

**APPENDIX N**

**OPERATIONS PLANS**

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**APPENDIX N  
OPERATIONS PLANS**

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**APPENDIX N  
OPERATIONS PLANS**

**APPENDIX N-1  
Aqueous Ammonia Storage and Handling System  
EPA/CalARP Risk Management Plan**

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**DRAFT**

**EL SEGUNDO POWER, LLC**

**AQUEOUS AMMONIA STORAGE AND HANDLING SYSTEM**

**EPA/CalARP RISK MANAGEMENT PLAN**

**Prepared for El Segundo Power, LLC**

**by**

**Southern California Edison Co.**

**Environmental Affairs Division**

**June 15, 1999**

**EL SEGUNDO GENERATING STATION**  
**AQUEOUS AMMONIA STORAGE AND HANDLING SYSTEM**  
**EPA/CalARP RISK MANAGEMENT PLAN**

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## 1.0 EXECUTIVE SUMMARY

The following provides a brief summary of the key components of the Risk Management Program for the aqueous ammonia storage and handling system at El Segundo Generating Station.

### 1.1 Introduction

Pursuant to the requirements contained in Chapter 6.95, Article 2 of the California Health & Safety Code § 25531 through 25543.3, and the Clean Air Act 112r and Title 40 of the Code of Federal Regulations Part 68, this Risk Management Plan (RMP) is submitted on behalf of the El Segundo Generating Station. This program is implemented in California as the California Accidental Release Prevention (CalARP) Program

The scope of this RMP is based on discussions with the Administering Agency (AA), the city of El Segundo Fire Department, to ensure that all issues are resolved and to incorporate state requirements. With input from the AA, the ammonia storage and handling facility was identified as the only process that triggers the RMP/CalARP requirements. This process was determined to be covered by Program 2 requirements. The process hazard review technique was then presented to and approved by the AA and the level of detail for this RMP submission agreed upon.

### 1.2 General Description of the Stationary Source and Regulated Substance

El Segundo Generating Station, located in El Segundo, California, is an electric generating station consisting of four units, two rated at 175 MW, and two rated at 335 MW. These units are capable of combusting either fuel oil or natural gas. Unit 4, rated at 335 MW, is equipped with pollution control equipment using Selective Catalytic Reduction (SCR) technology for controlling nitrogen oxides (NO<sub>x</sub>) emissions. The SCR system in use at the El Segundo Generating Station employs ammonia injection to reduce NO<sub>x</sub> emissions approximately 80% from uncontrolled levels. Aqueous ammonia is also used in the station water treatment system where it is used for pH control. Aqueous ammonia is classified as a toxic chemical subject to the requirements of the California Accidental Release Prevention (CalARP) Program. The aqueous ammonia used is a 29.5% solution of ammonia in water, ammonium hydroxide (CAS Number 7664-41-7).

The ammonia storage and handling system at El Segundo Generating Station is comprised of a single underground storage tank, pumps, and piping which terminate at the vaporizer where the aqueous ammonia is atomized. The underground storage tank is double-walled, 20000 gal in volume, and is equipped with pressure relief valves, leak detectors, temperature, pressure, and reference level indicators. The piping consists of 2 inch I.D. piping to the vaporizer; a 1 inch I.D. ammonia line to the station water treatment system and an additional 1 inch I.D. line to the demineralizer system formerly used for the regeneration of anion and cation exchange resins. The line to the demineralizer system is now capped.

All other regulated substances onsite including hydrazine and propane are in quantities below thresholds.

### 1.3 Offsite Consequence Analysis Results

The Offsite Consequence Analysis prepared in support of this RMP utilized the methodologies recommended by EPA and employed the RMP\*Comp, ver. 1.06 modeling system. The following release scenarios were hypothesized:

#### Release Scenario I - Worst-Case

The entire contents of all piping carrying aqueous ammonia between the pump and vaporizer are released through a failed pipe. Under worst-case meteorological conditions, 1.5 m/s wind speed and a stable (Pasquill F) atmospheric stability class, the ammonia cloud could travel 0.1 miles before dispersing sufficiently to no longer pose a health hazard to the public.

#### Release Scenario II - Alternative

The entire contents of the delivery truck's hose carrying aqueous ammonia between the truck shut-off valve and the tank hook-up is released by a failed delivery hose. Active mitigation consists of the station's fill procedure which utilizes both the truck operator and the plant operator. The plant operator verifies the truck operator is following the fill procedure and authorizes the driver to begin the fill when the delivery hose is properly connected. In case of a hose rupture the fill delivery truck's operator closes the truck's shut-off valve and dilutes the ammonia spill with water. Response action will be consistent with the emergency procedures in the station's spill plan. Under average meteorological conditions, 3.0 m/s wind speed and a neutral (Pasquill D) atmospheric stability class, the ammonia cloud could travel <0.1 miles before dispersing sufficiently to no longer pose a health hazard to the public.

### Release Scenario III - Alternative

A pump flange or connector fails resulting in the leak of approximately 50 gallons of aqueous ammonia outside. Active mitigation consists of control room operator intervention to manually shutoff of the affected pump. A pump low pressure alarm and low flow alarm will annunciate in the control room. Upon receiving either alarm the system will be shut down. The pump will be isolated pending repair and dilution of the spill with water. Response action will be consistent with the emergency procedures in the station's spill plan. Under average meteorological conditions, the ammonia cloud could travel <0.1 miles before dispersing sufficiently to no longer pose a health hazard to the public.

#### 1.4 Summary of the Five-Year Accident History

There have been no accidental releases from the aqueous ammonia storage and handling system at El Segundo Generating Station in the past five years that have resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. (Statute: 40 CFR 68.42)

#### 1.5 Summary of Prevention Program 2

El Segundo Generating Station is covered by an accidental release prevention program which includes the following:

- Periodic hazard reviews and updates.
- Periodic audits of the system and its operation.
- Emergency Response Plan that is coordinated with local emergency response agencies.

The aqueous ammonia storage and handling system prevention program includes the following steps:

- Comprehensive Station Orders covering all components of the aqueous ammonia storage and handling system including,
  - operation

- maintenance
- inspection
- training

#### 1.6 Summary of the Emergency Response Program

The El Segundo Generating Station has recently revised its emergency response plan. The core elements of the plan include:

- specific actions to be taken in response to an accidental release of ammonia
- procedures to notify local and public agencies including the El Segundo Fire Department, the Office of Emergency Services and the National Response Center as necessary
- a list of resources for emergency health care
- information regarding the training of employees on responses to releases
- a list of other federal and state requirements the facility is subject

#### 1.7 Planned Changes to Improve Safety

The HAZOP Analysis of the aqueous ammonia storage and handling system at El Segundo Generating Station conducted as part of this Risk Management Program resulted in recommendations to improve the system's safety. The recommendations are in the evaluation process and will be implemented as necessary.

#### 1.8 Source of Meteorological Data

United States of America Department of Commerce 1997 Local Climatological Data Annual Summary with Comparative Data Los Angeles California International Airport

## 3.0 HAZARD ASSESSMENT PROGRAM

### 3.1 Offsite Consequence Analysis (OCA)

Following is an offsite consequence analysis (OCA) of the aqueous ammonia storage and handling system at El Segundo Generating Station. This OCA evaluates the worst case and several alternative case release scenarios which could potentially occur at El Segundo. This analysis strictly follows the recommended approaches described in EPA OCA Guidance Document (April 1999 version).

#### 3.1.1 Worst-case release scenario for toxics

##### 3.1.1.1 Description and release parameters

###### Worst Case - Scenario I

The entire contents of all piping carrying aqueous ammonia between the pumps and vaporizer is released through a failed pipe. Release parameters are as follows:

- Chemical Name: Aqueous Ammonia (ammonium hydroxide) 29.5% water solution
- CAS# 7664-41-7
- Physical state: Liquid
- Scenario: Liquid spill and vaporization
- Quantity released: 1158.3 lb
- Release rate: 115.8 lb per min
- Release rate to outside air: 23.2 lb per min
- Release duration: 10 min
- Mitigation measures considered: None

##### 3.1.1.2 OCA methodology

- RMP\*Comp Ver. 1.06

##### 3.1.1.3 Meteorological data

- Wind Speed: 1.5 meter per second (3.4 miles per hour)

- Atmospheric Stability Class: F
- Temperature: 77 deg F (25 deg C)
- Topography: Urban

#### 3.1.1.4 OCA results

Estimated Distance to Toxic Endpoint of 0.14 mg/l: 0.1 miles

Public Receptors

Residential: NONE

Institutions (schools, hospitals, prisons): NONE

Parks/Recreational Areas:

El Segundo Beach

Pacific Ocean

Commercial/Office/Industrial Buildings:

Chevron Oil Refinery (tanks only, no buildings)

#### 3.1.2 Alternate-case release scenario for toxics

##### 3.1.2.1 Description and release parameters

###### Alternate Scenario II

The entire contents of the delivery truck's hose carrying aqueous ammonia between the truck shut-off valve and tank hook-up is released by a failed hose. Release parameters are as follows:

- Chemical Name: Aqueous Ammonia (ammonium hydroxide) 29.5% water solution
- CAS# 7664-41-7
- Physical state: Liquid
- Scenario: Liquid spill and vaporization
- Quantity released: 137.5 lbs (18.4 gallons)
- Release rate: 13.8 lbs per min
- Release rate to outside air: 3.45 lbs per min
- Release duration: 10 minutes
- Active mitigation measures considered: Truck shut-off valve manually closed.

###### Alternate Case - Scenario III

A connector or flange fails resulting in the leak of 50 gallons of aqueous ammonia. Active mitigation consists of automatic or manual shutoff of affected pump and isolation pending repair. Release parameters are as follows:

- Chemical: Aqueous Ammonia (ammonium hydroxide) 29.5% water solution
- Physical state: Liquid
- Scenario: Liquid spill and vaporization
- Quantity released: 374 lbs (50 gal)
- Release rate: 37.4 lbs per min
- Release rate to outside air: 9.38 lbs per min
- Release duration: 10 minutes
- Active mitigation measures considered: Manual or automatic shutoff of affected pump and isolation pending repair.

#### 3.1.2.2 OCA Methodology

- RMP\*Comp Ver. 1.06

#### 3.1.2.3 Meteorological data

- Wind Speed: 3.0 meter per second (6.7 miles per hour)
- Atmospheric Stability Class: D
- Temperature: 77 deg F (25 deg C)
- Topography: Urban

#### 3.1.2.4 OCA results

##### Alternate Case - Scenario II

Estimated Distance to Toxic Endpoint of 0.14 mg/l: <0.1 miles

Public Receptors

Residential: NONE

Institutions (schools, hospitals, prisons): NONE

Parks/Recreational Areas: YES

El Segundo Beach

Pacific Ocean

Commercial/Office/Industrial Buildings: YES

Chevron Oil Refinery (tanks only, no buildings)

### Alternate Case - Scenario III

Estimated Distance to Toxic Endpoint of 0.14 mg/l: <0.1 miles

#### Public Receptors

Residential: NONE

Institutions (schools, hospitals, prisons): NONE

Parks/Recreational Areas: YES

Ormond Beach

Pacific Ocean

Commercial/Office/Industrial Buildings: YES

Chevron Oil Refinery (tanks only, no buildings)

### 3.2 Five-year accident history

There have been no accidental releases from the aqueous ammonia storage and handling system in the past five years that have resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. (Statute: 40 CFR 68.42)

↑  
Prevailing Wind Direction

PACIFIC OCEAN

El Segundo Power, LLC

VISTA DEL MAR

Chevron Oil Refinery

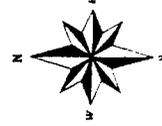
SCE Tank Farm

Worst Case Scenario  
( 520 Ft. radius )

EL SEGUNDO POWER, LLC

10000 VISTA DEL MAR, EL SEGUNDO, CA 90245

- Worst Case Scenario - 520 Ft. Radius
- Everything in ammonia lines, (1,158 lbs.), is released
- Safety controls not activated



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Reproduced with permission granted by THOMAS BROTHERS  
The map is copyrighted by THOMAS BROTHERS

NO SCALE  
06/28/1999

REC-11077 / EL\_SegLLC.wor

Prevaling Wind Direction



PACIFIC OCEAN

LOS ANGELES

W FRANKLIN AV

W EL SEGUNDO BLVD

Chevron Oil Refinery

VISTA DEL MAR

El Segundo Power, LLC

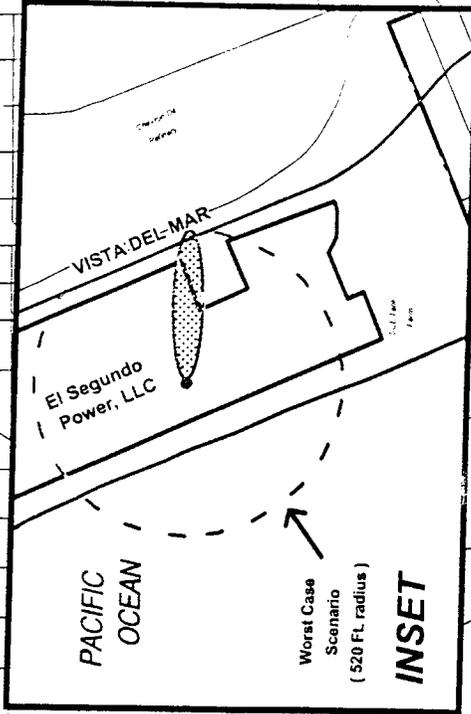
EL SEGUNDO

UP RR

ROSECRANS AV

35TH ST

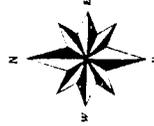
MANHATTAN BEACH



### EL SEGUNDO POWER, LLC

REDA MAPS/AMBIENT/AMMONIA/AMMONIA RELEASE

- Worst Case Scenario - 520 FL Radius is released
- Safety controls not activated



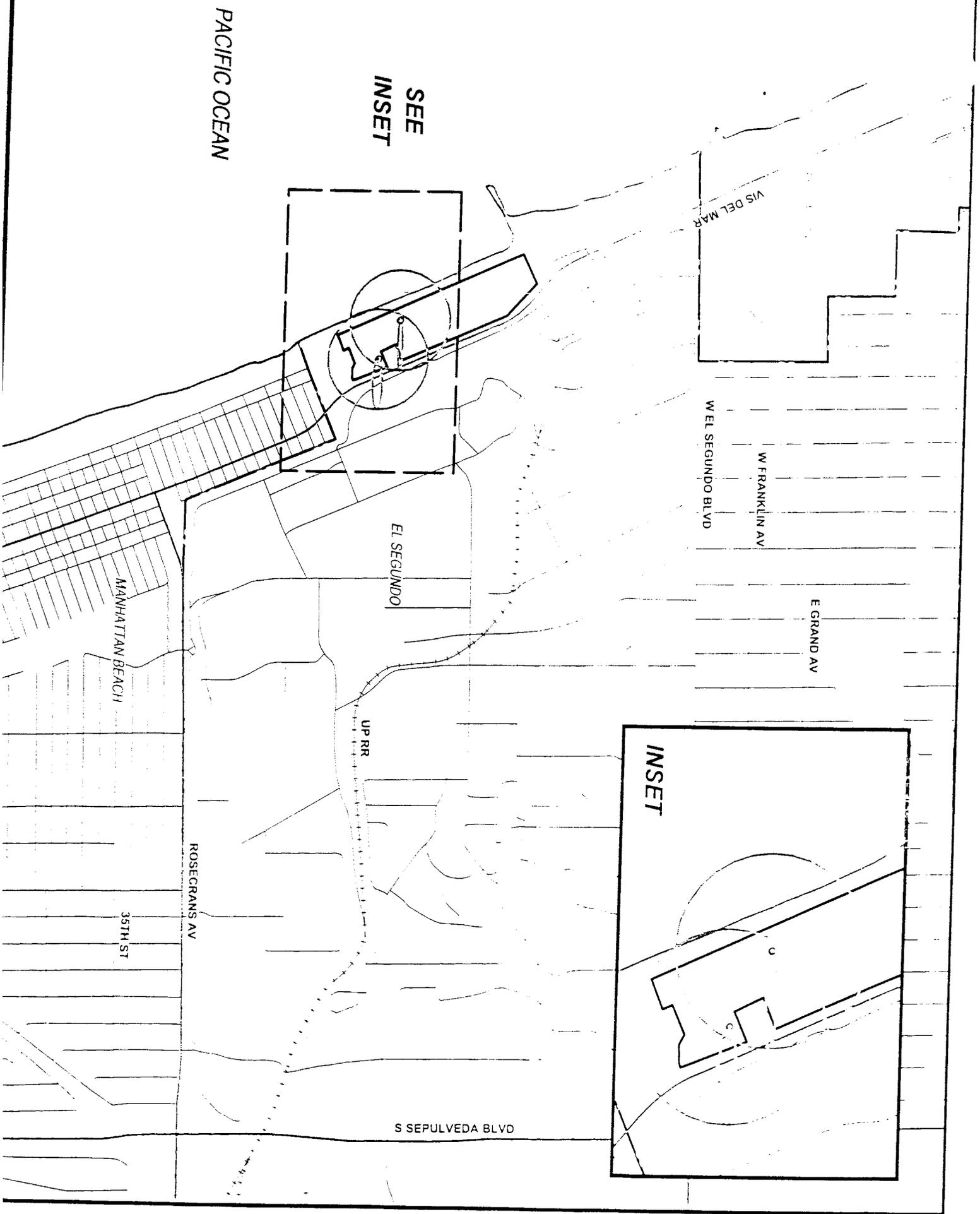
NO SCALE

06/29/1999

REQ-11077 / El Segundo Power, LLC

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PACIFIC OCEAN

SEE  
INSET

VIS DEL MAR

W EL SEGUNDO BLVD

W FRANKLIN AV

E GRAND AV

EL SEGUNDO

MANHATTAN BEACH

UP RR

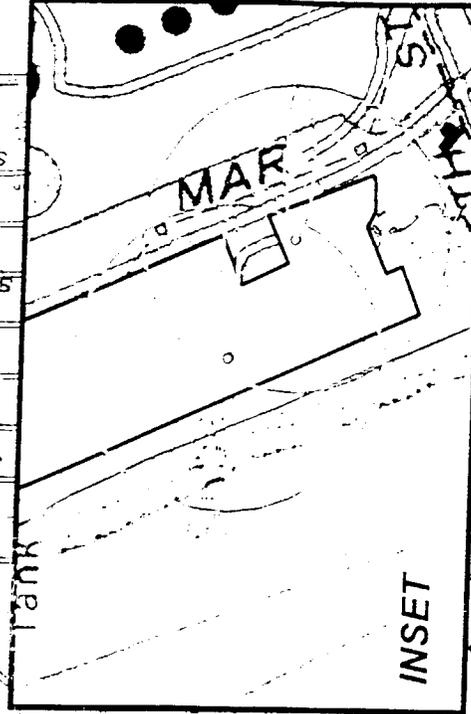
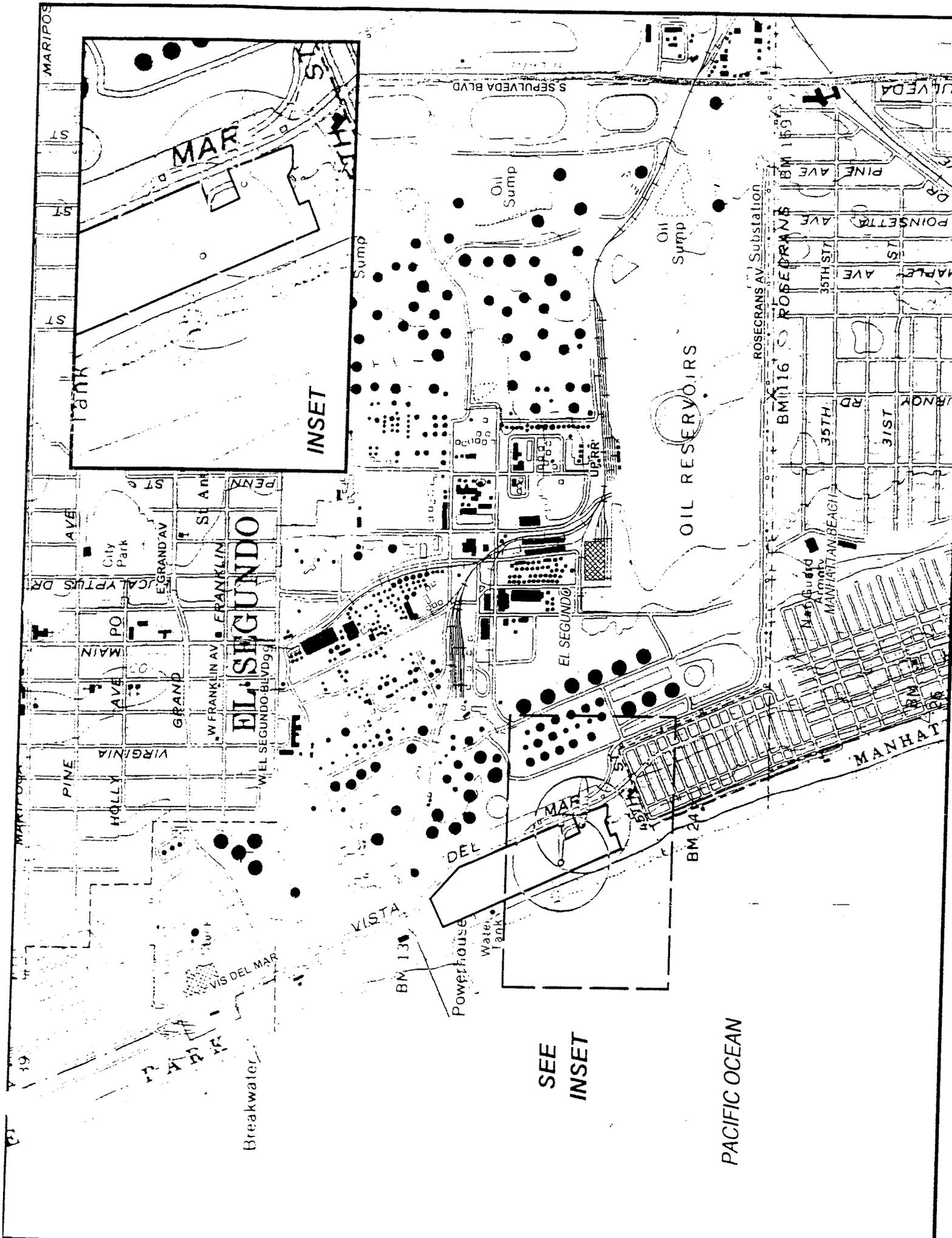
ROSECRANS AV

35TH ST

S SEPULVEDA BLVD

INSET





SEE  
INSET

PACIFIC OCEAN

MANHATTAN

OIL RESERVOIRS

EL SEGUNDO

MARIPOS

ULVEDA

PINE AVE

POINSETTA AVE

MAPLE AVE

35TH ST

ROSECRANS AVE

31ST RD

MANHATTAN BEACH

Oil Sump

Oil Sump

Sump

EL SEGUNDO

MAR

DEL

Powerhouse

Water Tank

VISTA

BM 130

BM 24

ROSECRANS AV. Substation

BM 116

BM 159

35TH ST

31ST RD

MANHATTAN BEACH

MANHATTAN BEACH

MANHATTAN BEACH

MANHATTAN BEACH

Breakwater

VIS DEL MAR

VIRGINIA

HOLLY

PINE

GRAND

MAIN

PO

City Park

WEL SEGUNDO BLVD

FRANKLIN ST

GRAND

AV

ST

39

39

39

39

39

EL SEGUNDO POWER, LLC  
301 Vista Del Mar  
El Segundo, CA 90245

Phone: 310.615.6342  
FAX: 310.615.6080

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June 21, 1999

RECEIVED

Mr. Steven H. Tsumura  
Environmental Safety Coordinator  
El Segundo Fire Department  
314 Main Street  
El Segundo, CA 90815

JUN 21 1999

EL SEGUNDO  
FIRE DEPT.

**SUBJECT: EL SEGUNDO GENERATING STATION RMP SUBMITTAL**

Enclosed please find a copy of the RMP Submit for the EL Segundo Generating Station. Included in this submittal are a Certification Statement; and a diskette with the RMP Submittal. This is pursuant to 40 CFR 68.185 and 19 CFR 2745.9. In addition, as required by CCR Title 19 2755 2 (d) please find an External Events Analysis and a Summary of the Seismic Study for the Risk Management Plan. The Risk Management Plan will be available for your viewing at the El Segundo Generating Station.

If you should have any questions or wish to talk to me please fill free to call me at (310) 615-6351.



Alex Sanchez  
Safety & Environmental Supervisor  
El Segundo Generating Station

*EL SEGUNDO POWER, LLC*  
*301 Vista Del Mar*  
*El Segundo, CA 90245*

*Phone: 310.615.6342*  
*FAX: 310.615.6080*

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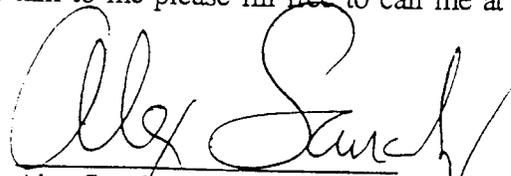
June 17, 1999

RMP Reporting Center  
C/O Computer Based Systems Inc., Suite 300  
4600 North Fairfax Dr.  
Arlington, VA 22203  
Attn: Risk Management Plans

**SUBJECT: EL SEGUNDO GENERATING STATION RMP SUBMITAL**

Enclosed please find a copy of the RMP Submit for the EL Segundo Generating Station, in El Segundo, California. Included in this submittal are a Certification Statement, and a diskette with the RMP Submittal. This is pursuant to 40 CFR 68.185 and 19 CFR 2745.9.

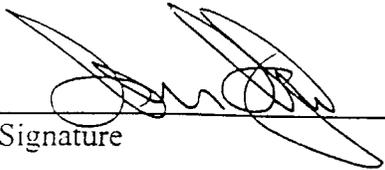
If you should have any questions or wish to talk to me please feel free to call me at (310) 615-6351.

  
Alex Sanchez  
Safety & Environmental Supervisor  
El Segundo Generating Station

## CERTIFICATION STATEMENT

Pursuant to 40 CFR §68.185 and 19 CCR §2745.9, a signed certification statement must be sent with each RMP.

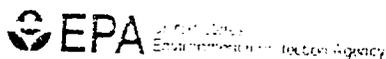
To the best of the undersigned's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

  
\_\_\_\_\_  
Signature

Audun Aaberg  
\_\_\_\_\_  
Print Name

Regional Manager  
\_\_\_\_\_  
Title

6/17/99  
\_\_\_\_\_  
Date



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460  
OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

Audun Aaberg  
El Segundo Power LLC  
301 Vista Del Mar  
El Segundo, CA 90245

July 08, 1999

EPA Facility ID#: 1000 0010 2667  
Postmark Date: 06/18/1999  
Anniversary Date: 06/18/2004

NOTIFICATION LETTER: COMPLETE RMP

The U.S. Environmental Protection Agency (EPA) received your Risk Management Plan (RMP) dated with the above postmark date. **This letter notifies you that your RMP is "complete" according to EPA's completion check.** The completion check is a program implemented by EPA to determine whether a submitted RMP includes the minimum amount of information every RMP must provide. The completion check does not assess whether a submitted RMP should have provided additional information or whether the information it provides is accurate or appropriate. In other words, it does not indicate that the RMP meets the requirements of 40 CFR Part 68.

Please note the anniversary date indicated above. Your RMP must be revised and updated by this date or earlier as required by 40 CFR §68.190. Please also note your EPA Facility ID number as identified at the top of this letter; all future Risk Management Plan submissions, corrections and other correspondence must include this number.

Your RMP (excluding the Offsite Consequence Analysis data) can be viewed on RMP\*Info™, a national database on the Internet at <http://www.epa.gov/enviro>.

Facility Name: El Segundo Generating Station  
EPA ID: 1000 0010 2667

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If you have any questions, please call one of the following numbers:

(1) For RMP rule interpretation questions, call the EPCRA Hotline at (800) 424-9346 or (703) 412-9810 (in the D.C. Metro area).

(2) For RMP\*Submit installation and software questions, or information on the status of your RMP, contact the RMP Reporting Center at (703) 816-4434, or write to the:

RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA 22116-3346

(3) For more information on the Risk Management Program, you can contact your Implementing Agency. Your Implementing Agency is **California Office of Emergency Services, P.O. Box 419047, Rancho Cordova, CA, 95741-9047, Phone: 916-464-3281.**

Thank you for your cooperation in this matter.

Sincerely,

RMP Reporting Center

Enclosure:

Risk Management Plan (if submitted on paper)

El Segundo Power, LLC  
301 Vista Del Mar  
El Segundo, CA 90245

Phone: 310.615.6342  
FAX: 310.615.6080

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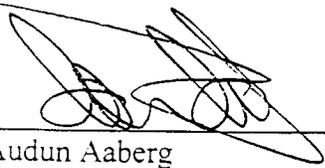
February 8, 2000

Director, FBI  
Attention: RMP Program – Room 1B327  
935 Pennsylvania Ave. N. W.  
Washington D.C. 20535-0001

**RE: EPA Facility ID# CAR000036848**

In accordance with P.L. 106-40, on January 12, 24, and 27, 2000, El Segundo Power, LLC, Facility ID number CAR000036848, after reasonable public notice, convened several public meetings. At those times, the local implications of our Risk Management Plan, including a summary of the OCA portion of the plan, were described and discussed.

Sincerely,  
El Segundo Power, LLC  
By: NRG El Segundo Operations Inc.,  
It's Authorized Agent

By:   
Audun Aaberg  
Regional Manager

Date: February 8, 2000

Cc: Tim Hemig – NRG Environmental Manager  
Steve Tsumura – El Segundo Fire Department

STATE OF CALIFORNIA  
 CALIFORNIA ACCIDENTAL RELEASE PREVENTION  
 PROGRAM REGISTRATION  
 DES 87085.6 (NEW 6/97)

Read instructions on reverse before completing.

REGISTRATION TYPE:  NEW  UPDATE  ADD  DELETE  REUSE

I. Business Owner/Operator Information

BUSINESS NAME: Southern California Edison/El Segundo Power Co., S.D.C.  
 ADDRESS (Number and Street): 301 Vista Del Mar  
 CITY: El Segundo STATE: CA ZIP: 90245  
 OWNER/OPERATOR NAME: Karl B. Henderson PHONE NUMBER: (310) 417-6341

II. Regulated Substance List

A. Name of Each Regulated Substance	Process Max. Quantity lbs.	CAS#
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

B. Name of Each Regulated Substance in a Mixture	Percent Weight	Process Max. Quantity lbs.	CAS#
1. Ammonia	30%	45,036	7664-41-7
2.			

III. Certification

I, the owner or operator of the aforementioned business, hereby certify that the registration information provided above is true, accurate, and complete to the best of my knowledge, based upon reasonable inquiry. I am fully aware that this certification, executed on the date indicated below, is made under penalty of perjury under the laws of the State of California.

OWNER/OPERATOR NAME (PRINT): Karl B. Henderson  
 OWNER/OPERATOR SIGNATURE: *Karl B. Henderson*  
 DATE EXECUTED: *January 20, 1998*

## **Sanchez, Alexander**

---

**From:** Chupa, Danielle  
**Sent:** Thursday, June 17, 1999 9:03 AM  
**To:** Sanchez, Alexander; Harnsberger, Ron D  
**Subject:** RMP

You need to send to the EPA:

The disk and the signed, original certification letter. Send it overnight only to:

RMP Reporting Center  
c/o Computer Based Systems, Inc., Suite 300  
4600 North Fairfax Dr.  
Arlington, VA 22203  
Attn: Risk Management Plans

Then, send the disk, the signed, original certification letter, the seismic report and the external analysis to Steve Tsumura.

Both need to be RECEIVED BY 6/21/99.

**Danielle M. Chupa**  
**Environmental Affairs**  
**(626) 302-2153**  
**fax (626) 302-9730**

## Section 1. Registration Information

Source Identification: There were no reportable accidents in the last 5 years.

a. Facility Name: El Segundo Generating Station

b. Parent Company #1 Name:

c. Parent Company #2 Name:

1.2 EPA Facility Identifier:

1.3 Other EPA Systems Facility Identifier: CAR000036848

1.4 Dun and Bradstreet Numbers (DUNS):

a. Facility DUNS: 197234768

b. Parent Company #1 DUNS:

c. Parent Company #2 DUNS:

1.5 Facility Location Address:

a. Street 1: 301 Vista Del Mar

b. Street 2:

c. City: El Segundo d. State: CA e. Zip: 90245

f. County: Los Angeles

Facility Latitude and Longitude:

i. Lat. (ddmmss.s): 34 49 23.3 h. Long. (ddmmss.s): -117 38 44.2

i. Lat/Long Method: A4 Address Matching - Nearest Intersection

j. Lat/Long Description: AB Administrative Building

1.6 Owner or Operator:

a. Name: El Segundo Power LLC

b. Phone: (310) 615-6303

Mailing address:

c. Street 1: 301 Vista Del Mar d. Street 2:

e. City: El Segundo f. State: CA g. Zip: 90245

1.7 Name and title of person or position responsible for part 68 (RMP) implementation:

a. Name of person: Audun Aaberg

b. Title of person or position: Regional Plants Manager

1.8 Emergency contact:

- a. Name: Alex Sanchez
- b. Title: Safety and Environmental Specialist
- c. Phone: (310) 615-6351
- d. 24-hour phone: (310) 615-6313
- e. Ext. or PIN:

1.9 Other points of contact:

- a. Facility or Parent Company E-Mail Address:
- b. Facility Public Contact Phone:
- c. Facility or Parent Company WWW Homepage Address:

1.10 LEPC:

1.11 Number of full time employees on site: 60

1.12 Covered by:

- a. OSHA PSM: No
- b. EPCRA 302: Yes
- c. CAA Title V: Yes Air Operating Permit ID: 018763

1.13 OSHA Star or Merit Ranking: No

1.14 Last Safety Inspection (by an External Agency) Date: 01/06/1999

1.15 Last Safety Inspection Performed by an External Agency: Fire Department

Will this RMP involve predictive filing?: No

## Section 1.17 Process(es)

Process ID: 4

Program Level 2

### b. NAICS Code

221112 Fossil Fuel Electric Power Generation

### c. Process Chemicals

c.1 Chemical Name	c.2 CAS Nr.	C.3 Qty (lbs.)
Ammonia (conc 20% or greater)	7665-41-7	44,836

## Section 2. Toxics: Worst Case

Toxics: Worst Case ID: 4

- 2.1 a. Chemical Name: Ammonia (conc 20% or greater)
- b. Percent Weight of Chemical (if in a mixture): 29.5
- 2.2 Physical State: Liquid
- 2.3 Model used: EPA's RMP\*Comp(TM)
- 2.4 Scenario: Liquid spill & vaporization
- 2.5 Quantity released: 1,158 lbs
- 2.6 Release rate: 115.8 lbs/min
- 2.7 Release duration: 10.0 mins
- 2.8 Wind speed: 1.5 m/sec
- 2.9 Atmospheric Stability Class: F
- 2.10 Topography: Urban
- 2.11 Distance to Endpoint: 0.10 mi
- 2.12 Estimated residential population within distance to endpoint: 0
- 2.13 Public receptors within distance to endpoint:
- |                     |    |   |     |
|---------------------|----|---|-----|
| a. Schools:         | No | d. Prisons/Correction facilities:                 | No  |
| b. Residences:      | No | e. Recreation areas:                              | Yes |
| c. Hospitals:       | No | f. Major commercial, office, or industrial areas: | Yes |
| g. Other (Specify): |    |   |     |
- 2.14 Environmental receptors within distance to endpoint:
- |   |    |
|---|----|
| a. National or state parks, forests, or monuments:                    | No |
| b. Officially designated wildlife sanctuaries, preserves, or refuges: | No |
| c. Federal wilderness areas:  |    |
| d. Other (Specify):   |    |
- 2.15 Passive mitigation considered:

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- a. Dikes: No
- b. Enclosures: No
- c. Berms: No
- d. Drains: No
- e. Sumps: No
- f. Other (Specify):

2.16 Graphic file name:

### Section 3. Toxics: Alternative Release

Toxics: Alternative Release ID: 9

- 3.1 a. Chemical Name: Ammonia (conc 20% or greater)
- b. Percent Weight of Chemical (if in a mixture): 29.5
- 3.2 Physical State: Liquid
- 3.3 Model used: EPA's RMP\*Comp(TM)
- 3.4 Scenario: Transfer hose failure
- 3.5 Quantity released: 138 lbs
- 3.6 Release rate: 13.8 lbs/min
- 3.7 Release duration: 10.0 mins
- 3.8 Wind speed: 3.0 m/sec

- 3.9 Atmospheric Stability Class: D
- 3.10 Topography: Urban
- 3.11 Distance to Endpoint: 0.10 mi

3.12 Estimated residential population within distance to endpoint: 0

3.13 Public receptors within distance to endpoint:

- a. Schools: No
- b. Residences: No
- c. Hospitals: No
- d. Prisons/Correction facilities: No
- e. Recreation areas: Yes
- f. Major commercial, office, or industrial areas: Yes
- g. Other (Specify):

3.14 Environmental receptors within distance to endpoint:

- a. National or state parks, forests, or monuments: No
- b. Officially designated wildlife sanctuaries, preserves, or refuges: No
- c. Federal wilderness areas: No
- d. Other (Specify):

Passive mitigation considered:

- a. Dikes: No
- b. Enclosures: No
- c. Berms: No
- d. Drains: No
- e. Sumps: No
- f. Other (Specify):

3.16 Active mitigation considered:

- a. Sprinkler systems: No
- b. Deluge system: No
- f. Flares: No
- g. Scrubbers: No

c. Water curtain: No      h. Emergency shutdown systems: No  
d. Neutralization: No      i. Other (Specify):  
e. Excess flow valve: No

3.1.7 Graphic file name:  
Toxics: Alternative Release ID: 10

3.1 a. Chemical Name: Ammonia (conc 20% or greater)

b. Percent Weight of Chemical (if in a mixture): 29.5

3.2 Physical State: Liquid

3.3 Model used: EPA's RMP\*Comp(TM)

3.4 Scenario: Pump or Flange Connector Failure

3.5 Quantity released: 374 lbs

3.6 Release rate: 37.4 lbs/min

3.7 Release duration: 10.0 mins

3.8 Wind speed: 3.0 m/sec

3.9 Atmospheric Stability Class: D

3.10 Topography: Urban

3.11 Distance to Endpoint: 0.10 mi

3.12 Estimated residential population within distance to endpoint: 0

3.13 Public receptors within distance to endpoint:

a. Schools: No      d. Prisons/Correction facilities: No  
b. Residences: No      e. Recreation areas: Yes  
c. Hospitals: No  
g. Other (Specify):

f. Major commercial, office, or industrial areas: Yes

3.14 Environmental receptors within distance to endpoint:

a. National or state parks, forests, or monuments: No  
b. Officially designated wildlife sanctuaries, preserves, or refuges: No  
c. Federal wilderness areas: No  
d. Other (Specify):

3.15 Passive mitigation considered:

a. Dikes: No      d. Drains: No  
b. Enclosures: No      e. Sumps: No

c. Berms: No      f. Other (Specify):

3.16 Active mitigation considered:

a. Sprinkler systems: No      f. Flares: No  
b. Deluge system: No      g. Scrubbers: No  
c. Water curtain: No      h. Emergency shutdown systems: No  
d. Neutralization: No      i. Other (Specify):  
e. Excess flow valve: No

3.17 Graphic file name:

Section 4. Flammables: Worst Case --- No Data To Report

Section 5. Flammables: Alternative Release --- No Data To Report

Section 6. Accident History --- No Data To Report

Section 7. Prevention Program 3 --- No Data To Report

Section 8. Prevention Program 2

Process Id: 4

Prevention Program ID: 3

Prevention Program Description: This process includes interconnected production units, for each of which the prevention program applies.

8.1 NAICS Code: 221112

8.2 Chemicals: Chemical Name  
Ammonia (conc 20% or greater)

8.3 Safety Information:

a. The date of the most recent review or revision of the safety information: 06/21/1999

b. Select all Federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement:

NFPA 58 (or state law based on NFPA 58):	Yes	ANSI Standards:	Yes
OSHA (29 CFR 1910.111):	No	ASME Standards:	Yes
ASTM Standards:	Yes	None:	No

Other (Specify):

Comments:

8.4 Hazard review:

a. The date of completion of most recent hazard review or update:	01/06/1999
b. The expected or actual date of completion of all changes resulting from the hazard review:	03/01/2000
c. Major hazards identified:	

Toxic release:	Yes	Overpressurization:	No	Earthquake:	No
Fire:	No	Corrosion:	No	Floods (flood plain):	No
Explosion:	No	Overfilling:	No	Tornado:	No
Runaway reaction:	No	Contamination:	No	Hurricanes:	No
Polymerization:	No	Equipment failure:	No	Other (Specify):	

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Loss of cooling, heating, electricity, instrument air: No

Process controls in use:

Vents:	No	Emergency air supply:	No	Other (Specify):
Relief valves:	Yes	Emergency power:	Yes	
Check valves:	Yes	Backup pump:	Yes	
Scrubbers:	No	Grounding equipment:	Yes	
Flares:	No	Inhibitor addition:	No	
Manual shutoffs:	Yes	Rupture disks:	No	
Automatic shutoffs:	Yes	Excess flow device:	Yes	
Interlocks:	No	Quench system:	No	
Alarms and procedures:	Yes	Purge system:	No	
Keyed bypass:	No	None:	No	

e. Mitigation systems in use:

Sprinkler system:	No	Water curtain:	No
Dikes:	No	Enclosure:	No
Fire walls:	No	Neutralization:	No
Blast walls:	No	None:	Yes
Deluge system:	No	Other (Specify):	

f. Monitoring/detection systems in use:

Process area detectors:	Yes	None:	No
Perimeter monitors:	No	Other (Specify):	

g. Changes since last PHA or PHA update:

Reduction in chemical inventory:	No	Installation of perimeter monitoring systems:	No
Increase in chemical inventory:	No	Installation of mitigation systems:	No
Change process parameters:	No	None recommended:	No
Installation of process controls:	No	None:	Yes
Installation of process detection systems:	No	Other (Specify):	

8.5 The date of the most recent review or revision of operating procedures:

05/26/1999

8.6 Training:

a. The date of the most recent review or revision of training programs:

06/21/1999

b. The type of training provided: Classroom: Yes On the job: Yes  
Other training (Specify):

c. The type of competency testing used:

Written tests: No                      Observation: Yes  
Oral tests: No                        Other (Specify):  
Demonstration: Yes

8.7 Maintenance:

- a. The date of the most recent review or revision of maintenance procedures: 05/26/1999
- b. The date of the most recent equipment inspection or test: 05/10/1999
- c. Equipment most recently inspected or tested: Ammonia Vapor Sensors

8.8 Compliance audits:

- a. The date of the most recent compliance audit (if any):
- b. Expected or actual date of completion of all changes resulting from the compliance audit:

8.9 Incident investigation:

- a. The date of the most recent incident investigation:
- b. Expected or actual date of completion of all changes resulting from the investigation:

8.10 The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training:

## Section 9. Emergency Response

9.1 Written Emergency Response (ER) Plan:

- a. Is facility included in written community emergency response plan? No
- b. Does facility have its own written emergency response plan? Yes

9.2 Does facility's ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)? Yes

9.3 Does facility's ER plan include procedures for informing the public and local agencies responding to accidental releases? Yes

9.4 Does facility's ER plan include information on emergency health care? Yes

9.5 Date of most recent review or update of facility's ER plan: 05/12/1999

9.6 Date of most recent ER training for facility's employees: 06/10/1999

9.7 Local agency with which facility's ER plan or response activities are coordinated:

- a. Name of agency: City of El Segundo Fire Department
- b. Telephone number: (310) 607-2242

9.8 Subject to:

a. OSHA Regulations at 29 CFR 1910.38: Yes

- |   |     |
|---|-----|
| b. OSHA Regulations at 29 CFR 1910.120:                                     | Yes |
| c. Clean Water Act Regulations at 40 CFR 112:                               | Yes |
| d. RCRA Regulations at 40 CFR 264, 265, and 279.52:                         | Yes |
| e. OPA-90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: | No  |
| f. State EPCRA Rules or Laws:   | Yes |
| g. Other (Specify):   |     |

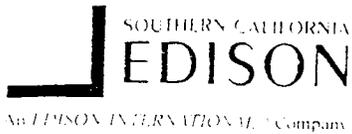
## Executive Summary

Attached File Name: EXECSUMM.DOC

RMP Validation Errors --- No Data To Report

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February 24, 1998

Mr. Steve Tsumura  
El Segundo Fire Department  
Hazardous Materials Division  
314 Main Street  
El Segundo, CA 90245

SUBJECT: RMP REGISTRATION  
EL SEGUNDO GENERATING STATION  
SOUTHERN CALIFORNIA EDISON COMPANY

Dear Mr. Tsumara:

As requested, attached is the RMP Registration for ammonia at the El Segundo Generating Station (301 Vista Del Mar). If you have any questions about the registration, please contact me at (626) 302-2153.

Sincerely,

A handwritten signature in cursive script that reads 'Danielle Chupa'.

DANIELLE CHUPA  
ENVIRONMENTAL SPECIALIST

Enclosure

CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM REGISTRATION

REGS 2735.6 (NEW 6/97)

Read instructions on reverse before completing.

REGISTRATION TYPE	UPDATE TYPE
<input checked="" type="checkbox"/> NEW	<input checked="" type="checkbox"/> ADD
<input type="checkbox"/> UPDATE	<input type="checkbox"/> DELETE
	<input type="checkbox"/> REVISE

I. Business Owner/Operator Information

BUSINESS NAME  
Southern California Edison/El Segundo Power Co., L.L.C.

ADDRESS (Number and Street)  
301 Vista Del Mar

CITY COUNTY STATE ZIP CODE  
El Segundo Los Angeles CA 90245

OWNER/OPERATOR NAME PHONE NUMBER  
Karl B. Henderson (310) 615-6341

II. Regulated Substance List

A. Name of Each Regulated Substance	Process Max. Quantity (lbs)	CAS#
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

B. Name of Each Regulated Substance in a Mixture	Percent Weight	Process Max. Quantity (lbs)	CAS#
1. Ammonia	30%	45,036	7664-41-7
2.			

III. Certification

I, the owner or operator of the aforementioned business, hereby certify that the registration information provided above is true, accurate, and complete to the best of my knowledge, based upon reasonable inquiry. I am fully aware that this certification, executed on the date indicated below, is made under penalty of perjury under the laws of the State of California.

OWNER/OPERATOR NAME (PRINT)  
Karl B. Henderson

OWNER/OPERATOR SIGNATURE  
*Karl B. Henderson*

DATE EXECUTED  
January 26 1998

# Chemical Safety Information, Site Security and Fuels Regulatory Relief Act: Public Meetings and Other Notifications

On Aug. 5, 1999, President Clinton signed the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (PL 106-40). The new law primarily concerns the public availability of the Off-site Consequence Analysis (OCA) sections of Risk Management Plans (RMPs) submitted by facilities under regulations implementing Section 112(r) of the Clean Air Act (CAA). The new law prohibits government officials from disclosing to the public the OCA sections of RMPs and other related materials until at least Aug. 5, 2000. However, the law does *not* prohibit facilities from sharing with the public the OCA sections of their RMPs, and it requires most facilities to provide the public with at least a summary of their OCA information by Feb. 1, 2000.

## Background

Section 112(r) of the Clean Air Act (CAA) requires facilities with more than a threshold quantity of a listed extremely hazardous substance to have a risk management program in place and to submit a summary of that program - the RMP - to the Environmental Protection Agency (EPA) by June 21, 1999.

Under Section 112(r) as originally enacted, RMPs, including the OCA sections of RMPs, were publicly available, since one purpose of RMPs is to inform the public about facilities' safety programs and to stimulate a dialogue between the community and industry about chemical safety.

However, concerns were raised that widespread electronic distribution of a database derived from the OCA sections of RMPs could pose a security risk. In response to this concern, the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act was passed.

The new law, among other things, limits public access to the OCA sections (i.e., sections 2 through 5) of RMPs and other related materials until at least Aug. 5, 2000. By that date, the federal government is to complete an assessment and rulemaking to address the future public availability of those OCA materials. In the meantime, the new

law requires facilities submitting RMPs to provide the public with certain related information.

## Public Meetings

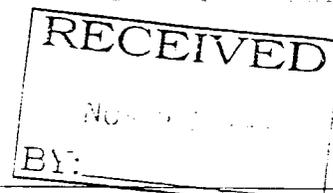
If your facility was required to submit an RMP for a Program 2 or Program 3 process, you must announce and hold a public meeting by Feb. 1, 2000, to discuss your RMP, including the OCA sections. If you meet the applicable definition of "small business stationary source," you may opt to publicly post a summary of your OCA information.

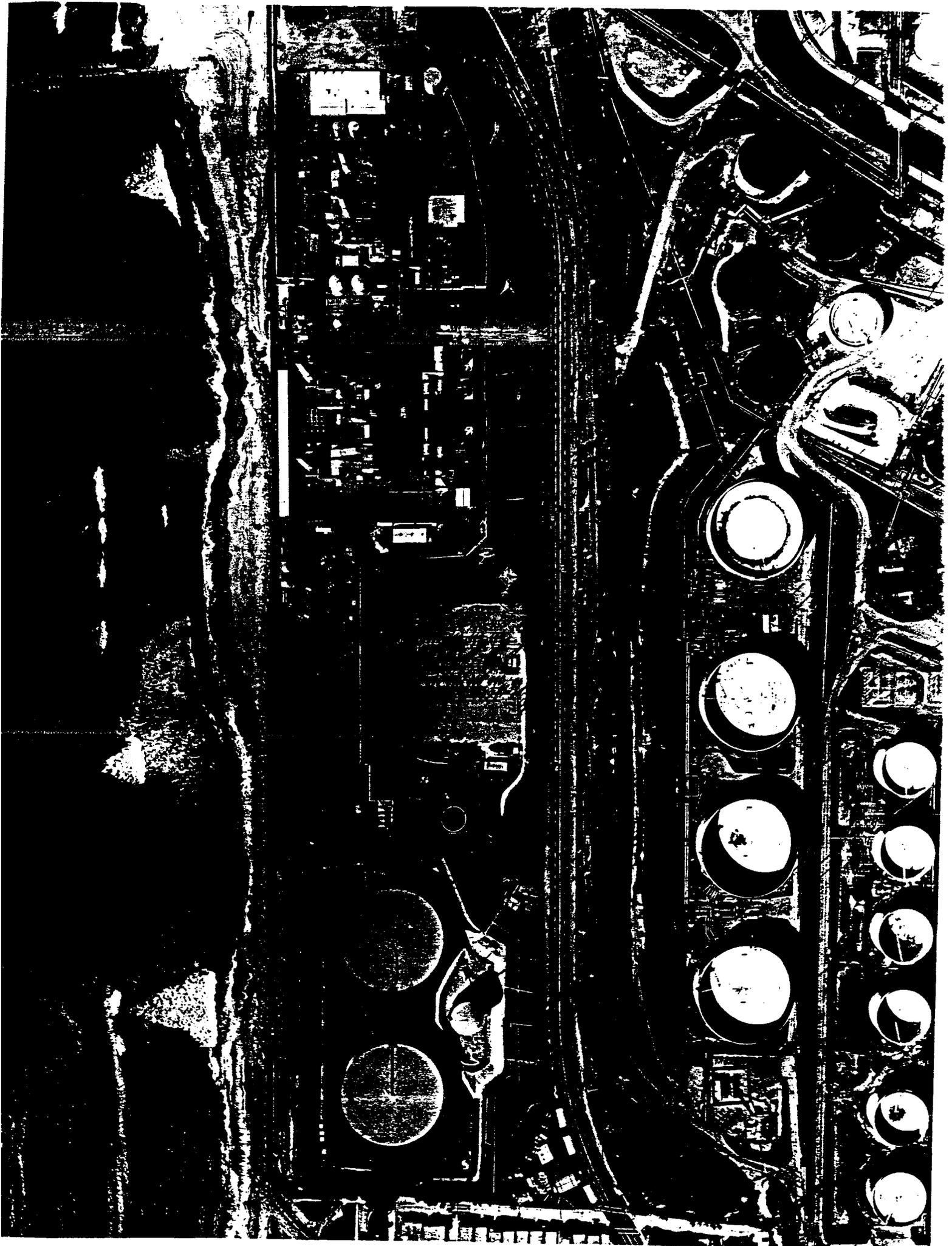
In either case, you must certify to the Federal Bureau of Investigation (FBI) by June 5, 2000, that you have held the meeting or posted the summary. Facilities having only Program 1 processes are exempt from the public meeting/summary requirement.

### It's An Opportunity!

Holding a public meeting can help your facility:

- Open a risk communication dialogue with the LEPC, local community leaders and the public;
- Explain what you are doing to reduce risk;
- Discuss your plans for Y2K compliance; and
- Identify key issues of concern in your community.





# LIVING SAFELY WITH CHEMICALS

## UNDERSTANDING CHEMICAL RISK MANAGEMENT



## Aqueous Ammonia

### **El Segundo Power, LLC**

**El Segundo Generating Station**

301 Vista Del Mar  
El Segundo, CA 90245

### **WHAT IS RMP?**

The main focus of the Federal Environmental Protection Agency (EPA) **Risk Management Plan** (RMP) Rule is the prevention of chemical releases that could affect the surrounding community or environment. The RMP Rule is also intended to assist in improving plant safety and protecting the public by collecting information to encourage community discussions in three main areas:

- **Hazard Assessment**
- **Prevention Program**
- **Emergency Response Program**

### **BASIC INFORMATION**

El Segundo Power, LLC, is an electric generating station. Aqueous ammonia is utilized at our facility to reduce air emissions in the form of nitrogen oxides (NO<sub>x</sub>). NO<sub>x</sub> is created by the combustion of natural gas in a boiler, much like the burning of gas in your car. The heating of the boiler is used to make steam, which drives a turbine generator that generates electricity. NO<sub>x</sub> can contribute to smog. El Segundo Power, LLC, utilizes a Selective Catalytic Reduction (SCR) reactor on Unit #4 that uses ammonia to reduce up to 90% of the NO<sub>x</sub> emissions to harmless nitrogen and water. Thereby, providing a cleaner environment for our neighbors while maintaining a reliable electric source.

Small concentrations of ammonia can be extremely irritating to the eyes, throat and breathing passages when inhaled. This irritating property causes us to flee from ammonia before we encounter higher concentrations. High concentrations could cause more serious problems, such as convulsive coughing, difficult and painful breathing, and in extreme cases, death. Contact of the eyes and skin with liquid ammonia and ammonia solutions is serious, requiring prompt medical attention, if burns develop.

### **FOR MORE INFORMATION:**

This brochure is only a summary of what has been provided to the Federal and State agencies. If you would like more information, please contact El Segundo Power, LLC at (310) 615-6391.

— date published: May, 1999 —

## FIVE-YEAR ACCIDENT HISTORY

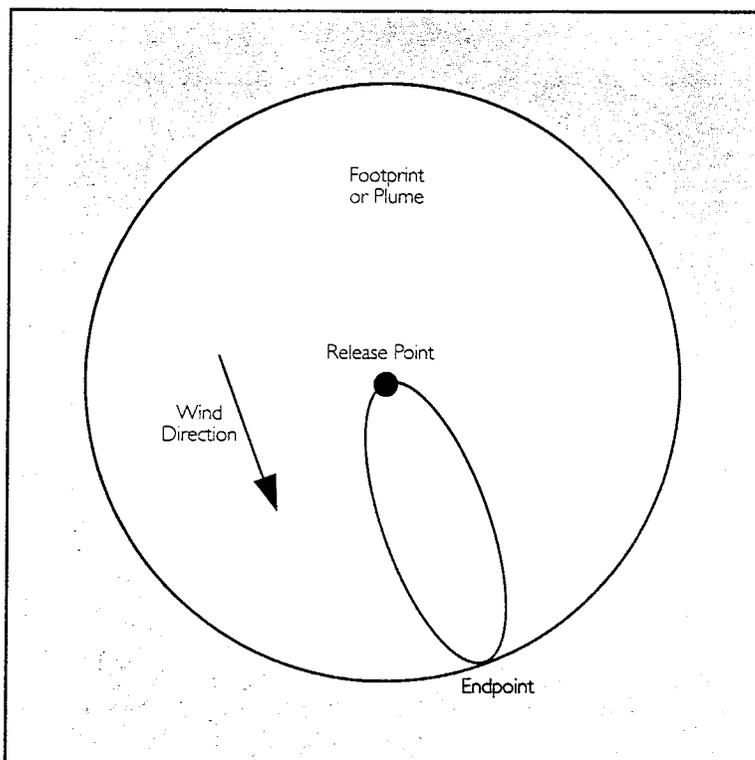
The Federal Environmental Protection Agency (EPA) requires companies to report releases that have resulted in an injury, illness or a significant impact on the community or the environment. In the past five years at El Segundo Power, LLC, we have had no releases of Aqueous Ammonia that were significant enough to be reported under the Risk Management Plan (RMP) rule. While some releases do occur, we take great efforts to ensure that they are as small and as infrequent as possible. These small releases were detected and minimized through safety controls and procedures and had no adverse impacts on the community or our employees.

## ACCIDENTAL RELEASE SCENARIOS

The Risk Management Plan requires companies to identify "worst case" and "alternate release" scenarios as defined by EPA. In determining the worst case scenario, no safety measures (such as automatic shutdown systems) or emergency response actions can be considered. For the alternate release scenario, existing safety systems and typical emergency response actions can be considered. For *toxics*, both the worst case scenario and the alternate release scenario would create a vapor cloud near the ground that travels away from the facility in the direction of the wind. As the cloud travels away from the facility it will spread out, becoming less concentrated and less harmful. For *flammables*, the release could affect the "full circle", but will be over very quickly. **It is important to remember that these scenarios are not predictors of events but rather are intended to be used as emergency response planning tools.**

## HOW TO READ A SCENARIO MAP

The maps on the next page show the worst case scenario for Aqueous Ammonia at El Segundo Power, LLC. The alternate case release scenario map is not displayed, since the radius of the circle would be similar to the worst case scenario, which is the default minimum distance allowed by the EPA.



### Scenario Circle

A circle extending from the release point to the endpoint distance. Used by local officials for emergency planning.

### Endpoint

For *toxics*, the endpoint is the distance at which a person can be exposed for up to an hour without serious health effects. For *flammables*, the endpoint is the distance at which a fire or explosion should no longer damage buildings or hurt people.

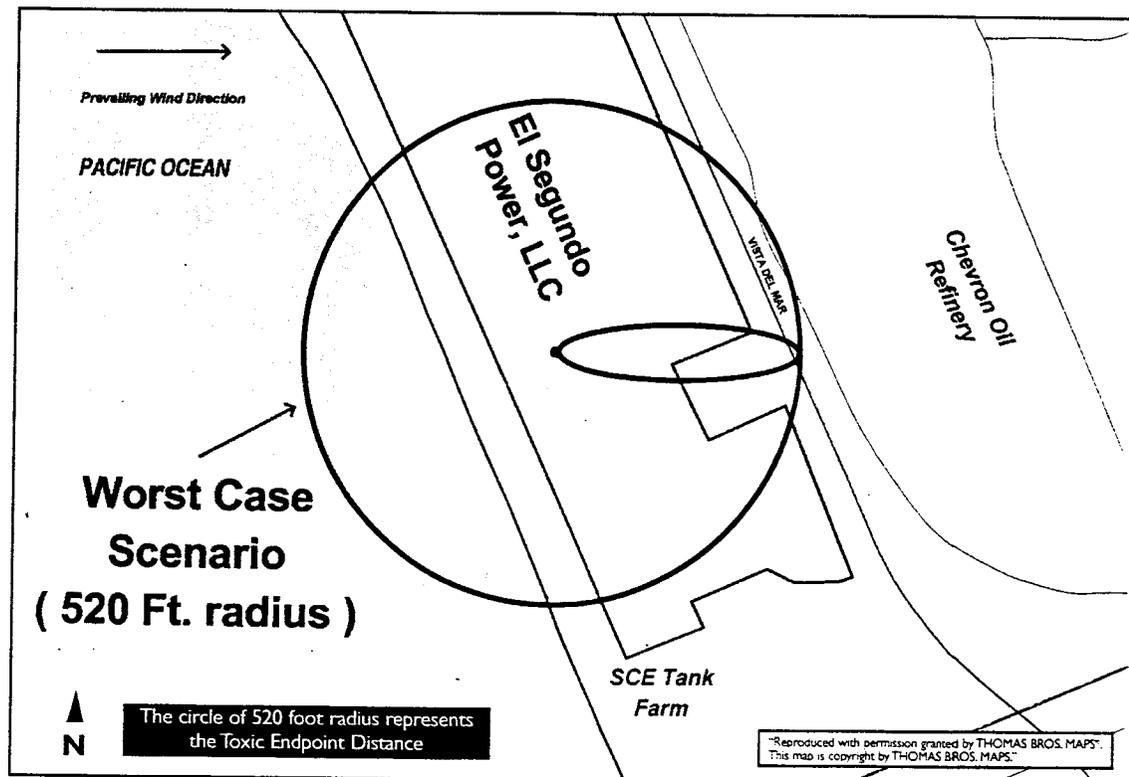
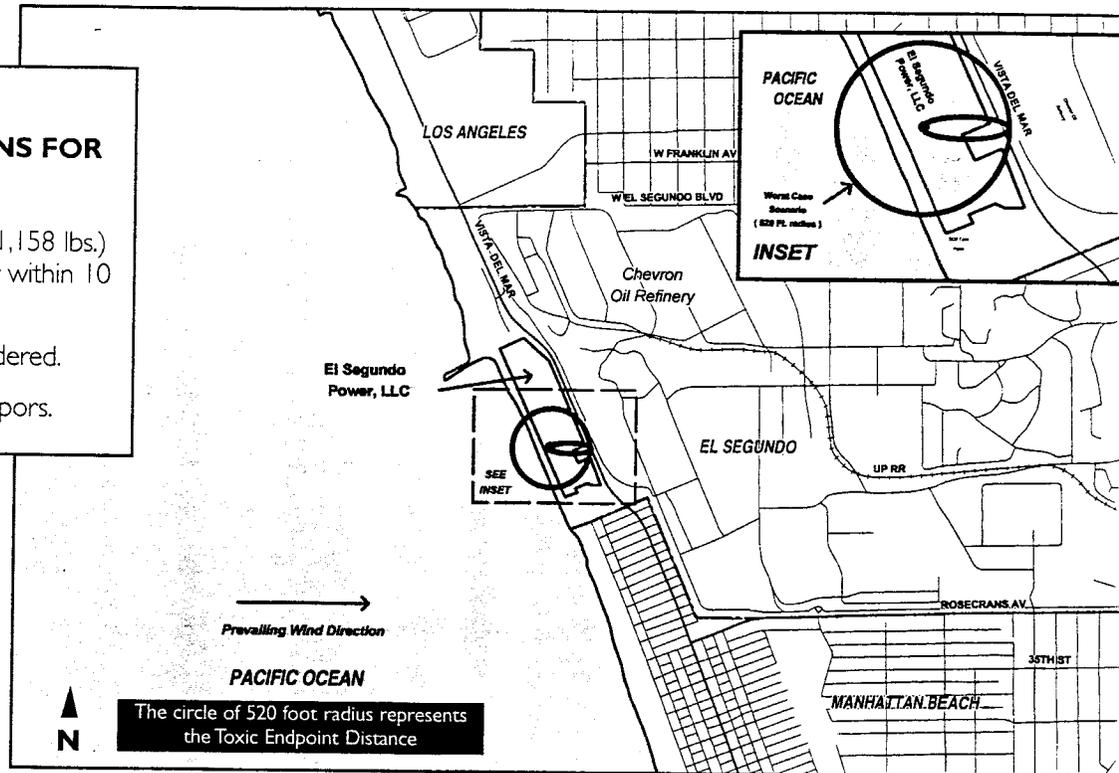
### Footprint or Plume

Assumptions are used to establish an area that could be affected by an accidental release. Toxic releases generally go in the direction of the wind and may travel many miles over several hours. The greater the distance from the release, the more time there is to take protective action. The effects of flammable releases are limited to areas much closer to the release point and could affect the "full circle", but are over very quickly.

# WORST CASE SCENARIO

## WORST CASE SCENARIO ASSUMPTIONS FOR AQUEOUS AMMONIA:

- Everything in ammonia line (1,158 lbs.) is released instantaneously or within 10 minutes.
- Safety controls are not considered.
- There is no wind to dilute vapors.



## PUTTING IT INTO PERSPECTIVE

Worst Case Scenario Amount Released .....	155 Gallons
Alternate Release Scenario Amount Released .....	18 Gallons
Largest Actual Release of Aqueous Ammonia from this facility .....	5 Gallons

# WHAT WE DO TO PREVENT ACCIDENTAL RELEASES

At El Segundo Power, LLC, safety is our number one priority and we take it seriously. We use a variety of safety equipment and follow strict procedures to prevent releases and to reduce the impact of releases. Some examples are:

- Safety controls, such as leak detectors, warning alarms and automatic shutdowns
- Regular equipment inspections and maintenance to ensure proper operation
- Investigation of all incidents to improve our procedures and prevent reoccurrence
- Routine audits of processes both by El Segundo Power, LLC and outside agencies

# WHAT TO DO IN A CHEMICAL EMERGENCY

Although the chance of a significant chemical accident is small, the possible health effects could be serious. Therefore, it is important for you to know what to do. These accidental releases can occur quickly. For the first few minutes of any emergency, you will be on your own and you will need to rely on your senses.

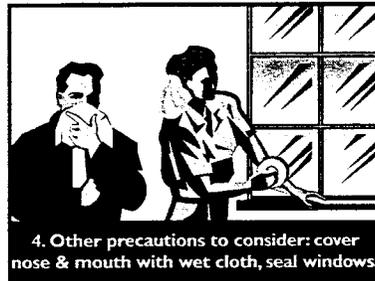
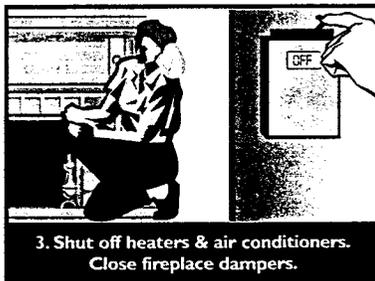
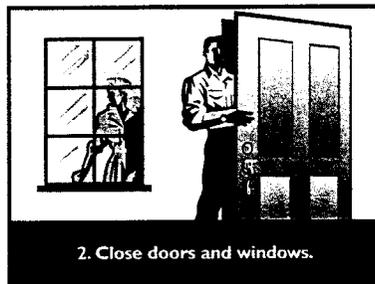
**If you are outdoors and you smell a strong chemical odor, protect yourself by immediately going inside the nearest building, home or vehicle.**

This is called **Shelter in Place** and is the best way to protect yourself and your family in the event of an accidental chemical release. This works because the outside air does not mix quickly with the air in these spaces when they are closed or sealed. Shelter in Place protects you from the most toxic vapors as the cloud passes.

## PREPARING FOR EMERGENCIES

El Segundo Power, LLC and other nearby facilities have formed a relationship with the local authorities in order to ensure your safety during a chemical emergency. Emergency plans are reviewed by local emergency responders, such as city and county fire departments. El Segundo Power, LLC conducts emergency response drills to prepare for accidents such as those described in this brochure.

For more information, please contact  
El Segundo Power, LLC  
Safety Department at  
(310) 615-6391  
or  
the El Segundo Fire Department at  
(310) 322-4311.



**APPENDIX N  
OPERATIONS PLANS**

**APPENDIX N-2  
2000 Business Plan**

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## *El Segundo Power, LLC*

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301 Vista Del Mar  
El Segundo, CA 90245  
(310) 615-6028 Telephone  
(310) 615-6060

November 3, 2000

Mr. Steve H. Tsumura  
Environmental Safety Coordinator  
El Segundo Fire Department  
314 Main Street  
El Segundo, California 90245

Subject: 2000 Business Plan Update

Dear Mr. Tsumura:

This letter is to certify pursuant to the California Health and Safety Code Section 25505 (c) that the Emergency Business Plan for the El Segundo Generating Station, 301 Vista Del Mar Blvd., has been reviewed for necessary changes or additions.

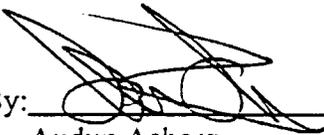
As required under Section 25505 (c), the following materials were added: 1) Nalco BT 3000-boiler water treatment 2) Nalco EG 5010-boiler alkalinity control 3) Nalco 350- a corrosion inhibitor 4) Nalco 356-corrosion inhibitor 5) Eliminox- an oxygen scavenger 6) Cardox-carbon dioxide 7) A300- low hazard corrosion inhibitor 8) Chel Clean 9) Ammonium Bicarbonate 10) Oxygen-gaseous oxygen 11) Aqua Ammonia 12) Hydrazine 35% 13) CuSol Solvent Waste. MSDS's or an analytical for the above mentioned materials or wastes are included with the updated material inventory. The following hazardous materials or wastes were deleted from the inventory previously disclosed: 1) Ammonium Bifluoride 2) Calcium Hydroxide 3) Corrosion Inhibitor A120 4) Hydrochloric Acid 5) Hydrochloric Acid Waste 6) Sodium Bromate 7) Sodium Sulfate 8) Sodium Hydroxide 9) Thiorerea. Reductions in quantity of hazardous materials or waste were made to the following: 1) Asbestos 2) Mineral Spirits 3) Mineral Spirits Waste 4) Paint 5) Petroleum Distillates (Waste Lube Oil) 6) Petroleum Distillates (Waste Oil/ Solids) 7) Waste Solvents and Debris.

The changes in the types or quantities of hazardous materials handled at this location represent some hazardous materials or wastes that will be onsite on a temporary basis. Those hazardous materials or wastes will only be on site for a sixty-day period.

If you have any questions regarding this matter, please call Alex Sanchez at (310) 615-6351.

Sincerely,

El Segundo Power, LLC  
By: NRG El Segundo Operations Inc.,  
It's Authorized Agent

By: 

Audun Aaberg  
Regional Manager



EL SEGUNDO FIRE DEPARTMENT - CERTIFIED UNIFIED PROGRAM AGENCY  
FACILITY INFORMATION  
BUSINESS OWNER/OPERATOR IDENTIFICATION

I. IDENTIFICATION

FACILITY ID #	190133000111	BEGINNING DATE	100	ENDING DATE	101
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)	3	BUSINESS PHONE	102		
El Segundo Power, LLC		310/615-6028			
BUSINESS SITE ADDRESS	301 Vista del Mar				
CITY	103	CA	ZIP CODE	104	
El Segundo		90245			
DUN & BRADSTREET	105	SIC CODE	106		
19-723-5187		(+ digit #) 4911			
COUNTY	Los Angeles 107				
BUSINESS OPERATOR NAME	108	BUSINESS OPERATOR PHONE	109		
NRG El Segundo Operations Inc.		310/615-6028			

II. BUSINESS OWNER

OWNER NAME	110	El Segundo Power, LLC	OWNER PHONE	111	310/615-6028
OWNER MAILING ADDRESS	301 Vista del Mar 112				
CITY	113	El Segundo	STATE	114	CA
		ZIP CODE	115		
		90245			

III. ENVIRONMENTAL CONTACT

CONTACT NAME	116	Alex Sanchez	CONTACT PHONE	117	310/615-6351
CONTACT MAILING ADDRESS	301 Vista del Mar				
CITY	118	El Segundo	STATE	119	CA
		ZIP CODE	120		
		90245			

-PRIMARY-

IV. EMERGENCY CONTACTS

-SECONDARY-

(Varies with Shift)	121	Alex Sanchez	123
NAME	124	Environmental Supervisor	129
TITLE	125	310/615-6351	130
BUSINESS PHONE	126	310/529-3280	131
24-HOUR PHONE	127		132
PAGER #			

ADDITIONAL LOCALLY COLLECTED INFORMATION:

133

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE	DATE	134	NAME OF DOCUMENT PREPARER	135
			Alex Sanchez	
NAME OF SIGNER (Print)	136	TITLE OF SIGNER	137	
Audun Aaberg		Regional Plants Manager		



UNIFIED PROGRAM CONSOLIDATED FORM

FACILITY INFORMATION

BUSINESS ACTIVITIES

I. FACILITY IDENTIFICATION

FACILITY ID #	1	9	0	1	3	3	0	0	0	1	1	EPA ID # (Hazardous Waste Only)	CAR 000 036 848
---------------	---	---	---	---	---	---	---	---	---	---	---	---------------------------------	-----------------

BUSINESS NAME (Same as Facility Name of DBA-Doing Business As) 3  
 El Segundo Power, LLC

II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list,  
 please submit the Business Owner/Operator Identification page (OES Form 2730).

Does your facility...	If Yes, please complete these pages of the UPCF....
<p><b>A. HAZARDOUS MATERIALS</b>                      Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO 4</p> <p>HAZARDOUS MATERIALS INVENTORY - CHEMICAL DESCRIPTION (OES 2731)</p>
<p><b>B. UNDERGROUND STORAGE TANKS (USTs)</b>                      1. Own or operate underground storage tanks?                      2. Intend to upgrade existing or install new USTs?                      3. Need to report closing a UST?</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO 5  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 6  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 7</p> <p>UST FACILITY (Formerly SWRCB Form A)                      UST TANK (one page per tank) (Formerly Form B)                      UST FACILITY                      UST TANK (one per tank)                      UST INSTALLATION - CERTIFICATE OF COMPLIANCE (one page per tank) (Formerly Form C)                      UST TANK (closure portion -one page per tank)</p>
<p><b>C. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs)</b>                      Own or operate ASTs above these thresholds:                      ---any tank capacity is greater than 660 gallons, or                      ---the total capacity for the facility is greater than 1,320 gallons?</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO 8</p> <p>NO FORM REQUIRED TO CUPAs</p>
<p><b>D. HAZARDOUS WASTE</b>                      1. Generate hazardous waste?                      2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?                      3. Treat hazardous waste on site?                      4. Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?                      5. Consolidate hazardous waste generated at a remote site?                      6. Need to report the closure/removal of a tank that was classified as hazardous waste and cleaned onsite?</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO 9  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 10  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 11  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 12  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 13  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 14</p> <p>EPA ID NUMBER - provide at the top of this page                      RECYCLABLE MATERIALS REPORT (one per recycler)                      ONSITE HAZARDOUS WASTE TREATMENT - FACILITY (Formerly DTSC Forms 1772)                      ONSITE HAZARDOUS WASTE TREATMENT - UNIT (one page per unit) (Formerly DTSC Forms 1772 A, B, C, D and L)                      CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232)                      REMOTE WASTE / CONSOLIDATION SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196)                      HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (Formerly DTSC Form 1249)</p>

**E. LOCAL REQUIREMENTS** 15  
 (You may also be required to provide additional information by your CUPA or local agency.)

**BUSINESS PLAN for EMERGENCY RESPONSE**

BUSINESS NAME El Segundo Power, LLC  
 301 Vista del Mar  
 BUSINESS ADDRESS El Segundo, CA 90245 PHONE 310/615-6391

Please answer the following questions clearly. Attachments are acceptable if additional space is needed:

**NOTIFICATION PROCEDURES**

In the event of a reportable hazardous materials or waste release, or threatened release, your business is required by State law to provide an immediate verbal report to:

The El Segundo Fire Department (ESFD) 911

The State Office of Emergency Services (OES): (800) 852-7550 or (916) 427-4341

## 1. Who will notify ESFD and OES?

Name Alex Sanchez Title Environmental Supervisor

Name Steve Odabashian Title Environmental Supervisor

2. Does your business have an additional emergency response notification system?  YES  NO

If yes, describe the system: In-house emergency warning system which consists of sirens, red flashing lights, and a public address system.

## 3. Name the employee(s) responsible for responding to a release or spill:

Name Wayne Forsyth/Robert Rea Title Shift Supervisor

Name Eugene Fitzhugh/Tracey Wootton Title Shift Supervisor

Name \_\_\_\_\_ Title \_\_\_\_\_

4. How will employee(s) become aware of a release or spill? (i.e., by alarm, leak detection device, etc.) By leak detection devices, operator rounds, alarms, sirens, red flashing lights and/or public address system.5. Is there an evacuation plan for your business in the event of a spill or release?  YES  NO6. How will employees be evacuated from your facility? See Attached.**MEDICAL ASSISTANCE**

## 7. List two local emergency medical facilities that will be used:

Name of emergency medical facility: Concentra Medical Centers

Address: 6033 W. Century Blvd, Ste. 200, Los Angeles Phone: 310/215-1600

Name of emergency medical facility: RFK Hospital

Address 4500 W. 116th Street, Hawthorne, CA 90250 Phone: 310/973-1711

**PREVENTION** (*Actions your business will take to prevent a hazard from occurring.*)

8. Describe the kinds of hazards associated with the hazardous materials present at your facility. Hazards associated with materials present at this facility include those commonly associated with the handling of natural gas, lubricating oils, caustics and oxidizers.
9. What actions would your business take to prevent these hazards from occurring? Precautions against these hazards are described in the facility's Spill Prevention Control and Countermeasure Plan (SPCC) and the Contingency Plan. The precautions include formal training of affected personnel, written operating instructions, notification procedures, containment and remediation orders.
10. What are your safety and storage *procedures*? The Safety and Storage procedures are covered in the following Station Documents:  
 -Station Procedure 7-1: Emergency Preparedness & Emergency Response Plan  
 -Station Procedure 8-2: Hazardous Materials & Hazardous Waste Management Plan

**MITIGATION** (*How do you reduce the hazard?*)

(Actions your business will take to lessen the harm or the damage to persons, property, or the environment, and prevent what has occurred from getting worse or spreading.)

11. What is the immediate response to a leak, spill, fire, explosion, or airborne release at your business? Mitigation procedures are outlined in the facility's SPCC Plan and the Contingency Plan. In instances of leaks, spills, explosions or airborne releases, station personnel monitoring the equipment (on a 24-Hour basis), immediately notify the Shift Supervisor. The response includes, but is not limited to, the proper notification, containment, isolation, and if necessary, an emergency evacuation of the area.

**ABATEMENT** (*What your facility does to eliminate the hazard.*)

12. How do you stop a release? Stoppage of the hazard would be as directed by the shift supervisor. Such directions would include the containing of hazardous materials by using dikes and absorbent materials.
13. How do you clean up a spill? Personnel trained to the appropriate "HAZWOPER" level or licensed, permitted contractors would assume responsibility for the clean-up of the hazardous material.
14. How do you dispose of hazardous waste? As permitted, a licensed contractor would be contracted for the removal of the hazardous waste to the proper disposal site. See the "Contingency Plan" for more detailed information.

EMPLOYEE TRAINING

Employee training is designed to teach employees about the following categories:

PART 1 - SAFETY: Handling Hazardous Materials Safely

PART 2 - EMERGENCY CONTACT: Which Emergency Agencies to Contact

PART 3 - EMERGENCY EQUIPMENT AND SUPPLIES: Use of Emergency Cleanup Equipment and Supplies

PART 4 - EVACUATION: Evacuation Procedures

PART 1: SAFETY

15. Describe the training NEW employees receive in handling and using the hazardous materials and waste that are part of your operation. The following training is provided to the listed employee groups: Hazard Communication-All Employees; HAZWOPER Awareness-All Employees; HAZWOPER Operations-All Operations Employees; and Hazardous Waste Generator-All Employees.

16. How often does REFRESHER training occur? Hazard Communication is initial and as new products are introduced. HAZWOPER and Hazardous Waste Generator are annual.

17. How is this documented? Sign in sheets and computer spread sheets.

18. Where is documentation kept? The Safety and Environmental office.

PART 2: EMERGENCY CONTACT

19. Are all NEW employees trained to know which emergency response agencies to contact when an emergency occurs?  YES  NO

20. Who is assigned to contact the emergency response agencies? Site Incident Commander or his/her designated representatives.

Name Alex Sanchez Title Environmental Supervisor

Name Steve Odabashian Title Environmental Supervisor

21. How often does REFRESHER training occur? Annually.

22. How is it conducted? Review of emergency procedures.

23. What is covered? Business Emergency Response Plan and Contingency Plan.

**PART 3: EMERGENCY EQUIPMENT AND SUPPLIES**

24. How are NEW employees trained in the use of emergency equipment and supplies needed to stop spills, leaks, or fires? Providing their jobs require such training, they are trained in the use of emergency equipment and supplies in the following training classes: HAZWOPER Operations, Spill Prevention Control and Countermeasures (SPCC); Fire Extinguisher Training.

25. What kinds of equipment and supplies are they taught to use to stop the release? The employees are instructed in the use of absorbent products, sandbags, drain covers, system valving, and the use of personal protective equipment.

26. How often is REFRESHER training conducted in the use of emergency equipment and supplies? Annually.

27. Are drills ever conducted?  YES  NO

**PART 4: EVACUATION**

28. Are NEW employees given initial training on evacuation procedures?  YES  NO

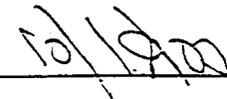
29. How often is REFRESHER training given on evacuation procedures? Annually.

30. Describe where this copy is located at your business:

NOTE: Your business is required by State law to keep a copy of this Business Plan, including the inventory

Copy is located in the Environmental Office.

  
\_\_\_\_\_  
Signature of Business Owner or Authorized Representation

  
\_\_\_\_\_  
Date

Audun Aaberg, Regional Plants Manager  
El Segundo Power, LLC  
By: NRG El Segundo Operations Inc.

Attachment

**BUSINESS PLAN for EMERGENCY RESPONSE**

El Segundo Power, LLC  
301 Vista del Mar  
El Segundo, CA 90245  
310-615-6391

**NOTIFICATION PROCEDURES**

6. How will employees be evacuated from your facility?

In the event of a release or threatened release of hazardous materials, station operations personnel would be notified by public address system and would assemble in the appropriate Control Room located on the second level. All other personnel would assemble in the park located in the northwest corner of the facility. A roll call would be conducted at each location. Based upon the location and type of incident, the shift supervisor would direct the evacuation of personnel from the station via the roadway exit to the front gate. The gate located at the south end of the facility, along with the gates located adjacent to the bike path and beach, are alternate routes enabling personnel to evacuate the facility.

Prepared: May 2000

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 1 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Unit 3 Turbine Deck, Unit 1 Heater Deck

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

H

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Hydrazine (N2H4) (35%)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE

(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

292

FED HAZARD CATEGORIES

(Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY  
AMOUNT

500

MAXIMUM DAILY  
AMOUNT

850

ANNUAL WASTE  
AMOUNT

0

STATE WASTE  
CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 35.00%	Hydrazine	<input type="checkbox"/> Yes <input type="checkbox"/> No	302-01-2
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

## HAZARDOUS MATERIALS INVENTORY HAZARDOUS MATERIALS CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 2 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Top of hill and other locations

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) P

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Ammonium Hydroxide (NH4OH) (28%)

TRADE SECRET  Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Aqueous Ammonia

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

20,000

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

15000

MAXIMUM DAILY AMOUNT

20000

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Builidin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	28.00%	Ammonium Hydroxide	<input type="checkbox"/> Yes <input type="checkbox"/> No	1336-21-6
2	72.00%	Water	<input type="checkbox"/> Yes <input type="checkbox"/> No	7732-18-5
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Unit #3 Northwest Side, ground level

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) D

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Hydrogen

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Hydrogen Compressed Gas

EHS\*

Yes  No

CAS #

1333740

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

40000

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

30000

MAXIMUM DAILY AMOUNT

40000

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Unit #3 North Side

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) S, A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Nitrogen

TRADE SECRET If Subject o EPCRA, refer to instructions  
Yes  No

COMMON NAME

Nitrogen Compressed Gas

EHS\* Yes  No

CAS #

7727-37-9

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 1500 gal

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT 106000 MAXIMUM DAILY AMOUNT 141265 ANNUAL WASTE AMOUNT 0 STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  Underground Tan  Can  Bag  Plastic Bottle  Other:  Tank Inside Buildin  Carboy  Box  Tote Bin  Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID#

1 9

0 1 3

3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

B

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Distillate (Diesel)

TRADE SECRET

Yes  No

If Subject to EPCRA, refer to instructions.

COMMON NAME

Diesel Fuel

EHS\*

Yes  No

CAS #

8002-05-9

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE  
(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES  
(Check all that apply)

Fire

Reactive

Pressure Release

Acute Health

Chronic Health

AVERAGE DAILY  
AMOUNT

110

MAXIMUM DAILY  
AMOUNT

165

ANNUAL WASTE  
AMOUNT

0

STATE WASTE  
CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tank

Can

Bag

Plastic Bottle

Other:

Tank Inside Building

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		Yes <input type="checkbox"/> No <input type="checkbox"/>	
2		Yes <input type="checkbox"/> No <input type="checkbox"/>	
3		Yes <input type="checkbox"/> No <input type="checkbox"/>	
4		Yes <input type="checkbox"/> No <input type="checkbox"/>	
5		Yes <input type="checkbox"/> No <input type="checkbox"/>	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Paint Shack

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) J

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Paint

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions:

COMMON NAME

Paint

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

5

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

25

MAXIMUM DAILY AMOUNT

100

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 7 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Paint Shack

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

J

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Mineral Spirits

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Mineral Spirits

EHS\*

Yes  No

CAS #

64742887

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

5

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

20

MAXIMUM DAILY AMOUNT

50

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATJRE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Southwest of Warehouse

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Acetylene (C2H2)

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*  Yes  No

CAS #

74862

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE  
(Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

353

FED HAZARD CATEGORIES  
(Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY  
AMOUNT

3530

MAXIMUM DAILY  
AMOUNT

10950

ANNUAL WASTE  
AMOUNT

0

STATE WASTE  
CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 99.80%	Acetylene	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-85-2
2 0.20%	Acelore	<input type="checkbox"/> Yes <input type="checkbox"/> No	67-54-1
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

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ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Chemical Storage Room, Chemical Feed Areas

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) M

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Acidic Aqueous Solution

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Calgon C-9 Corrosion Inhibitor

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

50

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY AMOUNT

250

MAXIMUM DAILY AMOUNT

600

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 37.00%	Phosphoric Acid	<input type="checkbox"/> Yes <input type="checkbox"/> No	7664-38-2
2 26.00%	Zinc Chloride	<input type="checkbox"/> Yes <input type="checkbox"/> No	7646-85-7
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 10 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

North of Units 3,4; Southwest of Units 1&2

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

E

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Sodium Hypochlorite (12.5%)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instruction

COMMON NAME

Bleach

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

2,500

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Health

AVERAGE DAILY AMOUNT

1500

MAXIMUM DAILY AMOUNT

2600

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Underground Tan

Tank Inside Buildin

Steel Drum

Plastic/Nonmetallic Dr

Can

Carboy

Silo

Fiber Drum

Bag

Box

Cylinder

Glass Bottle

Plastic Bottle

Tote Bin

Tank Wagon

Rail Car

Other:

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 12.50%	Sodium Hypochlorite	<input type="checkbox"/> Yes <input type="checkbox"/> No	7861-52-9
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

Unified Program Consolidated Form

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

(one page per material per building or area)

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Chemical Storage Room and chem feed areas

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) M

II. CHEMICAL INFORMATION

CHEMICAL NAME

Aqueous Isothiazolinone Solution

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions.

COMMON NAME

Calgon H-510 Microbiocide

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

50

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

250

MAXIMUM DAILY AMOUNT

600

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 1.75%	Magnesium Nitrate	<input type="checkbox"/> Yes <input type="checkbox"/> No	10377-60-3
2 1.15%	5-Chloro-2-methyl-4-isothiazolin-3-one	<input type="checkbox"/> Yes <input type="checkbox"/> No	26172-55-4
3 1.10%	Magnesium Chloride	<input type="checkbox"/> Yes <input type="checkbox"/> No	7786-30-3
4 0.35%	2-Methyl-4-Isouthiazoiln-3-one	<input type="checkbox"/> Yes <input type="checkbox"/> No	2686-20-4
5 0.16%	Cupric Nitrate	<input type="checkbox"/> Yes <input type="checkbox"/> No	3251-23-8

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 12 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Unit 2 Aux. Bay SW Corner; Unit 4 Aux. Bay, S. End

CHEMICAL LOCATION

CONFIDENTIAL -

EPCRA

Yes  No

FACILITY ID#

1 9

0 1 3

3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

K

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Electron

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instruction:

COMMON NAME

Dielectric Solvent

EHS\*

Yes  No

CAS #

If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes

No

CURIES

PHYSICAL STATE

(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES

(Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

110

MAXIMUM DAILY AMOUNT

330

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	10.00%	Citrus Terpenes	<input type="checkbox"/> Yes <input type="checkbox"/> No	68647-72-3
2	75.00%	Severly Hydrotreated Light Distillates	<input type="checkbox"/> Yes <input type="checkbox"/> No	64742-47-8
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 13 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Unit 2 Aux. Bay SW Corner; Unit 4 Aux. Bay S. End

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) K

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Trichloroethane

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

Selig Formula 229 Degreaser

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

110

MAXIMUM DAILY AMOUNT

110

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 94.50%	Trichloroethane	<input type="checkbox"/> Yes <input type="checkbox"/> No	71-55-6
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, South Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Oxygen

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

Compressed Oxygen Gas

EHS\*  Yes  No

CAS #

7782-44-7

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 282

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT 1128 MAXIMUM DAILY AMOUNT 3666 ANNUAL WASTE AMOUNT 0 STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 15 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, South Side and other locations

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Argon

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Compressed Argon Gas

EHS\*

Yes  No

CAS #

7440-37-1

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes

No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

850

MAXIMUM DAILY AMOUNT

1410

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID#

1 9 5 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Helium

TRADE SECRET

Yes  No

If Subject to EPCRA, refer to instructions.

COMMON NAME

Compressed Helium Gas

EHS\*

Yes  No

CAS #

7440-59-7

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE  
(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES  
(Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY  
AMOUNT

282

MAXIMUM DAILY  
AMOUNT

846

ANNUAL WASTE  
AMOUNT

0

STATE WASTE  
CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		Yes <input type="checkbox"/> No <input type="checkbox"/>	
2		Yes <input type="checkbox"/> No <input type="checkbox"/>	
3		Yes <input type="checkbox"/> No <input type="checkbox"/>	
4		Yes <input type="checkbox"/> No <input type="checkbox"/>	
5		Yes <input type="checkbox"/> No <input type="checkbox"/>	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Nitric Oxide/Nitrogen (12.75 ppm)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EPA Protocol Mix

EHS\*

Yes  No

CAS #

"If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

564

MAXIMUM DAILY AMOUNT

1410

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 0.02%	Nitric Oxide (125 ppm)	<input type="checkbox"/> Yes <input type="checkbox"/> No	10102-43-9
2 99.98%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLP

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Nitrogen/Oxygen Mixture (8.5% O2)

TRADE SECRET

Yes  No

If Subject to EPCRA, refer to instructions

COMMON NAME

Oxygen Mix

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

564

MAXIMUM DAILY AMOUNT

1410

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 8.50%	Oxygen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7782-44-7
2 91.50%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

Unified Program Consolidated Form

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY & CHEMICAL DESCRIPTION

(one page per material per building or area)

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

M

II. CHEMICAL INFORMATION

CHEMICAL NAME

Nitrogen/Oxygen Mixture (17% O2)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EPA Protocol Mix

EHS\*

Yes  No

CAS #

If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

564

MAXIMUM DAILY AMOUNT

1410

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 17.00%	Oxygen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7782-44-7
2 83.00%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Oxides of Nitrogen (125 ppm)

TRADE SECRET

Yes  No

If Subject of EPCRA, refer to instructions

COMMON NAME

Oxides of Nitrogen Mix

EHS\*

Yes  No

CAS #

If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes

No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

846

MAXIMUM DAILY AMOUNT

1410

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 0.01%	Nitric Oxide (125 ppm)	<input type="checkbox"/> Yes <input type="checkbox"/> No	10102-43-9
2 99.99%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

(one page per material per building or area)

Page 21 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 19013300011

MAP# (optional) 1

GRID# (optional) M

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Propane

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Propane

EHS\*

Yes  No

CAS #

If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

20

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY AMOUNT

200

MAXIMUM DAILY AMOUNT

400

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 0.50%	Ethane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-84-0
2 87.50%	Propane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-98-6
3 0.50%	Propylene	<input type="checkbox"/> Yes <input type="checkbox"/> No	115-07-1
4 2.50%	Butanes	<input type="checkbox"/> Yes <input type="checkbox"/> No	Various
5 0.01%	Ethyl Mercaptan (50 ppm)	<input type="checkbox"/> Yes <input type="checkbox"/> No	75-08-01

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 22 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Oxides of Nitrogen (59.50 ppm)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Oxides of Nitrogen Mix

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE  
(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES  
(Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY  
AMOUNT

564

MAXIMUM DAILY  
AMOUNT

1128

ANNUAL WASTE  
AMOUNT

0

STATE WASTE  
CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 0.01%	Nitric Oxide (59.50 ppm)	<input type="checkbox"/> Yes <input type="checkbox"/> No	10102-43-9
2 99.99%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Oxides of Nitrogen (34 ppm)

TRADE SECRET

Yes  No

If Subject to EPCRA, refer to instructions

COMMON NAME

Oxides of Nitrogen Mix

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE

(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES

(Check all that apply)

Fire

Reactive

Pressure Release

Acute Health

Chronic Health

AVERAGE DAILY  
AMOUNT

564

MAXIMUM DAILY  
AMOUNT

1410

ANNUAL WASTE  
AMOUNT

0

STATE WASTE  
CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tank

Can

Bag

Plastic Bottle

Other:

Tank Inside Building

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 0.01%	Nitric Acid (34 ppm)	<input type="checkbox"/> Yes <input type="checkbox"/> No	10102-43-9
2 99.99%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation areas

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Asbestos

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Asbestos Containing Debris

EHS\*

Yes  No

CAS #

12001-29-5

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

40 cu. yds.

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY AMOUNT

2000

MAXIMUM DAILY AMOUNT

15000

ANNUAL WASTE AMOUNT

100000

STATE WASTE CODE

151

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Portable Container

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 25 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation area

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Distillates (Waste Lube Oil)

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions.

COMMON NAME

Waste Lubricating Oil

EHS\*  Yes  No

CAS #

8002-05-9

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)	<input type="checkbox"/> PURE	<input type="checkbox"/> MIXTURE	<input checked="" type="checkbox"/> WASTE	RADIOACTIVE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CURIES
---	-------------------------------	----------------------------------	---	-------------	---	--------

PHYSICAL STATE (Check one item only)	<input type="checkbox"/> SOLID	<input type="checkbox"/> LIQUID	<input checked="" type="checkbox"/> GAS	LARGEST CONTAINER	55
--------------------------------------	--------------------------------	---------------------------------	---	-------------------	----

FED HAZARD CATEGORIES (Check all that apply)	<input checked="" type="checkbox"/> Fire	<input type="checkbox"/> Reactive	<input type="checkbox"/> Pressure Releas	<input checked="" type="checkbox"/> Acute Health	<input type="checkbox"/> Chronic Heait
--	--	-----------------------------------	--	--	--

AVERAGE DAILY AMOUNT	220	MAXIMUM DAILY AMOUNT	550	ANNUAL WASTE AMOUNT	5550	STATE WASTE CODE	221
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UNITS* (Check one item only)	<input type="checkbox"/> GALLONS	<input type="checkbox"/> CUBIC FEET	<input checked="" type="checkbox"/> POUNDS	<input type="checkbox"/> TONS	DAYS ON SITE	365
------------------------------	----------------------------------	-------------------------------------	--	-------------------------------	--------------	-----

Storage Container (Check all that apply)	<input type="checkbox"/> Aboveground Tank	<input type="checkbox"/> Plastic/Nonmetallic Dr	<input type="checkbox"/> Fiber Drum	<input type="checkbox"/> Glass Bottle	<input type="checkbox"/> Rail Car
	<input type="checkbox"/> Underground Tan	<input type="checkbox"/> Can	<input type="checkbox"/> Bag	<input type="checkbox"/> Plastic Bottle	<input type="checkbox"/> Other:
	<input type="checkbox"/> Tank Inside Buildin	<input type="checkbox"/> Carboy	<input type="checkbox"/> Box	<input type="checkbox"/> Tote Bin	
	<input checked="" type="checkbox"/> Steel Drum	<input type="checkbox"/> Silo	<input type="checkbox"/> Cylinder	<input type="checkbox"/> Tank Wagon	

STORAGE PRESSURE	<input checked="" type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT
------------------	--	---	---

STORAGE TEMPERATURE	<input checked="" type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT	<input type="checkbox"/> d. CRYOGENIC
---------------------	--	---	---	---------------------------------------

#	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	99.00%	Petroleum Hydrocarbon	<input type="checkbox"/> Yes <input type="checkbox"/> No	8002-05-9
2			<input type="checkbox"/> Yes <input type="checkbox"/> No	
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation areas

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Distillates (Waste Oil/Solids)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Oil Contaminated Soil/Solids

EHS\*

Yes  No

CAS #

8002-05-9

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE  
(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES  
(Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY  
AMOUNT

220

MAXIMUM DAILY  
AMOUNT

1100

ANNUAL WASTE  
AMOUNT

5500

STATE WASTE  
CODE

223

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 85.00%	Petroleum Hydrocarbons	<input type="checkbox"/> Yes <input type="checkbox"/> No	8002-05-9
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 27 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation areas

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID#

1

9

0

1

3

3

0

0

0

1

1

MAP# (optional)

1

GRID# (optional)

F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Hydrocarbon & 1,1,1-Trichloroethane

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Waste Oil & Solvent

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes

No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

500

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY AMOUNT

450

MAXIMUM DAILY AMOUNT

1350

ANNUAL WASTE AMOUNT

2700

STATE WASTE CODE

221 - 741

UNITS\* (Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	90.00%	Petroleum Hydrocarbon (90 - 99%)	<input type="checkbox"/> Yes <input type="checkbox"/> No	8002059
2	10.00%	1,1,1-Trichloroethane (1 - 10%)	<input type="checkbox"/> Yes <input type="checkbox"/> No	71-55-6
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 28 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation areas

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Mineral Spirits (Waste)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Waste Paint & Thinner

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes

No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY AMOUNT

55

MAXIMUM DAILY AMOUNT

110

ANNUAL WASTE AMOUNT

165

STATE WASTE CODE

4561 / 213

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 80.00%	Mineral Spirits (80 - 90%)	<input type="checkbox"/> Yes <input type="checkbox"/> No	64742-88-7
2 10.00%	Aliphatic Petroleum Distillates (10 - 20%)	<input type="checkbox"/> Yes <input type="checkbox"/> No	87052-41-3
3 20.00%	Citrus Terpenes	<input type="checkbox"/> Yes <input type="checkbox"/> No	68647-72-3
4 80.00%	Severely Hydrotreated Liight Distillates	<input type="checkbox"/> Yes <input type="checkbox"/> No	64742-47-8
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, South Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Flammable Gas Mixture #1

TRADE SECRET Yes  No   
If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\* Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 282

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT 846 MAXIMUM DAILY AMOUNT 1410 ANNUAL WASTE AMOUNT STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 1.00%	Carbon Dioxide	<input type="checkbox"/> Yes <input type="checkbox"/> No	124-38-9
2 5.00%	Ethane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-84-0
3 3.00%	Isobutane	<input type="checkbox"/> Yes <input type="checkbox"/> No	106-97-8
4 4.00%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
5 10.00%	Hydrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	1333-74-0

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 30 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Flammable Gas Mixture #2

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

846

MAXIMUM DAILY AMOUNT

1410

ANNUAL WASTE AMOUNT

0

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 70.00%	Methane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-82-8
2 1.00%	Ethylene	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-85-1
3 1.00%	Propylene	<input type="checkbox"/> Yes <input type="checkbox"/> No	115-07-1
4 4.00%	Propane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-98-6
5 1.00%	Carbon Monoxide	<input type="checkbox"/> Yes <input type="checkbox"/> No	630-08-0

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

## HAZARDOUS MATERIALS INVENTORY

HAZARDOUS MATERIALS

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 31 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, South Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Flammable Gas Mixture #3

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 282

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT 846 MAXIMUM DAILY AMOUNT 1410 ANNUAL WASTE AMOUNT 0 STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 5.00%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
2 5.00%	Hydrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	1333-74-0
3 2.00%	Ethane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-84-0
4 1.50%	Propane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-98-6
5 1.00%	Carbon Monoxide	<input type="checkbox"/> Yes <input type="checkbox"/> No	630-08-0

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Flammable Gas Mixture #4

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE  
(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES  
(Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY  
AMOUNT

846

MAXIMUM DAILY  
AMOUNT

1410

ANNUAL WASTE  
AMOUNT

STATE WASTE  
CODE

UNITS\*  
(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Builidin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 1.00%	Ethylene	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-85-1
2 1.00%	Carbon Dioxide	<input type="checkbox"/> Yes <input type="checkbox"/> No	124-38-9
3 1.00%	N-Butane	<input type="checkbox"/> Yes <input type="checkbox"/> No	106-97-8
4 0.33%	Pentane	<input type="checkbox"/> Yes <input type="checkbox"/> No	109-66-0
5 0.03%	Hexane	<input type="checkbox"/> Yes <input type="checkbox"/> No	110-54-3

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

## HAZARDOUS MATERIALS INVENTORY

HAZARDOUS MATERIALS

CHEMICAL DESCRIPTION  
(one page per material per building or area)

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### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Flammable Gas Mixture #5

TRADE SECRET If Subject o EPCRA, refer to instructions  
Yes  No

COMMON NAME

EHS\* Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 282

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY AMOUNT 846 MAXIMUM DAILY AMOUNT 1410 ANNUAL WASTE AMOUNT STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  Underground Tan  Can  Bag  Plastic Bottle  Other:  Tank Inside Buildin  Carboy  Box  Tote Bin  Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 72.00%	Methane	<input type="checkbox"/> Yes <input type="checkbox"/> No	74-82-8
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA  Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) A

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Nitrogen/Oxygen Mixture (1% O2)

TRADE SECRET  Yes  No  
If Subject to EPCRA, refer to instructions

COMMON NAME

EPA Protocol Mix

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

282

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Release  Acute Health  Chronic Health

AVERAGE DAILY AMOUNT

282

MAXIMUM DAILY AMOUNT

564

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 1.00%	Oxygen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7782-44-7
2 99.00%	Nitrogen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7727-37-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Transformers at Units 1, 2, 3 and 4

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID#

1 9 0 1 3 3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Distillates (Mineral Oil)

TRADE SECRET

Yes  No

If Subject to EPCRA, refer to instructions

COMMON NAME

Mineral Oil with PCB's >2ppm - <50 ppm

EHS\*

Yes  No

CAS #

If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

13900

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Release  Acute Health  Chronic Health

AVERAGE DAILY AMOUNT

87800

MAXIMUM DAILY AMOUNT

88000

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tank  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Building  Carboy  Box  Tote Bin  Transformers  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 0.10%	Polychlorinated Biphenyls	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2 99.00%	Petroleum Hydrocarbons	<input type="checkbox"/> Yes <input type="checkbox"/> No	8002-05-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 36 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation areas

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID#

1 9

0 1 3

3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Distillates (Waste Mineral Oil)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Waste Mineral Oil with PCB's >2ppm - <50 ppm

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE

(Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES

(Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY AMOUNT

110

MAXIMUM DAILY AMOUNT

330

ANNUAL WASTE AMOUNT

550

STATE WASTE CODE

261

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container

(Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 1.00%	Polychlorinated Biphenyls	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2 9.90%	Petroelum Hydrocarbons	<input type="checkbox"/> Yes <input type="checkbox"/> No	8002-05-9
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 37 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation areas

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Waste Solvent and Debris

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL  
TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE  
(Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES  
(Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY  
AMOUNT

55

MAXIMUM DAILY  
AMOUNT

110

ANNUAL WASTE  
AMOUNT

220

STATE WASTE  
CODE

211

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON  
SITE

365

Storage Container  
(Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 10.00%	1,1,1-Trichlorethane (1 -10%)	Yes <input type="checkbox"/> No <input type="checkbox"/>	71-55-6
2		Yes <input type="checkbox"/> No <input type="checkbox"/>	
3		Yes <input type="checkbox"/> No <input type="checkbox"/>	
4		Yes <input type="checkbox"/> No <input type="checkbox"/>	
5		Yes <input type="checkbox"/> No <input type="checkbox"/>	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

## HAZARDOUS MATERIALS INVENTORY

HAZARDOUS MATERIALS

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

Page 38 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area & accumulation areas

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Waste Hydrazine and Debris

TRADE SECRET Yes  No   
If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\* Yes  No

CAS #

If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 55

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Heait

AVERAGE DAILY AMOUNT 55 MAXIMUM DAILY AMOUNT 110 ANNUAL WASTE AMOUNT 220 STATE WASTE CODE 181 / 352

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)

<input type="checkbox"/> Aboveground Tank	<input type="checkbox"/> Plastic/Nonmetallic Dr	<input type="checkbox"/> Fiber Drum	<input type="checkbox"/> Glass Bottle	<input type="checkbox"/> Rail Car
<input type="checkbox"/> Underground Tan	<input type="checkbox"/> Can	<input type="checkbox"/> Bag	<input type="checkbox"/> Plastic Bottle	<input type="checkbox"/> Other:
<input type="checkbox"/> Tank Inside Builidin	<input type="checkbox"/> Carboy	<input type="checkbox"/> Box	<input type="checkbox"/> Tote Bin	
<input checked="" type="checkbox"/> Steel Drum	<input type="checkbox"/> Silo	<input type="checkbox"/> Cylinder	<input type="checkbox"/> Tank Wagon	

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

#	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	20.00%	Hydrazine	<input type="checkbox"/> Yes <input type="checkbox"/> No	302-01-2
2			<input type="checkbox"/> Yes <input type="checkbox"/> No	
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Hazardous Waste Storage Area and accumulation area

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Non-RCRA Hazardous Waste Silicone Grease & Debris

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE

(Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES

(Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

55

MAXIMUM DAILY AMOUNT

110

ANNUAL WASTE AMOUNT

220

STATE WASTE CODE

352

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container

(Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 99.00%	Silicone Polymer	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 40 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Warehouse, Southwest Side

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) B

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Distillates (Kerosene)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Kerosene

EHS\*

Yes  No

CAS #

8008-20-6

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

110

MAXIMUM DAILY AMOUNT

165

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		Yes <input type="checkbox"/> No <input type="checkbox"/>	
2		Yes <input type="checkbox"/> No <input type="checkbox"/>	
3		Yes <input type="checkbox"/> No <input type="checkbox"/>	
4		Yes <input type="checkbox"/> No <input type="checkbox"/>	
5		Yes <input type="checkbox"/> No <input type="checkbox"/>	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

Page 41 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Near Paint Shack and Hazardous Waste Storage Area

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional) J, F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Waste Paint Soilds/Sludge

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

55

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

55

MAXIMUM DAILY AMOUNT

165

ANNUAL WASTE AMOUNT

880

STATE WASTE CODE

352

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 20.00%	Mineral Spirits	Yes <input type="checkbox"/> No <input type="checkbox"/>	64742-88-7
2 20.00%	Aliphatic Petroleum Distillates	Yes <input type="checkbox"/> No <input type="checkbox"/>	8052-41-3
3 20.00%	Citrus Terpenes	Yes <input type="checkbox"/> No <input type="checkbox"/>	68647-72-3
4 20.00%	Severely Hydrotreated Light Distillates	Yes <input type="checkbox"/> No <input type="checkbox"/>	64742-74-8
5		Yes <input type="checkbox"/> No <input type="checkbox"/>	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Near Paint Shack and Hazardous Waste Storage Area

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional) J, F

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Waste Paint Chips and Debris (with Benzene & Lead)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 55

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT 110 MAXIMUM DAILY AMOUNT 165 ANNUAL WASTE AMOUNT 660 STATE WASTE CODE 352

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  Underground Tan  Can  Bag  Plastic Bottle  Other:  Tank Inside Buildin  Carboy  Box  Tote Bin  Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 10.00%	Benzene	<input type="checkbox"/> Yes <input type="checkbox"/> No	71-43-2
2 10.00%	Lead	<input type="checkbox"/> Yes <input type="checkbox"/> No	7439-92-1
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

Unified Program Consolidated Form

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

(one page per material per building or area)

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLC

CHEMICAL LOCATION

Unit1&2 Ground Flr. & SW Unit 2, Unit3&4Ground Flr

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID#

1 9

0 1 3

3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

C

II. CHEMICAL INFORMATION

CHEMICAL NAME

Petroleum Distillate (Lube Oil)

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Lubricating Oil

EHS\*

Yes  No

CAS #

8002-05-9

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

10000

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Heat

AVERAGE DAILY AMOUNT

27800

MAXIMUM DAILY AMOUNT

40500

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
*(one page per material per building or area)*

Page 44 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLC

CHEMICAL LOCATION

Under unit 3 boiler and unit 1 chem area

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Phosphate, Caustic, Water

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Nalco BT-3000

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

400

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

500

MAXIMUM DAILY AMOUNT

800

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 2.50%	Sodium Hydroxide	<input type="checkbox"/> Yes <input type="checkbox"/> No	1310-73-2
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Under unit 3 boiler and unit 1 chem area

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Polymer, Caustic, in aqueous solution

TRADE SECRET

Yes  No

If Subject to EPCRA, refer to instructions

COMMON NAME

Nalco EG-5010

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIOS

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

400

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Release  Acute Health  Chronic Health

AVERAGE DAILY AMOUNT

500

MAXIMUM DAILY AMOUNT

800

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tank  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Building  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

#	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	20.00%	Sodium Hydroxide	<input type="checkbox"/> Yes <input type="checkbox"/> No	1310-73-2
2			<input type="checkbox"/> Yes <input type="checkbox"/> No	
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

Unified Program Consolidated Form

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

(one page per material per building or area)

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLC

CHEMICAL LOCATION

Under unit 3 boiler and unit 1 chem area

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional)

II. CHEMICAL INFORMATION

CHEMICAL NAME

Amines, Water

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

Nalco 350

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER  
400

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY AMOUNT

500

MAXIMUM DAILY AMOUNT

800

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE  
365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 45.00%	Cyclohexylamine	<input type="checkbox"/> Yes <input type="checkbox"/> No	108-91-8
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY & CHEMICAL DESCRIPTION

*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Under unit 3 boiler and unit 1 chem area

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Modified Amino Compound

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

Elimin-ox Oxygen Scavenger

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER  
400

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

500

MAXIMUM DAILY AMOUNT

800

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE  
365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	Carbohydrazide	<input type="checkbox"/> Yes <input type="checkbox"/> No	497-18-7
2	Water	<input type="checkbox"/> Yes <input type="checkbox"/> No	7732-18-5
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Under unit 3 boiler and unit 1 chem area

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Amines, Water

TRADE SECRET

Yes  No

If Subject to EPCRA, refer to instructions

COMMON NAME

Nalco 356

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 400

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT 500 MAXIMUM DAILY AMOUNT 800 ANNUAL WASTE AMOUNT STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 365

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

#	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	7.50%	Morpholine	<input type="checkbox"/> Yes <input type="checkbox"/> No	110-91-8
2	20.00%	Cyclohexylamine	<input type="checkbox"/> Yes <input type="checkbox"/> No	108-91-8
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

## HAZARDOUS MATERIALS INVENTORY

HAZARDOUS MATERIALS

CHEMICAL DESCRIPTION  
(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

Unit 2 2nd level west side

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Carbon Dioxide

TRADE SECRET  Yes  No  
If Subject to EPCRA, refer to instructions

COMMON NAME

Cardox

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

5

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Release  Acute Health  Chronic Health

AVERAGE DAILY AMOUNT

3

MAXIMUM DAILY AMOUNT

5

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE 365

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tank  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Building  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY

(one page per material per building or area)

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

South of Unit 4 boiler

CHEMICAL LOCATION  
CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Inhibitor

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

Low Hazard Corrosion Inhibitor

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE  Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER  
200

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY AMOUNT

75

MAXIMUM DAILY AMOUNT

100

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE  
60

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 29.40%	Ammonia, anhydrous	<input type="checkbox"/> Yes <input type="checkbox"/> No	7664-41-7
2 70.60%	Water	<input type="checkbox"/> Yes <input type="checkbox"/> No	7732-18-5
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 51 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

South of unit 4 boiler

CHEMICAL LOCATION

CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Chelant

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

ChelClean 665 Chelating Agent

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE  MIXTURE  WASTE

RADIOACTIVE

Yes  No

CURIES

PHYSICAL STATE (Check one item only)

SOLID  LIQUID  GAS

LARGEST CONTAINER

5600

FED HAZARD CATEGORIES (Check all that apply)

Fire  Reactive  Pressure Releas  Acute Health  Chronic Healt

AVERAGE DAILY AMOUNT

50000

MAXIMUM DAILY AMOUNT

89000

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\*

(Check one item only)

GALLONS  CUBIC FEET  POUNDS  TONS

DAYS ON SITE

60

Storage Container (Check all that apply)

Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  poly tank  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 44.50%	Diammonium ethylenediaminsterrarstate	<input type="checkbox"/> Yes <input type="checkbox"/> No	20824-56-0
2 50.00%	Water	<input type="checkbox"/> Yes <input type="checkbox"/> No	7732-18-5
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

HAZARDOUS MATERIALS

## HAZARDOUS MATERIALS INVENTORY CHEMICAL DESCRIPTION

*(one page per material per building or area)*

Page 52 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

EI Segundo Power, LLC

CHEMICAL LOCATION

South of unit 4 boiler

CHEMICAL LOCATION

CONFIDENTIAL - EPCRA

Yes  No

FACILITY ID#

1 9

0 1 3

3 0 0 0 1 1

MAP# (optional)

1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Alkali

TRADE SECRET

Yes  No

If Subject o EPCRA, refer to instructions

COMMON NAME

Aqua Ammonia, 29.4%

EHS\*

Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)

PURE

MIXTURE

WASTE

RADIOACTIVE

Yes

No

CURIES

PHYSICAL STATE (Check one item only)

SOLID

LIQUID

GAS

LARGEST CONTAINER

400

FED HAZARD CATEGORIES (Check all that apply)

Fire

Reactive

Pressure Releas

Acute Health

Chronic Healt

AVERAGE DAILY AMOUNT

600

MAXIMUM DAILY AMOUNT

1000

ANNUAL WASTE AMOUNT

STATE WASTE CODE

UNITS\* (Check one item only)

GALLONS

CUBIC FEET

POUNDS

TONS

DAYS ON SITE

60

Storage Container (Check all that apply)

Aboveground Tank

Plastic/Nonmetallic Dr

Fiber Drum

Glass Bottle

Rail Car

Underground Tan

Can

Bag

Plastic Bottle

Other:

Tank Inside Buildin

Carboy

Box

Tote Bin

Steel Drum

Silo

Cylinder

Tank Wagon

STORAGE PRESSURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

STORAGE TEMPERATURE

a. AMBIENT

b. ABOVE AMBIENT

c. BELOW AMBIENT

d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 29.40%	Ammonia, anhydrous	<input type="checkbox"/> Yes <input type="checkbox"/> No	7664-41-7
2 70.60%	Water	<input type="checkbox"/> Yes <input type="checkbox"/> No	7732-18-5
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

## HAZARDOUS MATERIALS INVENTORY

HAZARDOUS MATERIALS

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 53 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

South of unit 4 boiler

CHEMICAL LOCATION  
CONFIDENTIAL -  
EPCRA

Yes  No

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Ammonium Bicarbonate

TRADE SECRET  Yes  No  
If Subject o EPCRA, refer to instructions

COMMON NAME

Ammonium Bicarbonate

EHS\*  Yes  No

CAS #

\*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)	<input checked="" type="checkbox"/> PURE	<input type="checkbox"/> MIXTURE	<input type="checkbox"/> WASTE	RADIOACTIVE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CURIES
PHYSICAL STATE (Check one item only)	<input checked="" type="checkbox"/> SOLID	<input type="checkbox"/> LIQUID	<input type="checkbox"/> GAS	LARGEST CONTAINER	50	
FED HAZARD CATEGORIES (Check all that apply)	<input type="checkbox"/> Fire	<input type="checkbox"/> Reactive	<input type="checkbox"/> Pressure Releas	<input checked="" type="checkbox"/> Acute Health	<input checked="" type="checkbox"/> Chronic Healt	
AVERAGE DAILY AMOUNT	400	MAXIMUM DAILY AMOUNT	600	ANNUAL WASTE AMOUNT	STATE WASTE CODE	
UNITS* (Check one item only)	<input type="checkbox"/> GALLONS	<input type="checkbox"/> CUBIC FEET	<input checked="" type="checkbox"/> POUNDS	<input type="checkbox"/> TONS	DAYS ON SITE 60	
Storage Container (Check all that apply)	<input type="checkbox"/> Aboveground Tank	<input type="checkbox"/> Plastic/Nonmetallic Dr	<input type="checkbox"/> Fiber Drum	<input type="checkbox"/> Glass Bottle	<input type="checkbox"/> Rail Car	
	<input type="checkbox"/> Underground Tan	<input type="checkbox"/> Can	<input checked="" type="checkbox"/> Bag	<input type="checkbox"/> Plastic Bottle	<input type="checkbox"/> Other:	
	<input type="checkbox"/> Tank Inside Buildin	<input type="checkbox"/> Carboy	<input type="checkbox"/> Box	<input type="checkbox"/> Tote Bin		
	<input type="checkbox"/> Steel Drum	<input type="checkbox"/> Sito	<input type="checkbox"/> Cylinder	<input type="checkbox"/> Tank Wagon		
STORAGE PRESSURE	<input checked="" type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT			
STORAGE TEMPERATURE	<input checked="" type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT	<input type="checkbox"/> d. CRYOGENIC		

#	% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1	99.60%	Oxygen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7782-44-7
2			<input type="checkbox"/> Yes <input type="checkbox"/> No	
3			<input type="checkbox"/> Yes <input type="checkbox"/> No	
4			<input type="checkbox"/> Yes <input type="checkbox"/> No	
5			<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# Unified Program Consolidated Form

## HAZARDOUS MATERIALS INVENTORY

**HAZARDOUS MATERIALS**  
**CHEMICAL DESCRIPTION**  
*(one page per material per building or area)*

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

South of unit 4 boiler

CHEMICAL LOCATION  
 CONFIDENTIAL -  Yes  No  
 EPCRA

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1

MAP# (optional) 1

GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

Gaseous oxygen

TRADE SECRET  Yes  No  
 If Subject o EPCRA, refer to instructions

COMMON NAME

Oxidizer

EHS\*  Yes  No

CAS #

**\*If EHS is "Yes", all amounts below must be in lbs.**

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 45000

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY AMOUNT 30000 MAXIMUM DAILY AMOUNT 45000 ANNUAL WASTE AMOUNT STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 60

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin cylinder trailer  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1 99.60%	Oxygen	<input type="checkbox"/> Yes <input type="checkbox"/> No	7782-44-7
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

# Unified Program Consolidated Form

**HAZARDOUS MATERIALS**

## HAZARDOUS MATERIALS INVENTORY

CHEMICAL DESCRIPTION  
(one page per material per building or area)

Page 55 of 55

### I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As)

El Segundo Power, LLC

CHEMICAL LOCATION

South of unit 4

CHEMICAL LOCATION

CONFIDENTIAL -  Yes  No  
EPCRA

FACILITY ID# 1 9 0 1 3 3 0 0 0 1 1 MAP# (optional) 1 GRID# (optional)

### II. CHEMICAL INFORMATION

CHEMICAL NAME

CuSol Solvent Waste

TRADE SECRET  Yes  No  
If Subject to EPCRA, refer to instructions

COMMON NAME

CuSol Solvent Waste

EHS\*  Yes  No

CAS #

If EHS is "Yes" all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA)

HAZARDOUS MATERIAL TYPE (Check one item only)  PURE  MIXTURE  WASTE RADIOACTIVE  Yes  No CURIES

PHYSICAL STATE (Check one item only)  SOLID  LIQUID  GAS LARGEST CONTAINER 21,000

FED HAZARD CATEGORIES (Check all that apply)  Fire  Reactive  Pressure Releas  Acute Health  Chronic Heat

AVERAGE DAILY AMOUNT 100000 MAXIMUM DAILY AMOUNT 180000 ANNUAL WASTE AMOUNT 180000 STATE WASTE CODE

UNITS\* (Check one item only)  GALLONS  CUBIC FEET  POUNDS  TONS DAYS ON SITE 60

Storage Container (Check all that apply)  Aboveground Tank  Plastic/Nonmetallic Dr  Fiber Drum  Glass Bottle  Rail Car  
 Underground Tan  Can  Bag  Plastic Bottle  Other:  
 Tank Inside Buildin  Carboy  Box  Tote Bin  
 Steel Drum  Silo  Cylinder  Tank Wagon

STORAGE PRESSURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT

STORAGE TEMPERATURE  a. AMBIENT  b. ABOVE AMBIENT  c. BELOW AMBIENT  d. CRYOGENIC

% WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS#
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION:

If EPCRA, Please Sign Here

# EMERGENCY PREPAREDNESS AND EMERGENCY RESPONSE PLAN

## **Hazwoper**

### **OSHA Employee Emergency Plan and Fire Prevention Plan**

### **Resource Conservation and Recovery Act Contingency Plan and Emergency Procedures**

### **EPA Risk Management Plan**

Station Control Center:	(310) 615-6303
El Segundo Fire Department Fire Department:	911
Police and Ambulance:	911

El Segundo Power LLC  
301 Vista del Mar  
El Segundo, California, 90245  
(310) 615-6313

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## EMERGENCY PREPAREDNESS AND EMERGENCY RESPONSE PLAN

### INTRODUCTION

The purpose of this Station Procedure is to establish a course of action in the event of an emergency at El Segundo Generation, LLC. The standard for emergency response plans is derived from the Code of Federal Regulations HAZWOPER 29CFR 1910.120; 2) OSHA Employee Emergency Plan and Fire Prevention Plan 29CFR 1910.38; 3) the Resource Conservation and Recovery Act (RCRA) 40CFR 265.50; 4) and El Segundo Power, LLC operating procedures and standards that define the procedures to effectively respond to natural or man-made events in a manner that addresses the safety and protection of employees, the public, and the environment.

Emergency notification procedures are also stated in 1) CERCLA (Comprehensive Environmental Response, Compensation and Liability Act/Superfund) from 40CFR 302.6; and 2) SARA Title III/EPCRA (Emergency Planning and Community Right-to-Know Act) from 40CFR 355.40.

The term emergency involves acts of nature or man that can hinder the normal operation of this plant in a manner to cause concern for the safety and well-being of personnel and equipment. It encompasses, but is not limited to, the following emergency categories: 1) flood; 2) earthquake; 3) lightning; 4) fires; 5) explosions; 6) disruption of critical facilities, such as oil and gas supply; 7) enemy attack; 8) civil disturbance; 9) plane crash; 10) tidal wave and 11) hazardous material release. This plan also addresses procedures for personnel to seek medical assistance in non-major emergency situations.

The priority of this plan includes the following: 1) protection of life; 2) protection of the environment; 3) protection of property; 4) restoration of electric service; and the 5) restoration or safe shutdown of critical facility functions.

Emergency response actions beyond the capabilities of our Station personnel will be deferred to qualified outside agencies. Periodically, the Station's hazardous chemical storage facilities, this response plan, and the Station's fire protection system will be reviewed with the El Segundo Fire Department per regulatory requirements.

This Station Procedure will be separated in three parts; Part 1-Emergency Preparedness Guidelines; Part 2-Hazardous Material Emergency and Major Emergency Response and Part 3-Containment and Removal of Hazardous Wastes. The Hazardous Material Emergency response is designed to protect both employees and the environment.

## PART 1

### EMERGENCY PREPAREDNESS GUIDELINES

#### I. EMERGENCY PLANNING AND COORDINATION WITH OUTSIDE AGENCIES

- A. The El Segundo Fire Department (ESFD) has been contacted and understands they may be called to provide resources in an emergency situation.
- B. El Segundo Fire Department personnel will respond to any emergency hazardous chemical spill, leak or fire beyond the response capabilities of the Station operations and maintenance forces.
- C. The Fire Department will be contacted by the Shift Supervisor, Operations Manager, or Environmental Staff.

#### II. AREAS OF PREPAREDNESS

- A. First-aid supplies are maintained in First Aid kits throughout the Plant. Additional first aid supplies are located in the free stock area of the warehouse. The location of the Station emergency equipment is noted in Attachment #7.
- B. Emergency response equipment is located in both Units 1 & 2, and 3 & 4 Control Rooms. This includes backboard stretchers and other emergency equipment.
- C. A bomb threat procedure is located in Attachment No.4.
- D. A copy of this procedure will be kept in both Control Rooms and the Shift Supervisor's office,
- E. On an annual basis the phone list associated with the emergency plan will be updated.
- F. Annually, the Station will have each employee verify the accuracy of their emergency phone numbers.

#### III. EMERGENCY RESPONSE TRAINING

- A. All Station employees receive initial training and refresher training as required in the following topics:
  - 1) Hazard Communication
  - 2) HAZWOPER (Operations and Awareness level)
  - 3) Risk Management Plan
  - 4) Fire Prevention and Response
  - 5) Emergency Preparedness

- 6) First Aid Procedures
- 7) Respiratory Protection

- B. In addition to other topics, first aid training is conducted as required and specifically covers CPR, burns and shock treatment.
- C. Emergency response procedure training shall be conducted initially and on an as needed basis. This training should include various emergency scenarios to expose the work force to the possible responses necessary during a major emergency. Emergency procedures shall be a part of each new employee's orientation.
- D. All Operations personnel will receive initial and annual refresher training equivalent to HAZWOPER "First Responder Awareness Level."
- E. All Shift Supervisors will receive initial and annual refresher training equivalent to HAZWOPER "Operations". The Shift Supervisor will act as the emergency Response Coordinator (RC) until relieved by a qualified Incident Commander.

#### IV. EMERGENCY MEDICAL TREATMENT AND FIRST AID

- A. Emergency response equipment is located in both Units 1 & 2, and 3 & 4 Control Rooms.
- B. See Attachment No. 6 for a location of Station Emergency Equipment.

#### V. COMMUNICATIONS

- A. All emergency communications requesting outside agency assistance are initially routed through the Units 3 & 4 Control Room at 310 615-6303.
- B. The Control Room is the Incident Response Center, unless otherwise directed by the Shift Supervisor or Incident Commander.
- C. The Station's public address number is PAX 6-526.
- D. Security Officer has a cell phone.
- E. The Shift Supervisors have cell phones.
- F. The Station Emergency Warning System has a dedicated public address as well as an audible warning siren and strobe light system for notification to Station personnel of an emergency or a need to evacuate the plant and go to assigned assembly areas.
  - 1. Procedure "Operation of the Station Emergency Warning System" details this system.

#### VI. PREVENTION

- A. Operations personnel perform daily inspections of facilities and chemical transfer equipment.
  - 1. Minor leaks, spills, or deterioration are noted and reported.

2. Hazardous chemical storage tanks, drums, containers, and transfer lines are labeled and identified.
- B. See Attachment No. 5 for a copy of the RCRA & Daily Inspection sheet.
  - C. Prevention methods include spill reservoirs around bulk chemical tanks, and routine fire equipment inspections. Also shovels, sand, sand bags, and other absorbents are located in the spill prevention locker at the bottom of the roadway.

## VII. SITE SECURITY AND CONTROL

- A. The El Segundo Generating Station site is surrounded with perimeter fencing. Within the boundary of the perimeter fencing are the boilers, electrical switchyard, fuel oil tanks, and all Station buildings.
- B. The fence construction is chain link topped with barbed wire. The fence is eight feet high. The perimeter fencing is inspected daily by Station personnel. Any openings through or under the fence are reported to station management. Repairs are effected expeditiously.
- C. Entry to the Station is monitored by a security officer 16 hours a day, five days a week. During off hours entry is monitored by a video/card reader entry system. The on-duty Security Officer controls access to the plant site. The general public is not allowed entry to the plant. Visitors are escorted about the plant by qualified personnel.
- D. Warning signs are posted on the perimeter fencing at appropriate intervals. These signs carry the legend "No Trespassing - Private Property".
- E. The Station is sufficiently illuminated at night to maintain the ability to detect hazardous waste leaks or spills.
- F. The security procedures practiced at this facility are adequate to prevent entry by the public into the hazardous material facility areas.

## VIII. EMERGENCY PROCEDURES

- A. This section defines the responsibilities of all Station personnel and the appropriate course of action necessary in the event of a major emergency.
  1. As an emergency evolves, corresponding amounts of disorder and human emotion also develop to complicate the situation.
  2. An emergency can be too large in scope for Station personnel to handle alone and may require the combined efforts of all Station personnel and other outside organizations.
- B. Throughout any major event or emergency, the Station will utilize the following incident response system:
  1. The on-duty Shift Supervisor serves as the on-site response coordinator until relieved by a qualified Incident Commander.

2. The "Incident Response System" is a limited emergency management structure designed to minimize the impact of an incident until qualified emergency response personnel can gain control of the event.
3. Upon arrival at the Station, the Incident Commander will clearly notify Station personnel that he/she is the Incident Commander and is taking responsibility for direction of all personnel on-site. Beginning at that time, Station personnel will provide full assistance to the Incident Commander for the duration of the emergency.

#### IX. LINES OF AUTHORITY

A. During an emergency the lines of authority will be established as follows:

1. SHIFT SUPERVISOR
  - a. The on duty Shift Supervisor will function as the emergency "Response Coordinator" (RC).
2. FACILITY MANAGEMENT STAFF
  - a. Station Manager
  - b. Manager of Operations
  - c. Manager of Maintenance
  - d. Business Manager

#### X. PERSONNEL ROLES

A. **ALL STATION PERSONNEL SHALL TAKE NO ACTIONS WHICH CAUSE UNSAFE OR UNHEALTHY EXPOSURE TO THE HAZARD.**

B. SHIFT SUPERVISORS:

1. The on-duty Shift Supervisor The emergency Shift Supervisor is responsible for controlling, coordinating, and managing emergency response activities for the Station until a qualified Incident Commander arrives.
2. The Shift Supervisor will take initial control of the emergency. The Shift Supervisor will assess the need for outside assistance and, if required, direct personnel to arrange for required outside assistance such as fire agencies, local police and paramedics.
3. The Shift Supervisor takes action to limit the extent of damage, minimize hazards to personnel and the public, but only within the limits of the training provided to on-site personnel.
4. In addition, the Shift Supervisor obtains enough information to quickly assess the problem and as soon as practicable makes the proper notifications per regulatory requirements. The Shift Supervisor will also notify the Management Staff. If appropriate, the Shift Supervisor will direct announcements made over the Station Public Address and Emergency Warning systems.
5. If necessary the Shift Supervisor will authorize activation of the Plant Emergency Warning System notifying personnel to evacuate the plant. See Procedure "Activation of the Station Emergency Warning System"

C. STATION MANAGER:

1. As soon as time permits, the Shift Supervisor will call the Plant Manager or his designated representative to determine the best course of action. This may include an orderly plant shut down and evacuation provided that the situation merits this level of action.
2. The Management Staff will be composed of people who are knowledgeable in their particular fields and will provide support to the Incident Commander when he/she arrives on-site.

H. NON OPERATIONS PERSONNEL

1. In an emergency Mechanical and Technical personnel are to report to their respective shops and should remain there unless directed elsewhere by supervisors.
2. In an emergency Clerical personnel are to report to the Administration Building and should remain there unless directed elsewhere by supervisors.
3. In an emergency Storeroom personnel are to report to the Storeroom and should remain there unless directed elsewhere by supervisors.

XI. PLANT EVACUATION PLAN AND ASSEMBLY AREAS

- A. Activation of the Station Emergency Warning System requires all Station personnel to report to their assigned Assembly Areas. Use of the Station Emergency Warning System is described in Station Procedure 7-2.
- B. In the event of an emergency situation and it is necessary to evacuate the Plant, all personnel on site are to report to their assigned Assembly Areas.
  1. If personnel are unable to assemble in their assigned areas due to physical impossibility they will report to the closest assembly area.
  2. See Attachment No. 8 for Plant evacuation routes.
  3. Personnel assembling out of their assigned areas must at the earliest possibility report to their assigned assembly area. This is necessary for the Shift Supervisor to account for Station personnel.
- C. OPERATIONS PERSONNEL will report to their ASSIGNED CONTROL ROOM.
- D. STATION NON OPERATION, POWER GENERATION MAINTENANCE, OR OTHER PERSONNEL will report to the PARK AREA on the northwest corner of the plant.
- E. ALL CONTRACTOR PERSONNEL on site are expected to report to the PARK AREA on the northwest corner of the plant.
- F. SECURITY PERSONNEL are to remain at the MAIN GATE to assist with direction of emergency personnel and provide an accurate list of personnel on site. The Security Officer will report his status to the Incident Commander or to the Emergency Response Coordinator by phone.

G. ALTERNATE ASSEMBLY AREAS

1. Non Operations personnel in the Plant area who are unable to report to their assigned Assembly Area because of Plant conditions will use the Control Rooms as an Alternate Assembly Area.
  - a. At the earliest convenience these personnel are expected to report to their assigned Assembly Area.
  - b. This is necessary for the Incident Commander or Emergency Response Coordinator to account for Station personnel.
2. Operations personnel unable to report to their assigned Control Room shall assemble in the park area.
  - a. However, at the earliest possibility they are to report to their assigned Control Room for accounting purposes.
  - b. This is necessary for the Incident Commander or Emergency Response Coordinator to account for Station personnel.

## PART 2

### HAZARDOUS WASTE RELEASE OR MAJOR DISASTER EMERGENCY CONTINGENCY PLAN

#### I. PURPOSE

- A. Emergency Response regulations under Hazwoper defines the limits on response to hazardous chemical leak or spill.
- B. The purpose of this section is to specify how Station personnel at El Segundo Generating station will respond to any unplanned release of hazardous wastes to the air, soil or surface water.
- C. This response includes notifying the proper authorities of the release, controlling/cleaning up the release, and restoring the environment as required.

#### II. PLAN OUTLINE

- A. The following steps will be followed in the event of an imminent or confirmed release of hazardous waste:
  - 1. Discovery of the hazardous waste release source.
  - 2. Notification of the proper authorities. See Notification, this Part, Section XII.
  - 3. Containment and removal of the hazardous waste release ( including decontamination ).
  - 4. Restoration of the environment.
  - 5. Recording pertinent details of the incident.

#### III. RESPONSIBILITY

- A. The duty Shift Supervisor is responsible for implementing this plan.

#### IV. SOURCES OF HAZARDOUS WASTE

- A. Chemicals used at this station do not become hazardous wastes until they are no longer useful. Where at all possible materials will be reused, recycled, or reclaimed.
- B. This procedure is designed to be used with the "Oil and Hazardous Spill Contingency Plan, "Risk Management Plan", "Spill Prevention, "Control Use of the Station Emergency Warning System and "Hazardous Materials and Waste Management Plan."
  - 1. These plans detail sources and locations of hazardous materials found on site.
  - 2. These plans detail the emergency spill response plans and procedures for hazardous materials stored on site.
  - 3. These plans include"
    - a. Spills and leaks of oil (i.e., lubricating oils, hydraulic oils, etc).

- b. Spills or leaks from station bulk chemical storage tanks.
  - 1). Underground Ammonia Storage Tank
  - 2). Units 1 & 2 Sodium Hypochlorite Tank
  - 3). Units 3 & 4 Sodium Hypochlorite Tank
  - 4). Hydrogen
- c. Spills or leaks from station chemical barrels.
  - 1). Hydrazine
  - 2). Ammonium Hydroxide (Aqua ammonia)
- d. Cracks or holes in the linings of the Station retention basin.
- e. Cracks or holes in the walls of the Station sanitary waste treatment plants.
- f. Makeup demineralizer spent regenerant sump.
- g. Spills or leaks from Units 1 & 2 oil water separator.
- h. Spills or leaks from Units 3 & 4 oil water separator
- j. Spills or leaks from any containerized chemical found to be leaking whose empty container is normally disposed offsite in a Class 1 landfill area.
- j. Spills or leaks from the Hazardous Waste Management Area.

V. PERSONAL PROTECTIVE EQUIPMENT AND EMERGENCY EQUIPMENT

A. Personal protective equipment is located in the tool room and the warehouse.

- 1. This includes:
  - a. Impervious gloves
  - b. Rubber boots
  - c. Acid suits
  - d. Respirators and cartridges
  - e. Face shields
  - f. Goggles
  - g. Disposable coveralls
- 2. Attachment No. 7 has a complete detail of Station emergency equipment location.

B. Personnel performing emergency response clean up operations shall wear personal protective equipment that adequately addresses the hazards.

VI. LEVELS OF RESPONSE

A. NON-EMERGENCY RESPONSE

- 1. Involves a hazardous chemical leak or spill where there is no immediate or urgent need to take actions to stop the leak or spill.
- 2. This indicates there is no immediate hazard to the health or safety of employees, the environment, or equipment.

B. EMERGENCY RESPONSE USING IN-HOUSE CAPABILITIES

- 1. Involves an incidental release of a hazardous material from a leak or spill where there is an immediate or urgent need to take actions to stop the leak or spill.
- 2. Involves an incidental release of a hazardous material from a leak or spill where operations personnel can control the problem by defensive methods from safe distances.

C. EMERGENCY RESPONSE USING OUTSIDE AGENCY CAPABILITIES

1. Involves an emergency response to hazardous material leak or spill where there is an immediate or urgent need to take aggressive action requiring a close and potentially unsafe approach to the substance in order to affect control or stoppage of the leak or spill.
2. Station personnel would not perform these responses.

VII. LEVELS OF EMERGENCY ACTIONS

A. OPERATIONS PERSONNEL

1. Operations personnel in the immediate work area will perform the initial response to reports or discoveries of hazardous chemical leaks, spills, fires or other hazardous conditions.
2. Operations personnel are trained to the Hazwoper First Awareness Level.
3. Operations personnel will assess the situation from a safe distance and notify the Shift Supervisor only.

B. NON OPERATIONS PERSONNEL

1. Non Operations personnel are not trained to handle this type of emergency.
2. Non Operations personnel shall report the incident to the best of their ability, immediately and as accurately as possible, to the Shift Supervisor. **THEY SHALL IN NO WAY PARTICIPATE IN THE CONTROL OR MITIGATION OF THE SITUATION OTHER THAN TO ASSIST WITH SECURING THE AREA UNTIL HELP ARRIVES.**

VIII. EMERGENCY RECOGNITION

- A. All releases, fires, explosions, plane crashes, earthquakes, and tsunamis are emergency situations.
- B. Leaks or spills of hazardous materials which pose an immediate health or safety hazard to personnel or are beyond the response capabilities of the workers in the immediate area are to be considered an emergency situation.
- C. Only the duty Shift Supervisor can downgrade a situation headed towards normalcy. If an Incident Commander arrives on-site to manage an emergency, only the Incident Commander can downgrade the situation.
- D. All emergency situations are to be immediately communicated to the Units 3 & 4 Control Room and to the duty Shift Supervisor for appropriate hazard assessment and action.

IX. DISCOVERY

- A. Station personnel monitor potential sources of hazardous waste at a minimum of a least once every twelve hours. As such they are apt to locate potential problems and/or discover actual problems.
- B. The monitoring program is accomplished by the "RCRA & Daily Inspection" which is filled out twice per day.

- C. Operations performs equipment inspection rounds during each shift.
- D. Operations monitors every bulk chemical delivery to Station storage tanks.
- E. See Attachment No. 6 for the RCRA & Daily Inspection Sheet.

X. EMERGENCY ALERTING AND RESPONSE PROCEDURES

- A. The Control Room at Units 3 & 4 is manned on a 24 hour basis. Any indication of hazardous waste leaks or spills receive immediate attention and corrective action.
- B. The duty Shift Supervisor shall be immediately notified upon discovery of an imminent or actual emergency that is likely to require an emergency response.
- C. The duty Shift Supervisor is responsible for notifying Station personnel, outside response agencies, and Station management.
- D. These procedures should be followed in the event of a suspected or actual emergency :
  - 1. The First Responder notifies the Units 3 & 4 Control Room Operator.
  - 2. The First Responder evacuates and secures the area.
  - 3. Control Room notifies the duty Shift Supervisor.
  - 4. The duty Shift Supervisor assesses the nature and extent of the emergency.
  - 5. Appropriate level of response initiated. (See Section VI of this part)
    - a. Non-emergency
    - b. Emergency, need in-house response capability
    - c. Emergency, need outside response capability
  - 6. Decontamination
  - 7. Response critiques and follow-up.

XI. SAFE DISTANCES AND REFUGE

- A. Pre-determining safe distances for a hazardous chemical emergency is often difficult since it depends on quantities released, nature of the material, wind direction, and other unpredictable factors.
- B. Safe areas and refuges would typically be those areas upwind, upgrade, and away from the source of the hazard.
  - 1. This is offered only as a guideline since a bulk chemical delivery truck failure may contaminate an otherwise safe area.
  - 2. Actual safe distances and areas of refuge may be determined by the duty Shift Supervisor or Incident Commander based on the nature and extent of the emergency.

## XII. NOTIFICATION

### A. WHO

1. Upon discovery of an imminent or actual hazardous waste release the duty Shift Supervisor will be notified immediately.
2. The Shift Supervisor assumes control of the emergency response.
3. The Shift Supervisor is responsible for notifying Station personnel and management of the emergency.
  - a. The Shift Supervisor is responsible for coordination and implementation of the contingency plan until relieved by an Incident Commander or until termination of the incident.
4. The Shift Supervisor will also make the necessary notifications to the proper regulatory agencies.
5. Attachment 1 of this procedure contains the emergency call out list. The following are to be notified:
  - a. Plant Manager
  - b. The Environmental Supervisor will make notifications to all regulatory agencies. If unable to reach the Environmental Supervisor the Shift Supervisor will make the following notifications:
    - 1). ANY SIGNICANT HAZARDOUS WASTE RELEASE
      - a) El Segundo City Fire Department
      - b) California Office of Emergency Services
      - c) National Response Center
    - 2). ANY HAZARDOUS WASTE SPILL TO NAVIGABLE WATERS
      - a) Regional Response Center-Duty Officer United States Coast Guard Long Beach, California
  - c. In addition to the above notifications the Station shall also notify the following:
    - 1) NRG Regional Environmental Manager
    - 2) Chevron U.S.A. refinery Environmental coordinator.
6. In all notifications, a reasonable estimate of the quantity of spillage shall be reported.
  - a. For major spills, a reasonable estimate of the quantity of spillage shall be reported.
  - b. For hazardous substances spills, report approximate gallons in the case of liquids and pounds in the case of solids.

### B. WHEN

1. The regulation requires notification of any hazardous materials or hazardous wastes release which occurs in any period less than 24 hours and which exceeds the "reportable quantity", or RQ. See Attachment 2 for reportable quantities.
  - a. For many hazardous materials and hazardous wastes, the RQ is one pound. Since a pint of water is about one pound, spilling as little as a pint requires notification.
  - b. Any releases **which could threaten human health, or the environment, outside the facility** are to be reported.
  - c. The timing on reports is given "as soon as there is knowledge of any release."
    - 1). The priority is on timeliness.
    - 2). However, a balance must be struck between acting to report and

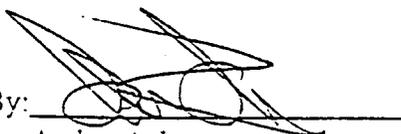
- acting to contain and prevent damage. Reporting within the first hour has generally been acceptable with respect to reporting.
- a). Name and telephone of the reporter.
  - b). Name and address of facility.
  - c). Time and type of incident (e.g., release, fire).
  - d). Name and quantity of material(s) involved, to the extent known.
  - e). The extent of injuries, if any.
  - f). The possible hazards to the human health, or the environment, outside the facility.
2. The reporting requirements for **extremely hazardous chemicals (hydrazine)** are more stringent.
- a. Any releases **which could threaten human health, or the environment, outside the facility** are to be reported when they occur.
  - b. The timing of the report is a critical issue.
  - c. Emergency notification is to be made immediately.
  - d. The report (and any emergency response) can not be delayed in order to provide the complete information.
    - 1). The priority is clearly on the timeliness of the initial report rather than the completeness or level of detail.
  - e. The person making the reports should make the report first to the agency with the most immediate responsibility, generally the nearest or most local level. This means calling 911.
  - f. The State Office of Emergency Services must be notified as well. The report must include:
    - 1). The chemical name or identity of any substance involved in the release.
    - 2). An estimated quantity of the chemical released.
    - 3). The time and duration of the release.
    - 4). The media into which the release occurred.
    - 5). The extent or dispersion of the release, and any environmental feature of concern ( e.g., body of water) which is threatened or which has been contaminated as a result of the release.
    - 6). Actions taken to respond to and contain the release, and the effect of those actions.
    - 7). Whether assistance from the National Response Team or other environmental agency may be advisable.
    - 8). The names and telephone numbers of the person or persons to contact for further information on the release or related matters.
3. Within 10 days following an incident that required notification and implementation of the hazardous material/waste release portion of this contingency plan, the Station shall submit a written report on the incident to the organization who received the verbal notification.

### PART 3

## CONTAINMENT AND REMOVAL OF HAZARDOUS WASTES

- I. ALL STATION PERSONNEL SHALL TAKE NO ACTIONS WHICH CAUSE UNSAFE OR UNHEALTHY EXPOSURE TO THE HAZARD. ALL SPILLS SHALL BE HANDLED USING THE APPROPRIATE PERSONNEL PROTECTIVE EQUIPMENT AND FOLLOWING THE PROSCRIBED PROCEDURES.
  
- II. SPILLS OR LEAKS
  - A. Petroleum products - Lubricating oils, hydraulic oils, etc. Station personnel will refer to procedure 6 for proper disposal of oils from Station oil systems.
  - B. Hazardous Materials
    1. Ammonia, Hypochlorite, Spills or leaks from the bearing cooling water system, and leaking containerized chemicals, etc. Station personnel will refer to the procedure for proper handling and disposal of Station hazardous wastes spills.
    2. Cracks or holes in the walls of the station sanitary waste treatment plant. Station personnel will refer to Procedure for proper handling and disposal of Station hazardous wastes spills.
  
- III. RESTORATION OF THE ENVIRONMENT
  - A. When any hazardous release results in ground contamination, the contaminated ground will be treated, as required, to render the contaminant harmless or the contaminated ground will be dug up and the ground removed offsite to an approved landfill disposal area (Class 1 dump).
  - B. The resulting hole will be filled in with uncontaminated soil.
  
- IV. CONTINGENCY PLAN DISTRIBUTION
  - A. A copy of this contingency plan must be:
    1. Maintained at the Station;
    2. Submitted to the local fire department and emergency response teams which may be called upon to provide emergency services.

El Segundo Power, LLC  
By: NRG El Segundo Operations Inc.,  
It's Authorized Agent

By:   
Audun Aaberg  
Regional Manager

Attachment No. 1

MAJOR EMERGENCY TELEPHONE LIST

FIRST RESPONSE

911

FIRE DEPARTMENTS

El Segundo Fire Department

911/(310) 322-4416

Manhattan Beach Fire Department

(310) 545-5679

POLICE DEPARTMENTS

El Segundo Police Department

911/(310) 322-2425

Manhattan Beach Police Department

(310) 545-4566

PRIMARY MEDICAL CARE

Concentra Medical Centers

(310) 215-1600

6033 W. Century Blvd., Suite 200

Los Angeles, CA 90045

HOSPITALS

RFK Medical Center

(310) 973-1711

4500 West 116th St.

Hawthorne, Ca. 90250

PARAMEDICS & AMBULANCES

El Segundo Fire Department Paramedics

911

EMERGENCY RESPONSE COORDINATORS:

Shift Supervisor:

Home Telephone Number

Cell

Business Telephone Number:

(310) 615-6313

Eugene Fitzhugh

Wayne Forsyth

(909) 205-1342

Robert Rea

(626) 446-8037

Tracy Woolton

Non- Operations

Alex Sanchez

(310) 615-6351

(310) 529-3280

Steve Odabashian

(310) 615-6331

EL SEGUNDO POWER MANAGEMENT STAFF

Audun Aaberg

(310) 615-6342

(310) 529-3257

Mark deCastro

(310) 615-6026

(310) 529-3258

Keith Goodner

(310) 615-6027

(310) 529-3261

Ahmad Sanati

(310) 615-6025

(310) 529-3260

CONTACTS FOR ANY SIGNIFICANT RELEASE

National Response Center (800) 424-8802  
California Office of Emergency Services (800) 852-7550

ANY HAZARDOUS WASTE SPILL TO NAVIGABLE WATERS

Regional Response Center-Duty Officer  
United States Coast Guard (562) 980-4450  
Long Beach, California (562) 980-4444

LOCAL ADMINISTERING AGENCY

El Segundo City Fire Department 911 OR  
(310) 322-4412

KEY MISCELLANEOUS

California Regional Water Quality Control Board (213) 576-6600  
California Department of Fish and Game (310) 590-5132  
California Highway Patrol (213) 620-4700  
LA County Lifeguard (310) 939-7200

VACUUM TRUCK/HAZARDOUS WASTE CLEAN-UP & DISPOSAL CONTRACTORS

Ancon Environmental (310) 548-8300  
IT Group (800) 334-0004

SUPPLIES & EQUIPMENT

Lab Safety Supply Company (800) 356 - 0783

FUEL GAS

Southern California Gas. Co. (800) 427-2000  
Chevron (310) 615-5000

Attachment 2

REPORTABLE QUANTITIES OF HAZARDOUS SUBSTANCES

(partial listing only including substances found in steam generation plants)

Material	Reportable Quantity (pounds)
Ammonium Hydroxide	1,000
Asbestos	1
Hydrazine	1
Petroleum Distillates-See NOTE 2 below	****
Sodium Hypochlorite	1,000

NOTE 1: Reportable quantities are expressed in pounds of the pure substance (100% basis). Spills of diluted chemicals must be corrected to the 100% basis. Assistance in making calculations may be obtained from Division Chemical staff.

NOTE 2: Any amount of oil that causes a sheen on navigable water, or any amount of oil that leaves station property is a reportable amount. Oil spilled on station property that is contained, not a threat to human health, or environment does not need to be reported. Normal clean up activities should take place.

Attachment 3

MEDIA INTERFACE GUIDELINES

1. Since the interface with the news media is always a sensitive area, it will be handled by a qualified El Segundo Power, LLC spokesperson, i.e. either the Plant Manager, Operations Manager or his/her representative. Employees are to be instructed not to make statements or to answer questions from media personnel. Any questions directed to them, on or off the job, are to be referred to the designated spokesperson. Until this qualified spokesperson arrives and has been briefed on the situation, the senior on-site supervisor will be responsible for maintaining the media interface.
2. No persons other than emergency agency and El Segundo Power, LLC personnel will be allowed on-site until adequate security and plant reliability has been established, as determined by the senior management representative on the premises. It will be extremely important to keep the plant entrance clear for emergency vehicles. The Security Officer will direct all unauthorized vehicles to park elsewhere.

Attachment 4

BOMB THREAT PROCEDURE

Any Station employee receiving a bomb threat is to remain calm and attempt to:

1. Encourage conversation with the caller.
2. Listen for voice identifying characteristics (sex, accent, and background noises).
3. Attempt to find out from the caller answers like-- where, what, why, how, who or what organization is involved?
4. Attempt to find answers to the following:
  - a. When is the bomb going to explode?
  - b. Where is the bomb right now?
  - c. What kind of bomb is it?
  - d. What is the description of the bomb (size, shape, container, color)?
  - e. What will cause the bomb to explode?
  - f. What was the motive for placing the bomb?
5. After concluding the call, the employee shall immediately report the call to Shift Supervisor and to no one else because:
  - a. Time is of the essence; and
  - b. The psychological effect upon other employees; and
  - c. To avoid the possibility of panic.
6. The Shift Supervisor shall immediately notify:
  - a. Police (call 911)
  - b. Plant Manager or his designated representative
  - c. Guard to restrict access to the plant, alert for emergency vehicle access.
7. Evacuation of employees from threatened areas:
  - a. Employee access shall be prohibited to threatened areas.
  - b. If need be the area, and all areas adjacent to the area should be evacuated.
  - c. If necessary the plant should be evacuated of all personnel.

Attachment 5  
 RCRA & DAILY INSPECTION REPORT

STATION \_\_\_\_\_ DATE \_\_\_\_\_ INSPECTOR - DAY \_\_\_\_\_  
 INSPECTOR - NIGHT \_\_\_\_\_

EQUIPMENT	RESULTS	
	DAYSHIFT	NIGHTSHIFT
SMUD SUMPS		
RECLAIM WATER BRINE TANK		
SPILL CONTROL AREA (INVENTORY)		
HAZARDOUS WASTE STORAGE AREA		
HAZARDOUS WASTE CONTAINERS		
PRIMARY FUEL OIL AREA		
SOUTH RETENTION BASIN LEAK DETECTOR		
SOUTH RETENTION BASIN LINER		
SOUTH RETENTION BASIN F/B		
NORTH RETENTION BASIN LINER		
NORTH RETENTION BASIN F/B		
RETENTION BASIN OIL SKIMMER		
FUEL OIL TANK AREA DRAIN EASEMENT		
UREA TANKS - AREA		
OILY WASTE SUMP 3P		
AMMONIA STORAGE AREA		
CHECK AMMONIA LEAK DETECTOR @ TANK		
CHECK UNDERGROUND AMMONIA DETECTOR		
CHECK AMMONIA TRANSFER LINE		
CHECK INJECTION SKID		
SECONDARY FUEL OIL AREA 3/4		
HYPOCHLORITE TANK 3P		
BCW TANKS - PUMPS - HEAT EXCHANGERS		
CONTAINERIZED CHEMICAL STORAGE AREAS		
OILY WASTE SUMP 1P		
SECONDARY FUEL OIL AREA 1P		
HYPOCHLORITE TANK 1P		
LUBE OIL STORAGE TANKS		
TURBINE LUBE OIL RESERVOIRS 1-4		
TURBINE BOWSER FILTERS 1-4		
CHEVRON RECOVERY WELLS		
SEWAGE TREATMENT PLANT 1P		
SEWAGE TREATMENT PLANT 3P		
BARREL BUNG TOP- KEEP AT 15, ORDER AT 8		
BARREL OPEN TOP- KEEP AT 20, ORDER AT 15		
PLANT STORM DRAINS		
COMMENTS:		

- \* PROVIDE COMMENTS FOR ABNORMAL CONDITIONS: N = NORMAL - A= ABNORMAL
- \* INCLUDE RETENTION BASIN FREEBOARD FIGURE IN FEET / INCHES
- \* INFORM SHIFT SUPERVISOR OF ALL ABNORMAL CONDITIONS
- \* FORWARD FORM TO THE ENVIRONMENTAL OFFICE.

Attachment 6  
EMERGENCY EQUIPMENT LOCATION

Units 1 & 2 Control Room :

Burn Pak (1)  
Mini Burn Pak (1)  
Water Gel med (2) lg (1)  
Backboards (3)

Units 3 & 4 Control Room :

Burn Pak (1)  
Mini Burn Pak (1)  
Water Gel med (2) lg (1)  
Backboards (3)

First Aid Kit Locations:

1 & 2 Control Room-#24	Security Truck vehicle #6810-#16
3 & 4 Control Room-#24	1 & 2 Gantry Crane-#16
Maintenance Shop-#24	3 & 4 Gantry Crane-#16
Storeroom-#24	Operation Truck vehicle #7007-#16
Administration Bldg-#24	Maintenance Truck vehicle # 5902-#16
Security Office-#24	GMC Carryall vehicle #7094-#16
1 & 2 Chemical Lab-#16	Ford Wagon vehicle #1213-#16
3 & 4 Chemical Lab-#16	Mobile Crane-#16
Foreman's Office 1-#16	
Foreman's Office 2-#1	

Additional first aid supplies are located in the First Aid storage supply locker in the Free stock area of the Storeroom

Safety Shower Location:

3 & 4 Chem area	1 & 2 Chem area
3 P Hypochlorite area	1P Hypochlorite area
1 & 2 Chem Lab	3 & 4 Chem Lab
1 & 2 Hypochlorite Day Tank	1 & 2 Chem Barrel Storage Area
3 & 4 Chem Barrel Storage Area	3P Battery Room
1P Battery Room	1P Burner Cleaning Shack
Unit 3 Burner Cleaning Shack	Unit 4 Burner Cleaning Shack
OP Chem Storage Area	Ammonia Underground Storage Tank
Smud Bldg east end	Unit 4 Ammonia Vaporization skid

Attachment 7

EMERGENCY ACTION CHECKLIST

**Duty Shift Supervisor – Emergency Response Coordinator**  
Action to Consider

The Emergency Response System will be utilized in all major emergencies. The Shift Supervisor is the Emergency Response Coordinator. The function of the Emergency Response Coordinator is to protect the employees, public and environmental, without going beyond the limits of employee training. The primary function of the Emergency Response Coordinator will be to isolate the affected area to prevent additional hazards or injuries, assess the magnitude of the emergency, and report it promptly and accurately to the appropriate agencies for assistance. The Emergency Response Coordinator shall maintain control over the situation by providing guidance to all personnel on-site until he/she is relieved by a qualified Incident Commander. At that time, the Emergency Response Coordinator will provide full assistance to the Incident Commander in the resolution of the emergency.

The Emergency Area will be isolated, staging and decontamination will be established as needed.

1. Assemble injured at a central location for ambulance and helicopter pick-up.
2. Have first aid supplies and equipment delivered to the area where injured are assembled.
3. Account for all personnel.
4. Determine if hazardous materials are involved and if they can be safely handled.
5. Organize a qualified team to contain the situation. use outside agencies as needed.
6. Assess damage for reporting purposes.
7. Call out additional personnel as required.
8. Establish a command center.
9. Secure plant perimeter. Establish "hot, warm and cold zones".
10. Inform key management of situation.
11. Communicate to plant personnel status of situation.

**EL SEGUNDO POWER, LLC**

**HAZARDOUS MATERIALS AND  
HAZARDOUS WASTE MANAGEMENT  
PLAN**

**CAR 000036848**

EL SEGUNDO POWER, LLC  
HAZARDOUS MATERIALS AND HAZARDOUS WASTE  
MANAGEMENT PLAN

PURPOSE

The purpose of this procedure is to comply with the requirements of the Code of Federal Regulations and the California Code of Regulations to have a hazardous materials and waste management plan.

LOCAL

Hazardous Materials Planning Program Inventory of Hazardous Materials and Business Plan requirements of county and local administering agency.

DISTRIBUTION

A copy of this plan and all revisions must be:

1. Maintained at the facility.
2. Submitted, upon request, to local jurisdictions with emergency response authority.

El Segundo Power, LLC  
By: NRG El Segundo Operations Inc.,  
It's Authorized Agent

By: \_\_\_\_\_

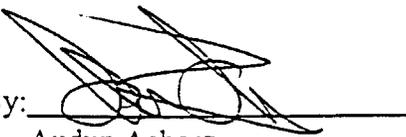
  
Audun Aaberg  
Regional Manager

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## FACILITY DESCRIPTION PLAN

### PART I

#### INTRODUCTION

As required under 40 CFR 264 and 265, El Segundo Power, LLC has developed and implemented a Hazardous Materials and Hazardous Waste Management Plan. The intent of this plan is to safely manage and control hazardous waste within the Station. Pursuant to Section 25503.5 of Chapter 6.95, Article 1 of California Health and Safety code, any business that handles hazardous materials in quantities that exceed 500 pounds, 55 gallons or 200 standard cubic feet for compressed gas must prepare and implement a "Business Plan" for emergency response to a release or threatened release of a hazardous material.

Based on Title 22 of the California Code of Regulations the California Department of Health Services has obtained EPA approval to administer the Hazardous Waste Management System in California. Consequently, the Business Plan for El Segundo Power, LLC has been submitted to the El Segundo City Fire Department which is the administering agency for this program.

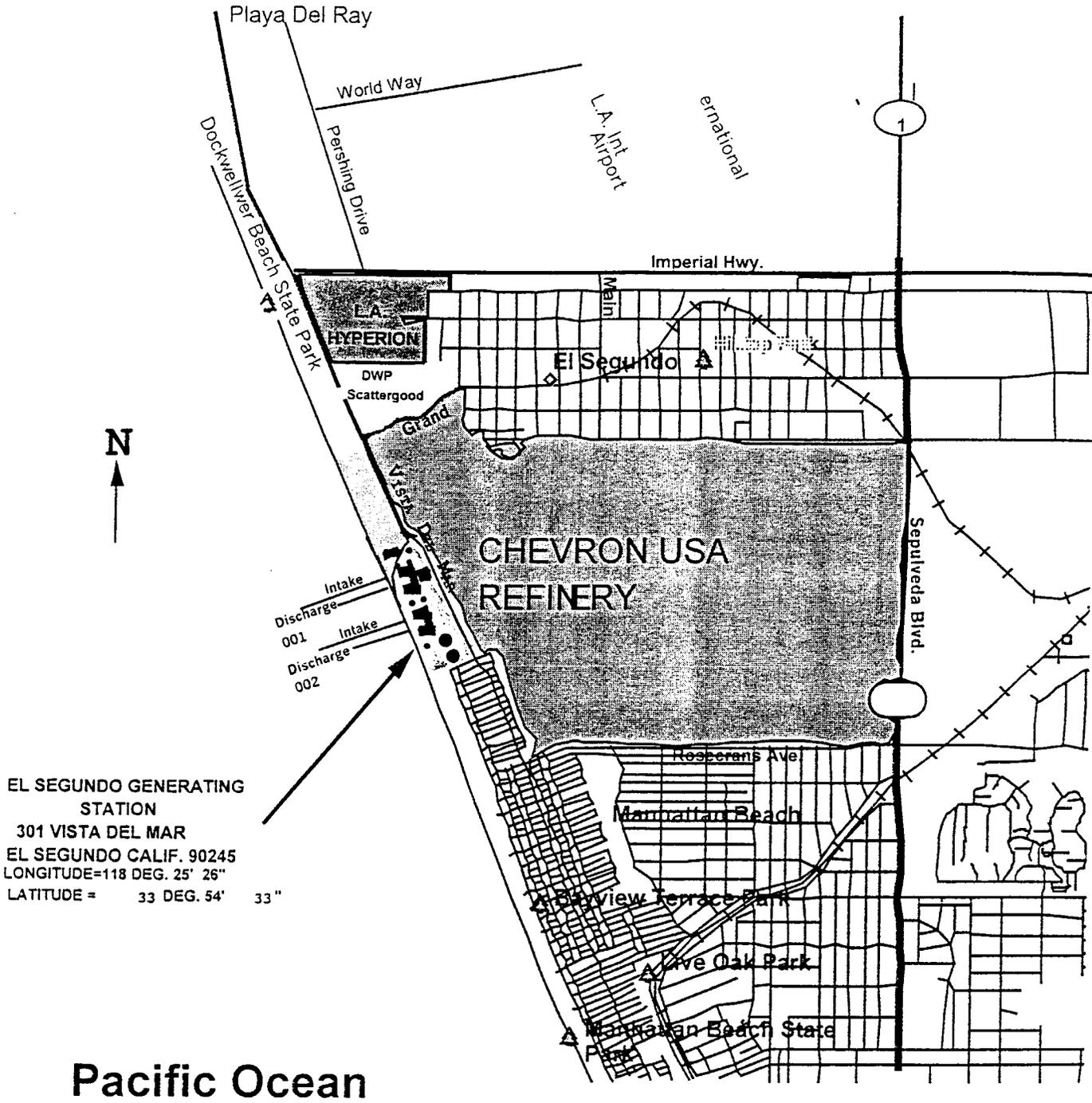
Copies of this plan are to be maintained on file. Copies are also to be made available to all local jurisdictions with emergency response authority.

A listing of personnel to be notified in the event of an emergency response to a release or threatened release of hazardous materials is included in this plan. This plan is to be revised and updated as necessary with a frequency not to exceed every two years.

#### FACILITY DESCRIPTION

El Segundo Power, LLC is located at 301 Vista Del Mar, El Segundo, California, 90245. El Segundo Generation, LLC contains waste facilities which include a general purpose retention basin, sumps, oil-water separators, and interconnecting piping between sumps. These facilities are shown on the attached plot plans. The first plot plan on page 6 is a location map and shows the El Segundo Power, LLC in relationship to its general surroundings. The second plot plan on page 7 is a map which shows the location of El Segundo Power, LLC Hazardous Materials. The third plot plan on page 9 is a map which shows El Segundo Power, LLC in-station waste facilities.

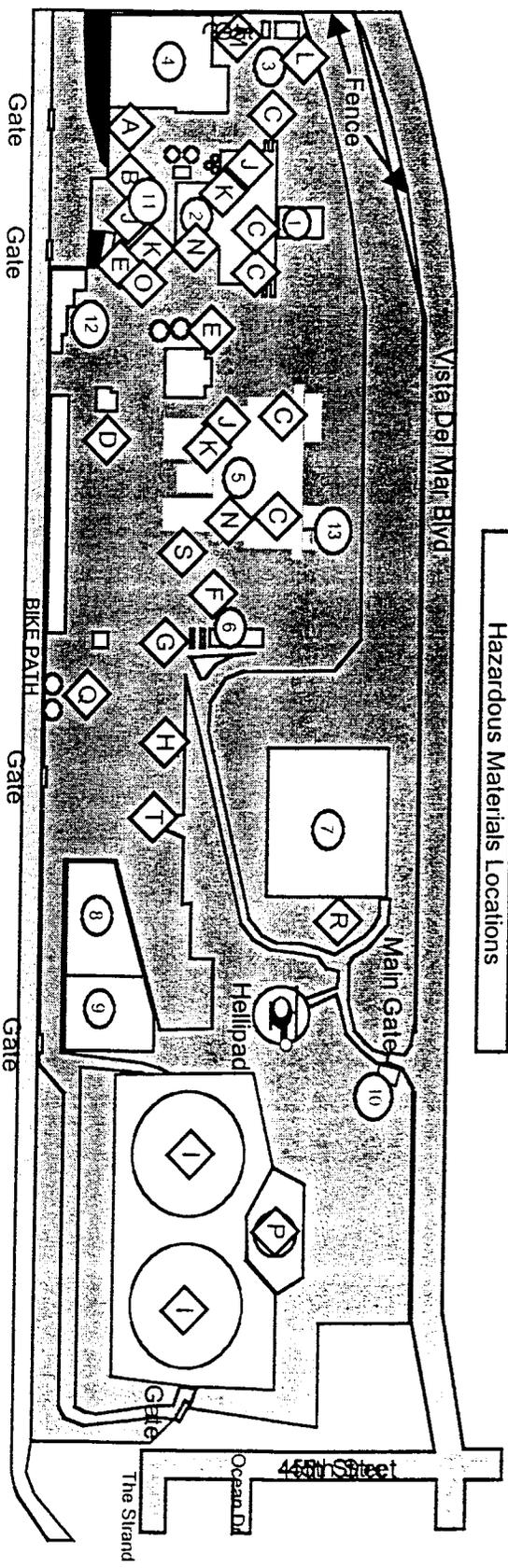
El Segundo Power, LLC has a designated Hazardous Waste Management Area which is used as a central collection area for containers designated as hazardous. The containers are sorted and stored in this area until hauled to a Class 1 dump. No hazardous waste is allowed to accumulate in this area for more than 90 days. Hazardous containerized chemicals are listed in Table 1 on page 12. Prior to contacting a waste transporter, containerized chemicals are inventoried and the appropriate manifest documents are prepared to accompany the hazardous waste to a Class 1 dump or recycle facility.



# EL SEGUNDO POWER, LLC

EL SEGUNDO GENERATING STATION

Hazardous Materials Locations



**BUILDINGS / STRUCTURES**

- 1 Administration Building
- 2 Units 1 & 2
- 3 Paint Shop
- 4 Warehouse & Maintenance Shop
- 5 Units 3 & 4
- 6 Demineralizer Building (Retired)
- 7 Switchyard (Retained by Edison)
- 8 Waste Water Retention Basin
- 9 Acid Retention Basin (Retired)
- 10 Security Guard Station
- 11 Chemical Storage Room
- 12 Technical Shop
- 13 Crane Garage

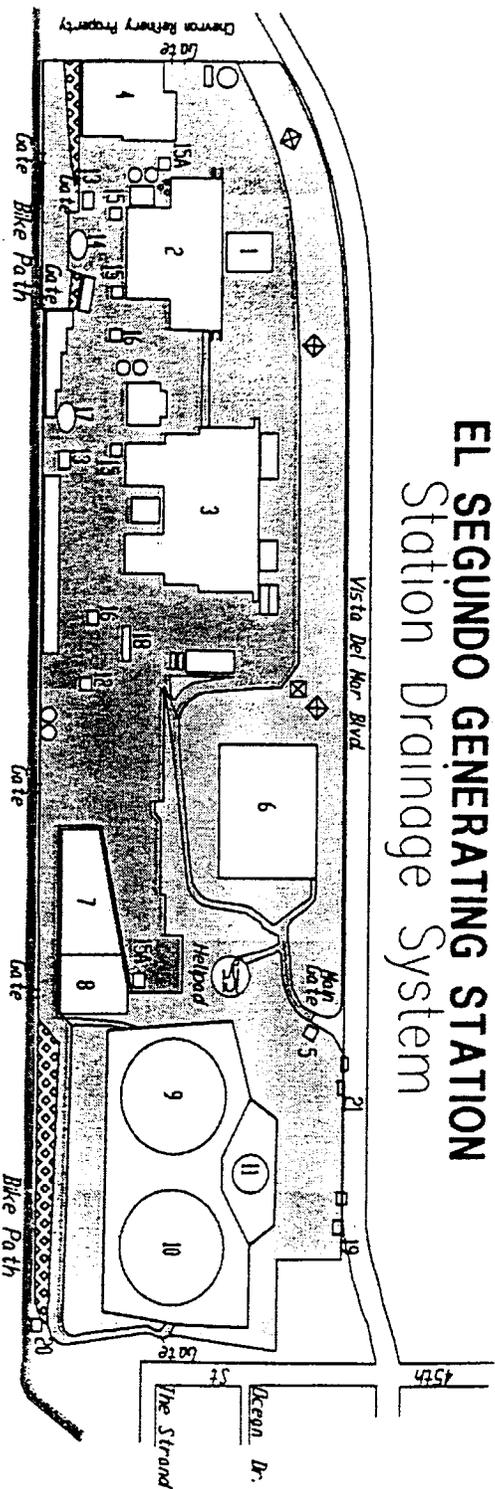
**MATERIALS STORAGE**

- A Compressed Gas Bottles
- B Diesel Fuel
- C Lubricating Tanks
- D Hydrogen Storage
- E Sodium Hypochlorite
- F Sulfuric Acid
- G Sodium Hydroxide
- H Hazardous Waste Storage Area
- I Fuel Oil (Retained by Edison)
- J Hydrazine
- K Ammonium Hydroxide
- L Paints and Paint Thinner
- M Solvent Degreaser

- N Lubricating Oil Drums
- O Betz Powerline (Sodium Nitrite)
- P Cutter Stock
- Q Urea Storage Tanks
- R Aqueous Ammonia Storage Tank
- S Aqueous Ammonia Injection Skip
- T Fuel Gas

<b>EL SEGUNDO POWER, LLC</b>	
Hazardous Materials Locations	
Not to Scale	Date: 6/16/99
AS/TMP	

# El Segundo Power, LLC EL SEGUNDO GENERATING STATION Station Drainage System



Requested by: Kim Sanchez, O & E Services  
 Revised: June 10, 1999  
 11077/ESG\_Dwg  
 BSAW

## Legend

STATION DRAINAGE SYSTEM

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1 - ADMINISTRATION BUILDING</li> <li>2 - UNITS 1 &amp; 2</li> <li>3 - UNITS 3 &amp; 4</li> <li>4 - WAREHOUSE &amp; MAINTENANCE SHOP</li> <li>5 - SECURITY GUARD STATION</li> <li>6 - SWITCHYARD</li> <li>7 - WASTE WATER RETENTION BASIN</li> <li>8 - ACID RETENTION BASIN</li> <li>9 - NORTH FUEL OIL TANK</li> <li>10 - SOUTH FUEL OIL TANK</li> </ul> | <ul style="list-style-type: none"> <li>11 - CUTTER STOCK TANK</li> <li>12 - OIL-WATER SEPARATOR SLUMP</li> <li>13 - SLAGGARY WASTE TREATMENT PLANT</li> <li>14 - UNIT 1 &amp; 2 OUTFALL (NORMALLY CLOSED)</li> <li>15 - OIL-WATER SEPARATOR BRASS VALVE (NORMALLY CLOSED)</li> <li>15A - YARD DRAIN FLAPPER VALVE</li> <li>16 - OILY WASTE TRANSFER SLUMP</li> <li>17 - UNIT 3 &amp; 4 OUTFALL</li> <li>18 - HAZARDOUS WASTE MANAGEMENT AREA</li> <li>19 - STORAGE WATER EASEMENT ENTRY</li> <li>20 - STORAGE WATER EASEMENT EXIT</li> <li>21 - SEPTIC TANK</li> </ul> |
|---|--|

No Scale  
 06/09/1999

## El Segundo Power, LLC Station Drainage System

EL SEGUNDO GENERATING STATION  
 300 VISTA DEL MAR BOULEVARD  
 EL SEGUNDO, CA 90245  
 BUSINESS PHONE - (310) 615-6391  
 24 HOUR PHONE - (562) 615-6313

- B. Bulk storage chemicals.
  - 1. Bulk chemicals used at the El Segundo Power, LLC are either generic chemicals bought under specifications or proprietary chemical mixtures purchased from treatment chemical compounders.
  - 2. Material Safety Data Sheets (MSDS) for these chemicals are maintained in the Safety Environmental Supervisor's and in supervisors' offices. Determination of the hazardous waste potential and analysis of the bulk chemicals for offsite disposal will be based on the MSDS.
    - a. Test methods: N/A (information on MSDS)
    - b. Sampling methods: N/A
    - c. Frequency of repeat analysis: N/A
- C. Containerized chemicals or gases.
  - 1. Containerized chemicals or gases used at El Segundo Power, LLC which may be considered potential sources of hazardous wastes are listed in Table 1 on page 12.
  - 2. Material Safety Data Sheets (MSDS) for these chemicals are maintained in the Safety & Environmental office and all other supervisors' offices. Determination of the hazardous waste potential and analysis of a containerized chemical or gas for offsite disposal will be based on the MSDS.
  - 3. If the containerized chemical is not listed in Table 1, follow the instructions on the container for disposal.
    - a. Test methods: N/A (information on MSDS)
    - b. Sampling methods: N/A
    - c. Frequency of repeat analysis: N/A
- D. Sanitary waste treatment facilities and septic tanks.
  - 1. No analyses will be performed on these wastes or any wastes removed offsite..
  - 2. Analyses will be made of treated liquid discharging from its normal effluent point(s).
  - 3. All wastes removed offsite will be disposed at a public owned treatment works (POTW).
    - a. Test methods: N/A
    - b. Sampling Frequency: N/A
    - c. Frequency of repeat analysis: N/A
- E. Bearing cooling water.
  - 1. Liquid from the bearing cooling water tanks will be analyzed for pH, arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.
  - 2. Reactivity, ignitability and pesticide content of the bearing cooling water will not be determined due to the nature of the constituents and their concentrations in the water.
    - a. Test methods: See METHODS OF ANALYSIS section of this plan.
    - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
    - c. Frequency of repeat analysis: Every two (2) years and any other time bearing cooling water treatment is changed in a bearing cooling water system (to establish new baseline data).

**PART II**  
**HAZARDOUS WASTE ANALYSIS PLAN**

I. OBJECTIVE

- A. The objective of this plan is to describe the procedures which will be carried out to provide the analysis of the waste and to insure that the analysis is accurate and up-to-date.
- B. Before any hazardous waste may be disposed, a detailed chemical and physical analysis of the waste must be obtained.
- C. Potential waste sources are listed in Table 1 on page 13.

II. RESPONSIBILITY

- A. Audun Aaberg the El Segundo Power, LLC Regional Plants Manager shall ensure station compliance.
- B. Alex Sanchez or Steve Odabashian, Environmental Supervisors shall coordinate the station waste sampling and analysis program and maintain the written records required by this plan.
- C. The Environmental Supervisors shall ensure the station waste samples are analyzed and technical assistance provided as required. Water Resources Technology shall also provide analysis sheets for the bulk chemicals, containerized chemicals and wastes listed in this plan.

III. WASTE ANALYSIS REQUIREMENTS, SAMPLING METHODS AND FREQUENCY

- A. Station waste holdup and process facilities.
  - 1. The sludge and liquid portions of the waste from the generating station waste holdup and process facilities will be analyzed for pH, and Title 22, CCR CAM metals.
  - 2. The sludge portion will be extracted in accordance with the Toxicity Characteristic Leaching Procedure and the California Waste Extraction Test Procedure.
  - 3. Oil skimmed off the liquid surface of the facilities will be checked for ignitability.
  - 4. Reactivity of the wastes will not be determined due to the nature of the materials used at the generating station. For the same reason, the pesticide content of the wastes will not be determined.
    - a. Test methods: See METHODS OF ANALYSIS section of this plan.
    - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
    - c. Frequency of repeat analysis: Every two years and any other time that new equipment is installed which could affect the waste stream(s) going into a particular waste facility (to establish new baseline data).

F. Chemical cleaning wastes.

1. Chemical cleaning of equipment will be analyzed for pH, and Title 22, CCR CAM metals. Where the chemical cleaning waste is a sludge, it will be extracted in accordance with the Toxicity Characteristic Leaching Procedure and the California Waste Extraction Test Procedure.
2. Reactivity, ignitability and pesticide content of the chemical cleaning wastes will not be determined due to the nature and concentrations of the waste constituents.
3. Since the chemical cleaning processes used in the generating stations are repetitious, standard analyses will be used for determination of the hazardous waste potential and analysis of the wastes for offsite disposal unless a new chemical cleaning solvent or new spent solvent waste treatment process is used.
  - a. Test methods: See METHODS OF ANALYSIS section of this plan.
  - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
  - c. Frequency of repeat analysis: Every two (2) years and any time a new chemical cleaning solvent or new spent solvent waste treatment process is used.

G. Other generating station wastes.

1. Anything which cannot be characterized by the above categories and, unlike asbestos, fuel oil, distillate, transformer oil, etc., has an unknown hazardous waste potential will be submitted to a certified laboratory for analysis.
2. Such analysis will consist of ignitability, pH, and Title 22, CCR CAM metals.
3. A Toxicity Characteristic Leaching Procedure and the California Waste Extraction Test Procedure will be done prior to metals analysis for sludges and solids samples.
4. Reactivity and pesticide content of the samples will not be determined due to the nature of the materials used at the generating stations.
5. As an alternate to the above analyses, an MSDS, if one exists, may be obtained for the material.
  - a. Test methods: See METHODS OF ANALYSIS section of this plan.
  - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
  - c. Frequency of repeat analysis: Sufficient to adequately characterize the unknown material.

IV. METHODS OF ANALYSIS

A. The following test methods will be used to determine the constituents and material characteristics listed in this plan:

1. Ignitability:
  - a. ASTM Standard D-93-79 (Pensky-Martens Closed Cup Tester)
  - b. ASTM Standard D-3278-79 (Setaflash Closed Cup Tester)
  - c. EPA 600/2-80-018 Sample Procedures for Hazardous Waste Streams
2. PH:
  - a. By pH meter using the test method describe in "Methods for Analysis of Water and Wastes" EPA 600/4-79-020, March, 1979.
3. Toxicity Characteristic Leaching Procedure
  - a. Extraction Procedure: Using the Toxicity Leaching Procedure (TCLP) described in Title 40 CFR Part 261 Appendix II- Method 1311 Toxicity Characteristic Leaching Procedure (Federal Register 55 FR26987, June 29, 1990.

4. Metals-Using EPA approved test methods described in 40CFR Part 136.
- |             |               |                |          |
|-------------|---------------|----------------|----------|
| 1) Arsenic  | 6) Mercury    | 11) Cobalt     | 16) Zinc |
| 2) Barium   | 7) Mercury    | 12) Copper     |          |
| 3) Cadmium  | 8) Silver     | 13) Molybdenum |          |
| 4) Chromium | 9) Antimony   | 14) Nickel     |          |
| 5) Lead     | 10) Beryllium | 15) Thallium   |          |

#### IV. WASTE ANALYSIS REPORTS

- A. The generating station will maintain a file on all waste analysis test reports. These reports will include:
1. Waste analysis reports for the waste holdup and processing facilities.
  2. MSDS forms for bulk chemicals and containerized chemicals and gases.
  3. El Segundo Power, LLC specifications for generic bulk chemicals used at the generating station.
  4. Bearing cooling water analysis reports.
  5. Chemical cleaning waste analysis reports.
  6. Waste analysis reports for uncategorized waste sample submitted to a certified laboratory for analysis (see paragraph 7, WASTE ANALYSIS REQUIREMENTS, SAMPLING METHODS AND FREQUENCY).

TABLE I  
POTENTIAL WASTE SOURCES  
EL SEGUNDO POWER, LLC  
EPA ID NO. CAR000036482

WASTE HOLDUP OR PROCESS FACILITIES

General Waste Retention Basin.  
Units 1&2 Oily Waste Sump.  
Units 3&4 Oil-Water Separator.  
Retention Basin Oil Skimmer  
Unit 1 North Oil -Water Drain Sump  
Unit 2 South Oil-Water Drain Sump  
Unit 3 North Oil-Water Drain Sump

BULK STORAGE CHEMICALS

Ammonium Hydroxide  
Units 1 & 2 Sodium Hypochlorite  
Units 3 & 4 Sodium Hypochlorite  
Turbine Lube Oil Storage Tanks

CONTAINERIZED CHEMICALS AND GASES

Containers which contain the following chemicals or gases:  
Empty aerosol cans which have trace amount of hazardous materials

Acetone  
Aqua Ammonia  
Hydrazine  
Mercury waste

Toluene  
Acetylene  
Hydrogen  
New oil  
Waste or used oil  
Oily rags  
Empty paint cans

OTHER

Sandblasting debris  
Furnace duct debris

SANITARY WASTE TREATMENT FACILITIES

Units 1&2 Area Sanitary Waste Treatment Plant.  
Units 3&4 Area Sanitary Waste Treatment Plant.  
Unit 2 BCW Tank  
Units 3&4 BCW Tank.

### PART III

## HAZARDOUS WASTE SECURITY PLAN

#### I. OBJECTIVE

- A. The Resource Conservation and Recovery Act (40 CFR 265-14) requires the owner of a hazardous waste facility to prepare a security plan.
- B. The purpose of the regulation is to ensure that reasonable action is taken to preclude unauthorized entry by the public into areas containing a hazardous waste facility.

#### II. FACILITY SECURITY

- A. The El Segundo Power, LLC site is surrounded with perimeter fencing. Within the boundary of the perimeter fencing are the boilers, electrical switchyard, and all station buildings. Additionally, the entire hazardous waste facility is contained within the fenced boundary.
- B. The perimeter fence is mainly chain link construction topped with barbed wire. The fence is nine feet high. The remainder is constructed of concrete blocks topped with barb wire, and measures eleven feet high. The perimeter fencing is inspected daily by the generating station personnel. In addition, station personnel make weekly inspections of the station perimeter fencing. Any openings through or under the fence are reported to the Regional Plants Manager. Repairs are effected expeditiously.
- C. Access to the station property is controlled through entry via the main gate. Security Officers are on duty at the main gate 16 hours a day and control the entry of visitors to the plant property. An automatic key card control system is used to operate the gate during non day shift hours. Access is controlled via remote video camera observation from the control room. The general public is not allowed entry to the plant; visitors are escorted about the plant by qualified personnel. Warning signs are posted on the perimeter fencing at appropriate intervals. These signs carry the legend " Trespassing or Loitering Forbidden by Law."
- D. The El Segundo Power, LLC Hazardous Waste Storage Area is located south of Unit 4 boiler adjacent to the west side of the hillside along the entry roadway to the plant. The storage area has a nine feet barb wire fence around the perimeter of the area. The storage area is constantly locked. Warning signs are posted at the entrance of the storage area in both English and Spanish. These signs carry the legend " Danger Hazardous Waste Area- Unauthorized Personnel Keep Out".
- E. The security procedures practiced at this facility are believed adequate to preclude entry be the public into the hazardous waste storage areas.

## PART IV

### HAZARDOUS WASTE INSPECTION PLAN

#### I. OBJECTIVE

- A. The purpose of this plan is to outline a schedule of equipment inspections in compliance with 40 CFR 265.15. This section requires the owner of a hazardous waste storage area to inspect the storage area on a set frequency basis to ensure problems are identified and corrected before a release of hazardous waste to the environment occurs.

#### II. REQUIREMENTS

- A. The Environmental Supervisors, Alex Sanchez and Steve Odabashian are responsible for implementing the inspection and monitoring program.
- B. Operations is assigned the responsibility to conduct the inspections on a once per shift frequency as indicated on the RCRA & Daily Inspection Report.
  1. The inspection consists of a walk down of all the facilities listed.
  2. Each facility is inspected for signs of leakage or spillage, equipment malfunctions, and deterioration.
  3. Conditions are recorded on the RCRA & Daily Inspection Report.
  4. Abnormal conditions are explained in the remarks section and corrective action noted. An abnormal condition is immediately brought to the attention of the Shift Supervisor.

#### III. RCRA & DAILY INSPECTION OBSERVATIONS

##### A. Retention Basins and Sumps

1. Inspect for signs of overflow, seepage, cracking, and deterioration of surfaces.
2. Empty retention basins are inspected for liner deterioration, settling and other signs which might indicate leakage could occur.
3. Freeboard is checked once per shift and recorded.
4. Freeboard or retention basins must not decrease to less than two feet.
5. Proper operation of the retention basin oil skimmer is also checked.

##### B. Tanks

1. Tanks and associated piping, pumps, valves and flanges are inspected for signs of leakage, and deterioration.

##### C. Sumps & Sump Pumps

1. Sumps & sump pumps are inspected to ensure that they are in operating condition and there are no signs of leakage.

##### D. Hazardous Waste Containerized Management Area

1. The area is inspected to ensure no barrels, drums or other containerized material in the area is leaking.

E. Containerized Chemical Storage Area

1. The area is inspected to ensure no drums or other containerized material in the area is leaking.

IV. RECORDS

A. The inspection is conducted using form the Daily RCRA Inspection Sheet.

1. On completion of the daily inspection, the operator performing the inspection signs the form and the form is routed to the Shift Supervisor.
2. The Shift Supervisor reviews the form for any required action. The form is then forwarded to the Environmental Supervisor for record retention.

RCRA & DAILY INSPECTION REPORT

STATION \_\_\_\_\_ DATE \_\_\_\_\_ INSPECTOR - DAY \_\_\_\_\_  
 INSPECTOR - NIGHT \_\_\_\_\_

EQUIPMENT RESULTS

	DAYSHIFT	NIGHTSHIFT
SMUD SUMPS		
RECLAIM WATER BRINE TANK		
SPILL CONTROL AREA (INVENTORY)		
HAZARDOUS WASTE STORAGE AREA		
HAZARDOUS WASTE CONTAINERS		
PRIMARY FUEL OIL AREA		
SOUTH RETENTION BASIN LEAK DETECTOR		
SOUTH RETENTION BASIN LINER		
SOUTH RETENTION BASIN F/B		
NORTH RETENTION BASIN LINER		
NORTH RETENTION BASIN F/B		
RETENTION BASIN OIL SKIMMER		
FUEL OIL TANK AREA DRAIN EASEMENT		
UREA TANKS - AREA		
OILY WASTE SUMP 3P		
AMMONIA STORAGE AREA		
CHECK AMMONIA LEAK DETECTOR @ TANK		
CHECK UNDERGROUND AMMONIA DETECTOR		
SECONDARY FUEL OIL AREA 3/4		
HYPOCHLORITE TANK 3P		
BCW TANKS - PUMPS - HEAT EXCHANGERS		
CONTAINERIZED CHEMICAL STORAGE AREAS		
OILY WASTE SUMP 1P		
SECONDARY FUEL OIL AREA 1P		
HYPOCHLORITE TANK 1P		
LUBE OIL STORAGE TANKS		
TURBINE LUBE OIL RESERVOIRS 1-4		
TURBINE BOWSER FILTERS 1-4		
CHEVRON RECOVERY WELLS		
SEWAGE TREATMENT PLANT 1P		
SEWAGE TREATMENT PLANT 3P		
BARREL BUNG TOP- KEEP AT 15, ORDER AT 3		
BARREL OPEN TOP- KEEP AT 20, ORDER AT 15		
PLANT STORM DRAINS		
COMMENTS:		

\* PROVIDE COMMENTS FOR ABNORMAL CONDITIONS: N = NORMAL - A= ABNORMAL

- INCLUDE RETENTION BASIN FREEBOARD FIGURE IN FEET / INCHES
- INFORM SHIFT SUPERVISOR OF ALL ABNORMAL CONDITIONS
- FORWARD FORM TO THE ENVIRONMENTAL OFFICE

## PART V

### HAZARDOUS MATERIALS & WASTE MANAGEMENT TRAINING PLAN

#### I. OBJECTIVE

- A. The purpose of this plan is to outline the requirements of the personnel training program as specified by Title 22, California Code of Regulations.
- B. This program requires close coordination between the Environmental Supervisor and the Regional Plants Manager to ensure that all Station employees involved in the handling of hazardous materials are adequately trained.

#### II. PROGRAM REQUIREMENTS

- A. All plant personnel who, in the normal course of their job duties, are involved in the operation, maintenance, sampling, engineering or supervision of the hazardous material storage facilities shall annually be trained in the requirements of this Station Procedure.
- B. This training is designed to ensure each employee understands his role in the operation and maintenance of the facilities.
- C. The Regional Plants Manager shall ensure all personnel subject to the requirements of this program are adequately trained.
- D. The content of the personnel training program includes the following elements:
  - 1. Operating procedures for the individual hazardous material.
  - 2. Emergency operating procedures for each material during spills or leaks from the system.
  - 3. Inspection and monitoring procedures.
  - 4. Maintenance procedures to lessen exposure and eliminate discharge to the environment.
  - 5. Use of emergency equipment (breathing devices, fire fighting equipment, protective clothing, etc.).
  - 6. Application and use of communication equipment.
  - 7. Response to fires and explosions.
  - 8. Response to ground water contamination.
  - 9. Response to spill or releases.
- E. New and transfer employees shall complete the training program within six months of employment at this facility.
- F. Training records shall be maintained in the Station Environmental Training files.

## PART VI

### HAZARDOUS WASTE OPERATING RECORD

#### I. OBJECTIVE

- A. The purpose of this plan is to outline the requirements for and the content of the hazardous waste operating record as maintained at this generating station and as required by 40 CFR 265.73. This regulation requires an on-site hazardous waste operating record be maintained until such time as these hazardous waste facilities are retired.

#### II. RECORD RETENTION

- A. The station will maintain records in the "Hazardous Waste Management File" as indicated below.
1. The quantity of hazardous waste will be recorded each time the waste is removed from the facility for processing or hauling off-site to a Class 1 dump.
    - a. RETENTION BASIN SOLIDS/SLUDGES-When solids/sludges are transported off-site, the date and quantity will be recorded on the California Uniform Hazardous Waste Manifest, and copies of the manifest will be filed along with a summary sheet recording total waste removed each time the retention basin is cleaned.
    - b. CHEMICAL CLEANING WASTE, LIQUID OR PROCESSED SLUDGE-The individual California Uniform Hazardous Waste Manifest will be retained and summarized as in (A) above for all waste hauled off site.
    - c. OTHER WASTE-Waste from oil-water separators and the hazardous waste containerized storage are hauled off-site will be recorded on the California Uniform Hazardous Waste Manifest retained and summarized as in (A) above for all waste hauled off site.
  2. Records and results of all waste analyses including date sampled, type of sample and waste source will be maintained in the "Hazardous Waste Management File".
  3. Summary reports and details of all incidents involving spills or leaks will be maintained whenever it is necessary to implement the Hazardous Waste Release Contingency Plan.
  4. Daily RCRA Inspection Report records are maintained and kept on file in the Environmental Office.
  5. Ground water monitoring analyses are maintained on file in the Environmental Office.
  6. Copies of reports related to the hazardous waste facility required by federal or state agencies whether annual, quarterly, monthly or special are maintained on file in the Environmental Office.
  7. All closure and post closure cost estimates are maintained and located in the station central files.

**PART VII**  
**HAZARDOUS WASTE CLOSURE PLAN**

I. OBJECTIVE

- A. The purpose of this plan is to ensure safe, accountable decommissioning and decontamination of all hazardous waste facilities at El Segundo Power, LLC.

II. DATE OF CLOSURE

- A. Anticipated plant decommissioning is the year 2015.
- B. At this time El Segundo Power, LLC has no projected date for the decommissioning.
- C. The above date is based on an assumed 50 year remaining station life following the last unit commissioning. Actual station decommissioning may differ considerably from this estimate.

III. CLOSURE METHOD

A. Retention basins

- |                         |   |
|-------------------------|---|
| 1. Method of Closure    | Water drained to NPDES Discharge No. 002 in conformance with NPDES standards. Sediment removed offsite to an approved landfill disposal area.   |
| 2. Decontamination      | Basin liner washed with water containing industrial detergent to remove remaining surface scum. Spent wash water and wash sediment removed offsite to an approved landfill disposal area. |
| 3. Infiltration Control | Not required — All material removed from basins.  |

B. Sanitary waste treatment plants

- |                      |   |
|----------------------|---|
| 1. Method of Closure | Water drained to NPDES Discharge No. 001 and No. 002 in conformance with NPDES standards. Sediment removed offsite to a public owned treatment works (POTW)                                     |
| 2. Decontamination   | Basin liners washed down with water drained to NPDES Discharge No. 001 and No. 002 in conformance with NPDES standards. Wash sediment removed offsite to a public owned treatment works (POTW). |

C. Sumps, oil and grease removal system and associated piping

- |                    |  |
|--------------------|--|
| 1. Decontamination | Water flush all piping to oil-water separators. Pump out oil-water separators and remove |
|--------------------|--|

pumped out material offsite to an approved landfill disposal area.

D. Bearing cooling water tanks, associated piping and equipment

1. Method of Closure Water drained to retention basins.
2. Decontamination Bearing cooling water tanks water flushed to retention basins.

E. Lubricating oil reservoirs and associated piping

1. Method of Closure Oil drained from equipment and removed or sold for refuse. Unsold portions removed offsite to an approved landfill disposal area.
2. Decontamination Sludge wiped out from reservoirs and disposed of to an approved landfill.

F. Waste storage area

1. Method of Closure All waste material removed offsite to an approved landfill disposal area.
2. Decontamination Waste storage area surface washed with water containing industrial detergent to remove any material buildup. Spent waste water and sediment removed offsite to an approved landfill disposal area.

G. Bulk chemical storage tanks

1. Method of Closure Chemicals removed offsite or sold for reuse.
2. Decontamination Water flush to retention basins. Sediment removed offsite to an approved landfill disposal area.

H. Miscellaneous: Containerized chemical or oil, gas cylinders

1. Method of Closure Removed offsite or sold for reuse. Unsold portions removed offsite to an approved landfill disposal area.

I. Structures, buildings and equipment

1. Method of Closure Inspect for hazardous waste materials. Remove any hazardous waste materials found offsite to an approved landfill disposal area.

IV. IMPLEMENTATION SCHEDULE

A. Closure Plan submittal

1. Schedule Submit at least 180 days prior to plant decommissioning date.

2. Agency

Submit to El Segundo Fire Department CUPA who is the agent for the Region IX Administrator of the Environmental Protection Agency.

B. Closure Plan approval

1. Schedule

Received at least 90 days prior to plant decommissioning date.

2. Agency

Received from El Segundo Fire Department CUPA who is the agent for the Region IX Administrator of the Environmental Protection Agency.

C. Closure duration and verification of completion

1. Schedule

Closure completed within 180 days of receipt of final waste volume.

2. Certification

Submit certification of Closure Plan compliance to El Segundo Fire Department CUPA who is the agent for the Region IX Administrator of the Environmental Protection Agency.

3. Plot Plan

A plot plan indicating location and dimension of onsite disposal areas will not have to be submitted to the Environmental Protection Agency since all hazardous wastes are disposed offsite in approved landfill disposal areas. Submit a statement to this effect with the certification of Closure Plan compliance above.

**PART VIII**  
**HAZARDOUS WASTE RELEASE CONTINGENCY PLAN**

**I. OBJECTIVE**

- A. The purpose of this plan is to specify how station personnel will respond to any unplanned release of hazardous wastes to the air, soil, or surface water at El Segundo Power, LLC.
- B. This response includes notifying the proper authorities of the release, controlling and cleaning up the release and restoring the environment as required.

**II. RESPONSIBILITY**

- A. The Regional Plants Manager is responsible for establishing procedures for corrective action in the event of an unplanned release of hazardous wastes at El Segundo Power, LLC.
- B. The on duty Shift Supervisor is the emergency Response Coordinator (RC).
  - 1. The emergency Response Coordinator is responsible for providing 24 hour coverage for the purpose of implementing this plan and notifying the management staff and appropriate agencies in the event of an unplanned release of hazardous wastes.

**III. SOURCES OF HAZARDOUS WASTE**

- A. Chemicals used at this Station do not become hazardous wastes until they are no longer considered for use (discarded, spilled or leaked).
- B. Sources of hazardous waste are listed below.
  - 1. Spills and leaks of oil, e.g., distillate, lubricating oils, hydraulic oils, etc.
  - 2. Spills or leaks from station bulk chemical storage tanks listed below.

	<u>Material Stored</u>	<u>Tank Holding Capacity, gal.</u>
a. Ammonium Hydroxide	29.4%NH <sub>4</sub> OH	20,000
b. 3P Sodium Hypochlorite Storage Tank	12.5wt%NaOCl	3,700
c. 1P Sodium Hypochlorite Storage Tank	12.5wt%NaOCl	300
3. Spills or leaks from bearing cooling water (BCW) tanks listed below.		
a. Unit 1 BCW Tank	Water containing 1,000 mg/l NaNO <sub>2</sub>	10,000

- |                       |  |        |
|-----------------------|--|--------|
| b. Unit 2 BCW Tank    | Water containing<br>1,000 mg/l NaNO <sub>2</sub> | 10,000 |
| c. Units 3&4 BCW Tank | Water containing<br>1,000 mg/l NaNO <sub>2</sub> | 50,000 |
4. Cracks or holes in the linings of station waste holdup or process facilities listed below.
    - a. General Waste Retention Basin
    - b. Chemical Cleaning Retention Basin
    - c. Makeup Demineralizer Spent Regenerant Sump
    - d. Units 1&2 Oil-Water Separator
    - e. Units 3&4 Oil-Water Separator
    - f. Retention basin oil skimmer
    - g. Storm drain oil skimmers
  5. Spills or leaks from station waste holdup or process facilities. (Same facilities listed in Paragraph. 4 above.)
  6. Cracks or holes in the walls of station sanitary waste treatment plants listed below.
    - a. Units 1&2 Area Sanitary Waste Treatment Plant
    - b. Units 3&4 Area Sanitary Waste Treatment Plant
  7. Any containerized chemical or waste barrel found to be leaking whose empty container is normally disposed offsite in a Class I landfill area.
  8. Spills or leaks from the SCR ammonia pump piping or piping run to ammonia injector skid.

#### IV. PLAN OUTLINE

- A. The following steps will be followed in the event of an imminent or confirmed release of hazardous waste from the facility:
  1. Discovery of the hazardous waste release source.
  2. Notification of the proper authorities.
  3. Evacuation of the plant if required.
  4. Containment and removal of the hazardous waste release.
  5. Restoration of the environment.
  6. Recording pertinent details of the incident

#### V. DISCOVERY

- A. Station personnel will monitor potential sources of hazardous waste release as part of the following programs:
  1. General inspection requirements instituted in conformance with 40 CFR 265.15.
  2. Normal station operator equipment inspection rounds each 12-hour shift.
  3. Normal station operator monitoring of bulk chemical deliveries to storage tanks.
  4. Hazardous waste operations and emergency response in conformance with 29 CFR 1910.120

#### VI. NOTIFICATION

- A. Upon discovery of an imminent or actual hazardous waste release, the Shift Supervisor (as the Response Coordinator) on shift shall be notified immediately.

- B. The Shift Supervisor shall be responsible for notifying station personnel, as required, of the incident over the station public address system per normal station procedures.
  - 1. The Shift Supervisor is responsible for coordination and implementation of the contingency plan until relieved by a qualified Incident Commander or until termination of the incident.
- C. The Shift Supervisor will contact:
  - 1. The appropriate agencies (Fire Dept, OES, and Police as needed).
  - 2. The Regional Plants Manager, Operations Manager, and/or the Environmental Supervisor.
  - 3. The Shift Supervisor will make the arrangements as required for additional manning to respond to the incident.

## VII. EMERGENCY RESPONSE NOTIFICATION LIST

- A. The following Administering agencies will be notified; as required if the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility.

- 1. El Segundo Fire Department 911 or (310) 322-4416
- 2. El Segundo Police Department 911 or (310) 322-2425
- 3. If necessary local hospitals see attachment #1

### B. NOTIFICATIONS

- 1. Contact the Regional Plants Manager and the Environmental Supervisor as soon as possible.
- 2. The Environmental Supervisor can assist with the notifications to regulatory agencies. If the Response Coordinator is unable to contact anyone for assistance the Response Coordinator will make the notifications if the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility.
  - a. National Response Center (800) 424-8802
  - b. California Office of Emergency Services (800) 852-7550
- 1) The report must include:
  - a). Name and telephone number of reporter;
  - b). Name and address of facility;
  - c). Time and type of incident (e.g., release, fire);
  - d). Name and quantity of material (s) involved, to the extent known;
  - e). The extent of injuries, if any; and
  - f). The possible hazard to human health, or the environment, outside the facility.
- 3. The Response Coordinator shall notify the Chevron U.S.A. Inc., El Segundo Refinery, if any spill is detected that did not originate at El Segundo Power, LLC .
- 4. Within 10 days following an incident that required implementing this contingency plan, the Regional Plants Manager shall submit a written for submittal to the EPA Regional Administrator within 15 days following the incident.

- a. Region IX Administrator  
U.S. Environmental Protection  
Agency 215 Fremont Street  
San Francisco, California 94105
- b. This report must include:
  - 1) Name, address, and telephone number of the owner or operator;
  - 2) Name, address, and telephone number of facility;
  - 3) Date, time and type of incident (e.g., fire, explosion);
  - 4) Name and quantity of material(s) involved;
  - 5) The extent of injuries, if any;
  - 6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
  - 7) Estimated quantity and disposition of recovered material that resulted from the incident.

### VIII. PLANT EVACUATION PLAN AND ASSEMBLY AREAS

- A. Activation of the Station Emergency Warning System requires all Station personnel to report to their assigned Assembly Areas. Use of the Station Emergency Warning System is described in Station Procedure 7-2.
- B. In the event of an emergency situation and it is necessary to evacuate the Plant, all personnel on site are to report to their assigned Assembly Areas.
  1. If personnel are unable to assemble in their assigned areas due to physical impossibility they will report to the closest assembly area.
  2. See Attachment No. 3 for Plant evacuation routes.
  3. Personnel assembling out of their assigned areas must at the earliest possibility report to their assigned assembly area. This is necessary for the Response Coordinator to account for Station personnel.
- C. OPERATIONS PERSONNEL will report to their ASSIGNED CONTROL ROOM.
- D. STATION NON OPERATION, POWER GENERATION MAINTENANCE, OR OTHER PERSONNEL will report to the PARK AREA on the northwest corner of the plant.
- E. ALL CONTRACTOR PERSONNEL on site are expected to report to the PARK AREA on the northwest corner of the plant.
- F. SECURITY PERSONNEL are to remain at the MAIN GATE to assist with direction of emergency personnel and provide an accurate list of personnel on site.
  1. The Security Officer will report his status to the emergency Response Coordinator.
- G. ALTERNATE ASSEMBLY AREAS
  1. Non Operations personnel in the Plant area who are unable to report to their assigned assembly area because of Plant conditions will use the Control Rooms as an alternate assembly area.
    - a. At the earliest convenience these personnel are expected to report to their assigned assembly area.

- b. This is necessary for the Response Coordinator to account for Station personnel.
- 2. Operations personnel unable to report to their assigned Control Room shall assemble in the parking area.
  - a. However, at the earliest possibility they are to report to their assigned Control Room for accounting purposes.
- b. This is necessary for the Response Coordinator to account for Station personnel.

#### IX. CONTAINMENT AND REMOVAL OF HAZARDOUS WASTE RELEASES

- A. El Segundo Shift Supervisors are trained only to the Hazwoper Operations level. The Shift Supervisors are restricted to function in a defensive manner only.
- B. El Segundo Operations personnel are trained only to the Hazwoper Operations level. The operations personnel shall identify and report the existence of a spill or leak.
- C. Consider leaks or spills exempt from the reporting requirements of this plan unless personal injury is involved, or if the spill, vapors or fumes extend beyond the station property lines or enters navigable waters.
  - 2. Containment and removal of the Hazardous Material or Hazardous Waste Release
    - a. The first order of business is to be in agreement with the Administering Agency and if necessary State and Federal Authorities as to a response plan.

#### X. SPILLS AND LEAKS

When considering the control and clean-up of a hazardous material spill or leak, it is necessary to develop agreement with the Administering Agency and if necessary, State and Federal Authorities, as to a response plan.

##### A. OILS LUBRICATING OILS, HYDRAULIC OILS, ETC.

- 1. Station personnel will refer to the Station Order EL O-6 "Oil Spill and Hazardous Substances Spill Contingency Plan", for all matters involving station oils and oil systems other than the legal notification requirements of this contingency plan.
- 2. Refer to product MSDS for proper safety procedures.

##### B. BULK CHEMICAL STORAGE TANKS

###### 1. AQUEOUS AMMONIA

- a. All operations are to be carried out using established safety procedures for the chemical involved.
- b. Refer to produce MSDS for proper safety procedures.
- c. Contain spills and contact clean up contractor. Neutralize only as necessary to protect human health and the environment. Spill should only be flushed to retention basin to protect life or to avoid environmental damage.

###### 2. SODIUM HYPOCHLORITE STORAGE TANKS

- a. CORRECTIVE ACTION
  - 1). Same as for sulfuric acid.
- 3. Neutralize or otherwise treat the waste in the retention basin as required to meet NPDES Discharge Permit standards prior to draining to NPDES Discharge No. 002.

C. SPILLS OR LEAKS FROM BEARING COOLING WATER TANKS

1. CORRECTIVE ACTION
  - a. Same as for ammonium hydroxide.

D. CRACKS OR HOLES IN THE LININGS OF SANITARY WASTE FACILITIES

1. CORRECTIVE ACTION
  - a. Isolate the sanitary waste treatment plant. Call in a vacuum truck to allow the tank to be pumped out and flushed. Dispose of all material removed offsite at Public Owned Treatment Works (POTW)
  - b. Determine whether the ground beneath the tank has been contaminated and remove any contaminated soil offsite to an approved Class I disposal site.
  - c. Fill in the ground around the tank as required, repair the wall and return the sanitary waste treatment plant to service.

E. SPILLS OR LEAKS FROM WASTE HOLDUP FACILITIES

1. CORRECTIVE ACTION
  - a. For leaks
    - 1) Treat spilled liquid wastes from leak in accordance with the requirements for spills described below in (B).
    - 2) Treat the source of the leak in accordance with the requirements for cracks or holes in the linings of station waste holdup or process facilities described in item d above.
  - b. For spills
    - 1) Divert flow around or isolate the process facility. Allow the level to go down with drainage via the normal discharge point.
    - 2) Divert spilled waste back into the facility which overflowed. If not possible divert into the nearest drain line or facility which routes back to the overflowed facility. If still not possible divert to another facility which is equal to or better than the overflowed facility.
    - 3) For example, sump overflows may be diverted to another sump or to the retention basins via station drains. If one retention basin overflows, the spillage may be directed to the other retention basin.
    - 4) If the facility discharge point is plugged treat the remaining liquid in the facility. Bringing it into conformance with the facility normal discharge requirements. Then pump out the liquid to the facility normal discharge point. Unplug or repair the discharge point and return the facility to normal operation. Remove any sediment taken from the facility offsite to an approved Class I disposal site.
    - 5) If the spill was dammed or otherwise contained, all materials used must be thoroughly cleaned by service water flushing or, if this is not possible, removed offsite to an approved Class I disposal site.

F. LEAKING CONTAINERIZED CHEMICALS OR WASTE DRUMS

1. CORRECTIVE ACTION
  - a. Refer to product MSDS for proper safety procedures.
  - b. Transfer remaining material in the container to another suitable container.
  - c. Contain spills and contact cleanup contractor. Neutralize only as necessary to protect human health and the environment. Spill should only be flushed to retention basin to protect life or to avoid environmental damage.

- d. Remove any contaminated material including soil, offsite to an approved Class I disposal site.

#### XI. RESTORATION OF THE ENVIRONMENT

- A. When any hazardous release results in ground contamination, the contaminated ground will be dug up and removed offsite to an approved Class I disposal site.
- B. The resulting hole will be filled in with uncontaminated soil.

#### XII. OPERATING RECORD OF INCIDENT

- A. The Regional Plants Manager will insure a Hazardous Waste Management Log is maintained.
- B. The log shall contain a record of the time, date and details of each incident which requires implementation of this contingency plan.

#### XIII. CONTINGENCY PLAN DISTRIBUTION

- A. A copy of the contingency plan and all revision to the plan must be:
  1. Maintained at the station at the following locations:
    - a. Hazardous Waste Management Files
    - b. Shift Supervisor's Office
  2. Submitted, to the El Segundo Fire Department which is the local administering agency. Additional copies may upon request be submitted to other State and local agencies as required.

#### XIV. ADDITIONAL FACTS

- A. The control room at Units 3&4 are manned on a 24-hour basis. Units 1 & 2 control room is manned on an as needed basis. Any indications of hazardous materials leaks receive immediate attention and correction.
- B. The station is sufficiently illuminated at night to maintain the ability to detect hazardous materials releases.
- C. EL Segundo Power, LLC Order EL-A2, outlines fire protection contingency actions, responsibilities and procedures. Station personnel will refer to these directives for all matters involving fires and fire protection other than the legal notification requirements of this contingency plan.
- D. El Segundo Power, LLC Order DS 10, Station Order 116, and Station Procedure 7-1 outline emergency response plans and emergency evacuation plan information, responsibilities and procedures. Station personnel will refer to these directives for all matters involving emergency response plans and emergency evacuation procedures.

- E. Station emergency equipment for handling unplanned hazardous materials releases are listed in Attachment 2.
- F. The plant manager and staff are equipped with cell phones to provide for communication in emergencies.
- G. In the event of an earthquake, the shift supervisor will be responsible for inspecting the Retention Basin and Chemical Cleaning Basin. The liners will be inspected for damage, and the monitoring wells will be inspected to determine if there is leakage. The shift supervisor shall also assure that the ammonia transfer line, tank area, and vaporization skid areas are inspected for leaks.

Attachment No. 1

MAJOR EMERGENCY TELEPHONE LIST

FIRST RESPONSE 911

FIRE DEPARTMENTS

El Segundo Fire Department 911/(310) 322-4416  
Manhattan Beach Fire Department (310) 545-5679

POLICE DEPARTMENTS

El Segundo Police Department 911/(310) 322-2425  
Manhattan Beach Police Department (310) 545-4566

PRIMARY MEDICAL CARE

Concentra Medical Centers (310) 215-1600  
6033 W. Century Blvd., Suite 200  
Los Angeles, CA 90045

HOSPITALS

RFK Medical Center (310) 973-1711  
4500 West 116th St.  
Hawthorne, Ca. 90250

PARAMEDICS & AMBULANCES

El Segundo Fire Department Paramedics 911

EMERGENCY RESPONSE COORDINATORS:

Shift Supervisor:	Home Telephone Number	Cell
Business Telephone Number:		
Eugene Fitzhugh		
Wayne Forsyth		
Robert Rea		
Tracy Woolton		
Non- Operations		
Alex Sanchez	(310) 615-6351	(310) 529-3280
Steve Odabashian	(310) 615-6331	(310) 529-3281

EL SEGUNDO POWER MANAGEMENT STAFF

Audun Aaberg	(310) 615-6342	(310) 529-3257
Mark deCastro	(310) 615-6026	(310) 529-3258
Keith Goodner	(310) 615-6027	(310) 529-3261
Ahmad Sanati	(310) 615-6025	(310) 529-3260

**ATTACHMENT 2**  
**EMERGENCY EQUIPMENT**  
**EL SEGUNDO POWER, LLC**

1. Emergency fire fighting equipment:
  - Refer to Procedure A2 (Fire Protection)
2. On-site spill washing and control:
  - a. Station service water connections and fire hydrants located around the station.
  - b. Spill control material is stored in the Spill Containment Materials shack located at the northeast corner of the south parking lot.
  - c. Lined concrete dikes built around the makeup demineralizer sulfuric acid and caustic storage tanks to contain tank spills.
  - d. Double lined Sodium Hypochlorite storage tanks to contain tank spills.
3. First aid equipment:
  - Refer to Procedure A1 (Safety Program)
  - Refer to Procedure A12 (Emergency Treatment)
4. Communication Systems:
  - a. Edison PAX internal phone system. Station public address number 6526.
  - b. Normal outside telephone.
  - c. Two-way radios for use on and near the site.
  - d. Cell phones to contact staff off site.

**APPENDIX N  
OPERATIONS PLANS**

**APPENDIX N-3  
Hazardous Materials and  
Hazardous Waste Management Plan**

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**EL SEGUNDO POWER, LLC**

**HAZARDOUS MATERIALS AND  
HAZARDOUS WASTE MANAGEMENT  
PLAN**

**CAR 000036848**

EL SEGUNDO POWER, LLC  
HAZARDOUS MATERIALS AND HAZARDOUS WASTE  
MANAGEMENT PLAN

PURPOSE

The purpose of this procedure is to comply with the requirements of the Code of Federal Regulations and the California Code of Regulations to have a hazardous materials and waste management plan.

LOCAL

Hazardous Materials Planning Program Inventory of Hazardous Materials and Business Plan requirements of county and local administering agency.

DISTRIBUTION

A copy of this plan and all revisions must be:

1. Maintained at the facility.
2. Submitted, upon request, to local jurisdictions with emergency response authority.

El Segundo Power, LLC  
By: NRG El Segundo Operations Inc.,  
It's Authorized Agent

By: \_\_\_\_\_

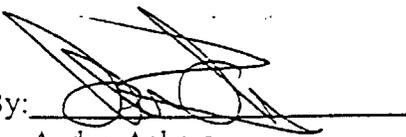
  
Audun Aaberg  
Regional Manager

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## **FACILITY DESCRIPTION PLAN**

### **PART I**

#### **INTRODUCTION**

As required under 40 CFR 264 and 265, El Segundo Power, LLC has developed and implemented a Hazardous Materials and Hazardous Waste Management Plan. The intent of this plan is to safely manage and control hazardous waste within the Station. Pursuant to Section 25503.5 of Chapter 6.95, Article 1 of California Health and Safety code, any business that handles hazardous materials in quantities that exceed 500 pounds, 55 gallons or 200 standard cubic feet for compressed gas must prepare and implement a "Business Plan" for emergency response to a release or threatened release of a hazardous material.

Based on Title 22 of the California Code of Regulations the California Department of Health Services has obtained EPA approval to administer the Hazardous Waste Management System in California. Consequently, the Business Plan for El Segundo Power, LLC has been submitted to the El Segundo City Fire Department which is the administering agency for this program.

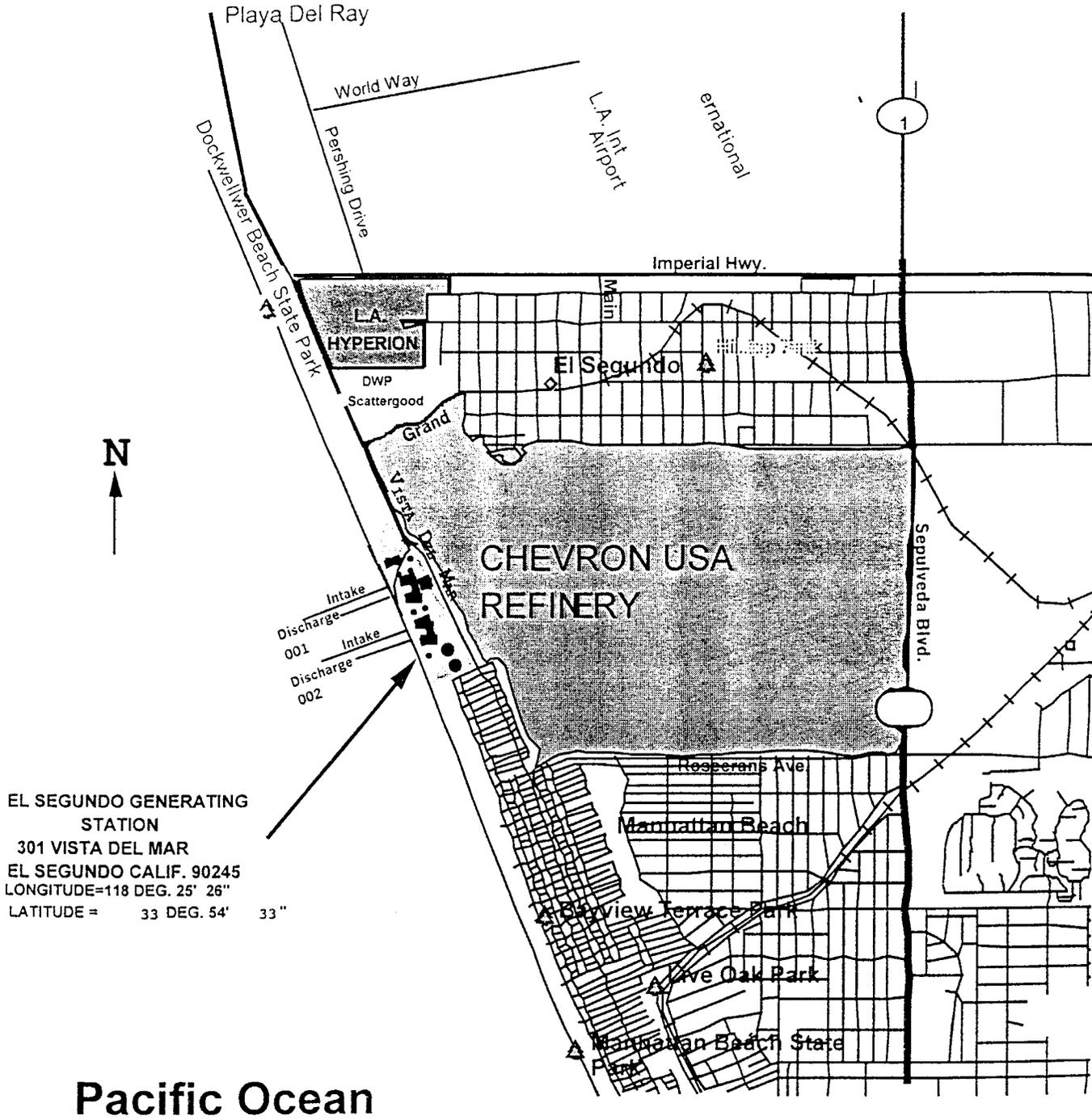
Copies of this plan are to be maintained on file. Copies are also to be made available to all local jurisdictions with emergency response authority.

A listing of personnel to be notified in the event of an emergency response to a release or threatened release of hazardous materials is included in this plan. This plan is to be revised and updated as necessary with a frequency not to exceed every two years.

#### **FACILITY DESCRIPTION**

El Segundo Power, LLC is located at 301 Vista Del Mar, El Segundo, California, 90245. El Segundo Generation, LLC contains waste facilities which include a general purpose retention basin, sumps, oil-water separators, and interconnecting piping between sumps. These facilities are shown on the attached plot plans. The first plot plan on page 6 is a location map and shows the El Segundo Power, LLC in relationship to its general surroundings. The second plot plan on page 7 is a map which shows the location of El Segundo Power, LLC Hazardous Materials. The third plot plan on page 9 is a map which shows El Segundo Power, LLC in-station waste facilities.

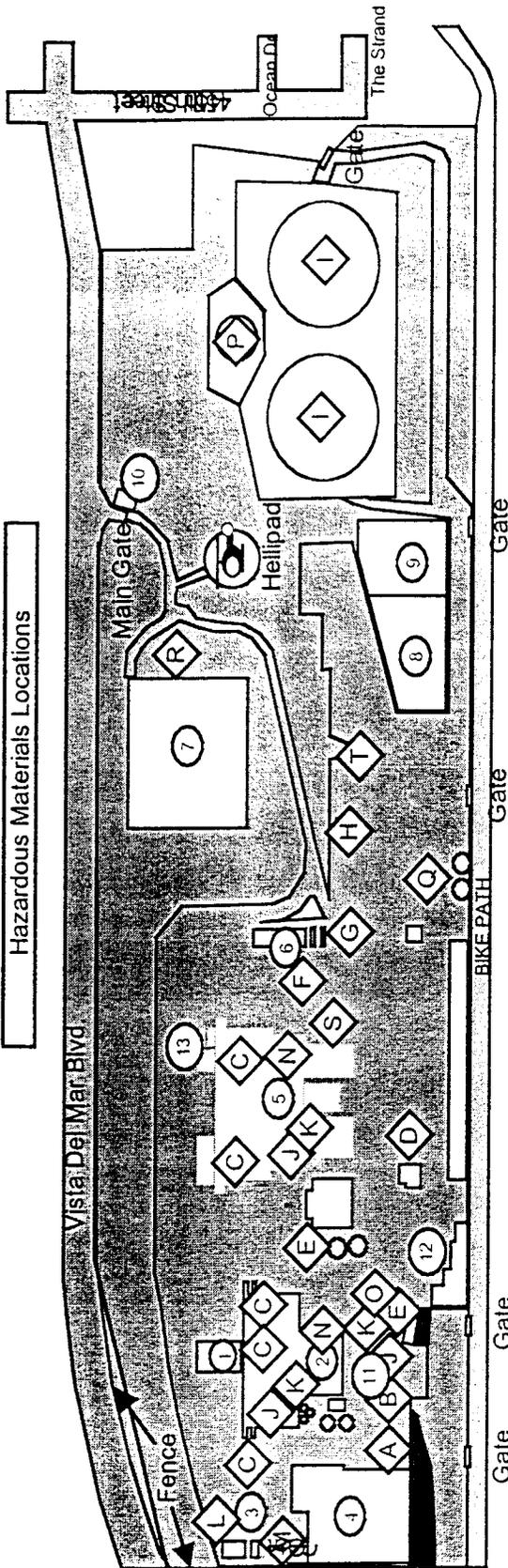
El Segundo Power, LLC has a designated Hazardous Waste Management Area which is used as a central collection area for containers designated as hazardous. The containers are sorted and stored in this area until hauled to a Class 1 dump. No hazardous waste is allowed to accumulate in this area for more than 90 days. Hazardous containerized chemicals are listed in Table 1 on page 12. Prior to contacting a waste transporter, containerized chemicals are inventoried and the appropriate manifest documents are prepared to accompany the hazardous waste to a Class 1 dump or recycle facility.



# EL SEGUNDO POWER, LLC

EL SEGUNDO GENERATING STATION

Hazardous Materials Locations



**BUILDINGS / STRUCTURES**

- 1 Administration Building
- 2 Units 1 & 2
- 3 Paint Shop
- 4 Warehouse & Maintenance Shop
- 5 Units 3 & 4
- 6 Demineralizer Building (Retired)
- 7 Switchyard (Retained by Edison)
- 8 Waste Water Retention Basin
- 9 Acid Retention Basin (Retired)
- 10 Security Guard Station
- 11 Chemical Storage Room
- 12 Technical Shop
- 13 Crane Garage

**MATERIALS STORAGE**

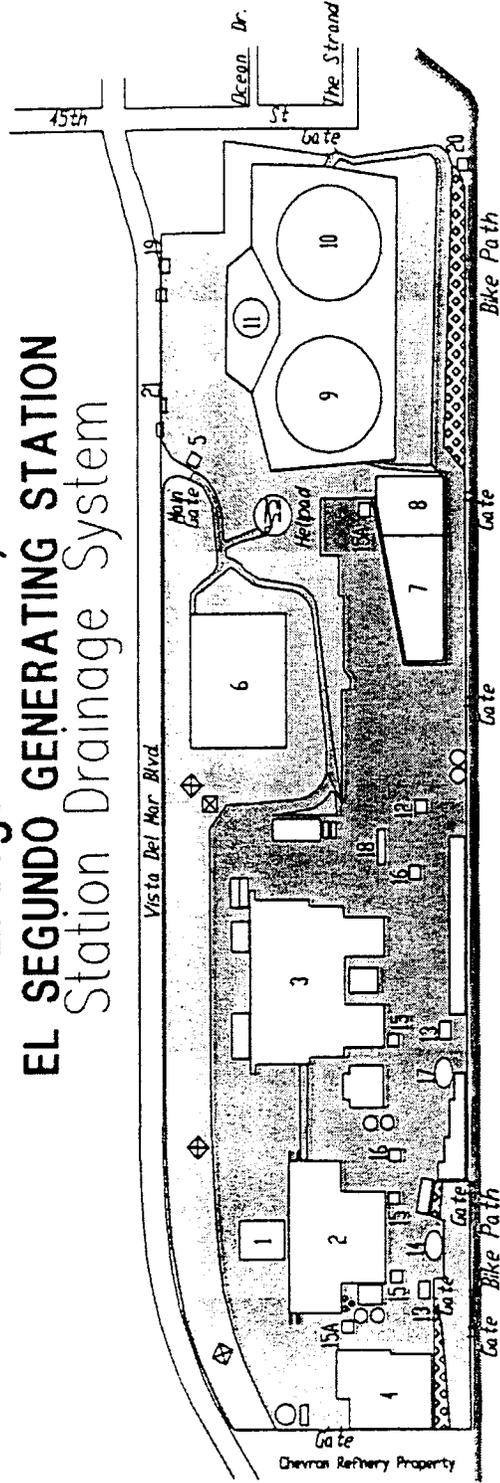
- A Compressed Gas Bottles
- B Diesel Fuel
- C Lubricating Tanks
- D Hydrogen Storage
- E Sodium Hypochlorite
- F Sulfuric Acid
- G Sodium Hydroxide
- H Hazardous Waste Storage Area
- I Fuel Oil (Retained by Edison)
- J Hydrazine
- K Ammonium Hydroxide
- L Paints and Paint Thinner
- M Solvent Degreaser

- N Lubricating Oil Drums
- O Betz Powerline (Sodium Nitrite)
- P Cutter Stock
- Q Urea Storage Tanks
- R Aqueous Ammonia Storage Tank
- S Aqueous Ammonia Injection Skip
- T Fuel Gas

<b>EL SEGUNDO POWER, LLC</b>	
Hazardous Materials Locations	
Not to Scale	Date: 6/16/99
AS/TMP	

Requested by: Alex Sanchez, O & M Services  
 Revised: June 10, 1999  
 S:\proj\11077\ESeg\_0.dwg  
 BAAE

# El Segundo Power, LLC EL SEGUNDO GENERATING STATION Station Drainage System



## Legend

### STATION DRAINAGE SYSTEM

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1 - ADMINISTRATION BUILDING</li> <li>2 - UNITS 1 &amp; 2</li> <li>3 - UNITS 3 &amp; 4</li> <li>4 - WAREHOUSE &amp; MAINTENANCE SHOP</li> <li>5 - SECURITY GUARD STATION</li> <li>6 - SWITCHYARD</li> <li>7 - WASTE WATER RETENTION BASIN</li> <li>8 - ACID RETENTION BASIN</li> <li>9 - NORTH FUEL OIL TANK</li> <li>10 - SOUTH FUEL OIL TANK</li> </ul> | <ul style="list-style-type: none"> <li>11 - CUTTER STOCK TANK</li> <li>12 - OIL-WATER SEPARATOR SUMP</li> <li>13 - SANITARY WASTE TREATMENT PLANT</li> <li>14 - UNIT 1 &amp; 2 OUTFALL (NORMALLY CLOSED)</li> <li>15 - OIL-WATER SEPARATOR BYPASS VALVE (NORMALLY CLOSED)</li> <li>15A - YARD DRAIN FLAPPER VALVE</li> <li>16 - OIL WASTE TRANSFER SUMP</li> <li>17 - UNIT 3 &amp; 4 OUTFALL</li> <li>18 - HAZARDOUS WASTE MANAGEMENT AREA</li> <li>19 - STORM WATER EASEMENT ENTRY</li> <li>20 - STORM WATER EASEMENT EXIT</li> <li>21 - SEPTIC TANK</li> </ul> |
|---|--|

**El Segundo Power, LLC**  
 (For Information Purpose Only)  
 Station Drainage System

EL SEGUNDO GENERATING STATION  
 300 VISTA DEL MAR BLVD  
 EL SEGUNDO, CA 90245  
 BUSINESS PHONE - (310) 615-6391  
 24 HOUR PHONE - (310) 615-6313

## PART II

### HAZARDOUS WASTE ANALYSIS PLAN

#### I. OBJECTIVE

- A. The objective of this plan is to describe the procedures which will be carried out to provide the analysis of the waste and to insure that the analysis is accurate and up-to-date.
- B. Before any hazardous waste may be disposed, a detailed chemical and physical analysis of the waste must be obtained.
- C. Potential waste sources are listed in Table 1 on page 13.

#### II. RESPONSIBILITY

- A. Audun Aaberg the El Segundo Power, LLC Regional Plants Manager shall ensure station compliance.
- B. Alex Sanchez or Steve Odabashian, Environmental Supervisors shall coordinate the station waste sampling and analysis program and maintain the written records required by this plan.
- C. The Environmental Supervisors shall ensure the station waste samples are analyzed and technical assistance provided as required. Water Resources Technology shall also provide analysis sheets for the bulk chemicals, containerized chemicals and wastes listed in this plan.

#### III. WASTE ANALYSIS REQUIREMENTS, SAMPLING METHODS AND FREQUENCY

- A. Station waste holdup and process facilities.
  - 1. The sludge and liquid portions of the waste from the generating station waste holdup and process facilities will be analyzed for pH, and Title 22, CCR CAM metals.
  - 2. The sludge portion will be extracted in accordance with the Toxicity Characteristic Leaching Procedure and the California Waste Extraction Test Procedure.
  - 3. Oil skimmed off the liquid surface of the facilities will be checked for ignitability.
  - 4. Reactivity of the wastes will not be determined due to the nature of the materials used at the generating station. For the same reason, the pesticide content of the wastes will not be determined.
    - a. Test methods: See METHODS OF ANALYSIS section of this plan.
    - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
    - c. Frequency of repeat analysis: Every two years and any other time that new equipment is installed which could affect the waste stream(s) going into a particular waste facility (to establish new baseline data).

B. Bulk storage chemicals.

1. Bulk chemicals used at the El Segundo Power, LLC are either generic chemicals bought under specifications or proprietary chemical mixtures purchased from treatment chemical compounders.
2. Material Safety Data Sheets (MSDS) for these chemicals are maintained in the Safety Environmental Supervisor's and in supervisors' offices. Determination of the hazardous waste potential and analysis of the bulk chemicals for offsite disposal will be based on the MSDS.
  - a. Test methods: N/A (information on MSDS)
  - b. Sampling methods: N/A
  - c. Frequency of repeat analysis: N/A

C. Containerized chemicals or gases.

1. Containerized chemicals or gases used at El Segundo Power, LLC which may be considered potential sources of hazardous wastes are listed in Table 1 on page 12.
2. Material Safety Data Sheets (MSDS) for these chemicals are maintained in the Safety & Environmental office and all other supervisors' offices. Determination of the hazardous waste potential and analysis of a containerized chemical or gas for offsite disposal will be based on the MSDS.
3. If the containerized chemical is not listed in Table 1, follow the instructions on the container for disposal.
  - a. Test methods: N/A (information on MSDS)
  - b. Sampling methods: N/A
  - c. Frequency of repeat analysis: N/A

D. Sanitary waste treatment facilities and septic tanks.

1. No analyses will be performed on these wastes or any wastes removed offsite..
2. Analyses will be made of treated liquid discharging from its normal effluent point(s).
3. All wastes removed offsite will be disposed at a public owned treatment works (POTW).
  - a. Test methods: N/A
  - b. Sampling Frequency: N/A
  - c. Frequency of repeat analysis: N/A

E. Bearing cooling water.

1. Liquid from the bearing cooling water tanks will be analyzed for pH, arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.
2. Reactivity, ignitability and pesticide content of the bearing cooling water will not be determined due to the nature of the constituents and their concentrations in the water.
  - a. Test methods: See METHODS OF ANALYSIS section of this plan.
  - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
  - c. Frequency of repeat analysis: Every two (2) years and any other time bearing cooling water treatment is changed in a bearing cooling water system (to establish new baseline data).

F. Chemical cleaning wastes.

1. Chemical cleaning of equipment will be analyzed for pH, and Title 22, CCR CAM metals. Where the chemical cleaning waste is a sludge, it will be extracted in accordance with the Toxicity Characteristic Leaching Procedure and the California Waste Extraction Test Procedure.
2. Reactivity, ignitability and pesticide content of the chemical cleaning wastes will not be determined due to the nature and concentrations of the waste constituents.
3. Since the chemical cleaning processes used in the generating stations are repetitious, standard analyses will be used for determination of the hazardous waste potential and analysis of the wastes for offsite disposal unless a new chemical cleaning solvent or new spent solvent waste treatment process is used.
  - a. Test methods: See METHODS OF ANALYSIS section of this plan.
  - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
  - c. Frequency of repeat analysis: Every two (2) years and any time a new chemical cleaning solvent or new spent solvent waste treatment process is used.

G. Other generating station wastes.

1. Anything which cannot be characterized by the above categories and, unlike asbestos, fuel oil, distillate, transformer oil, etc., has an unknown hazardous waste potential will be submitted to a certified laboratory for analysis.
2. Such analysis will consist of ignitability, pH, and Title 22, CCR CAM metals.
3. A Toxicity Characteristic Leaching Procedure and the California Waste Extraction Test Procedure will be done prior to metals analysis for sludges and solids samples.
4. Reactivity and pesticide content of the samples will not be determined due to the nature of the materials used at the generating stations.
5. As an alternate to the above analyses, an MSDS, if one exists, may be obtained for the material.
  - a. Test methods: See METHODS OF ANALYSIS section of this plan.
  - b. Sampling methods: In conformance with the procedures outlined in "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA 600/2-80-018.
  - c. Frequency of repeat analysis: Sufficient to adequately characterize the unknown material.

IV. METHODS OF ANALYSIS

A. The following test methods will be used to determine the constituents and material characteristics listed in this plan:

1. Ignitability:
  - a. ASTM Standard D-93-79 (Pensky-Martens Closed Cup Tester)
  - b. ASTM Standard D-3278-79 (Setaflash Closed Cup Tester)
  - c. EPA 600/2-80-018 Sample Procedures for Hazardous Waste Streams
2. PH:
  - a. By pH meter using the test method describe in "Methods for Analysis of Water and Wastes" EPA 600/4-79-020, March, 1979.
3. Toxicity Characteristic Leaching Procedure
  - a. Extraction Procedure: Using the Toxicity Leaching Procedure (TCLP) described in Title 40 CFR Part 261 Appendix II- Method 1311 Toxicity Characteristic Leaching Procedure (Federal Register 55 FR26987, June 29, 1990.

4. Metals-Using EPA approved test methods described in 40CFR Part 136.
- |             |               |                |          |
|-------------|---------------|----------------|----------|
| 1) Arsenic  | 6) Mercury    | 11) Cobalt     | 16) Zinc |
| 2) Barium   | 7) Mercury    | 12) Copper     |          |
| 3) Cadmium  | 8) Silver     | 13) Molybdenum |          |
| 4) Chromium | 9) Antimony   | 14) Nickel     |          |
| 5) Lead     | 10) Beryllium | 15) Thallium   |          |

#### IV. WASTE ANALYSIS REPORTS

- A. The generating station will maintain a file on all waste analysis test reports. These reports will include:
1. Waste analysis reports for the waste holdup and processing facilities.
  2. MSDS forms for bulk chemicals and containerized chemicals and gases.
  3. El Segundo Power, LLC specifications for generic bulk chemicals used at the generating station.
  4. Bearing cooling water analysis reports.
  5. Chemical cleaning waste analysis reports.
  6. Waste analysis reports for uncategorized waste sample submitted to a certified laboratory for analysis (see paragraph 7, WASTE ANALYSIS REQUIREMENTS, SAMPLING METHODS AND FREQUENCY).

TABLE I  
POTENTIAL WASTE SOURCES  
EL SEGUNDO POWER, LLC  
EPA ID NO. CAR000036482

WASTE HOLDUP OR PROCESS FACILITIES

General Waste Retention Basin.  
Units 1&2 Oily Waste Sump.  
Units 3&4 Oil-Water Separator.  
Retention Basin Oil Skimmer  
Unit 1 North Oil -Water Drain Sump  
Unit 2 South Oil-Water Drain Sump  
Unit 3 North Oil-Water Drain Sump

BULK STORAGE CHEMICALS

Ammonium Hydroxide  
Units 1 & 2 Sodium Hypochlorite  
Units 3 & 4 Sodium Hypochlorite  
Turbine Lube Oil Storage Tanks

CONTAINERIZED CHEMICALS AND GASES

Containers which contain the following chemicals or gases:  
Empty aerosol cans which have trace amount of hazardous materials

Acetone  
Aqua Ammonia  
Hydrazine  
Mercury waste

Toluene  
Acetylene  
Hydrogen  
New oil  
Waste or used oil  
Oily rags  
Empty paint cans

OTHER

Sandblasting debris  
Furnace duct debris

SANITARY WASTE TREATMENT FACILITIES

Units 1&2 Area Sanitary Waste Treatment Plant.  
Units 3&4 Area Sanitary Waste Treatment Plant.  
Unit 2 BCW Tank  
Units 3&4 BCW Tank.

**PART III**  
**HAZARDOUS WASTE SECURITY PLAN**

I. OBJECTIVE

- A. The Resource Conservation and Recovery Act (40 CFR 265-14) requires the owner of a hazardous waste facility to prepare a security plan.
- B. The purpose of the regulation is to ensure that reasonable action is taken to preclude unauthorized entry by the public into areas containing a hazardous waste facility.

II. FACILITY SECURITY

- A. The El Segundo Power, LLC site is surrounded with perimeter fencing. Within the boundary of the perimeter fencing are the boilers, electrical switchyard, and all station buildings. Additionally, the entire hazardous waste facility is contained within the fenced boundary.
- B. The perimeter fence is mainly chain link construction topped with barbed wire. The fence is nine feet high. The remainder is constructed of concrete blocks topped with barb wire, and measures eleven feet high. The perimeter fencing is inspected daily by the generating station personnel. In addition, station personnel make weekly inspections of the station perimeter fencing. Any openings through or under the fence are reported to the Regional Plants Manager. Repairs are effected expeditiously.
- C. Access to the station property is controlled through entry via the main gate. Security Officers are on duty at the main gate 16 hours a day and control the entry of visitors to the plant property. An automatic key card control system is used to operate the gate during non day shift hours. Access is controlled via remote video camera observation from the control room. The general public is not allowed entry to the plant; visitors are escorted about the plant by qualified personnel. Warning signs are posted on the perimeter fencing at appropriate intervals. These signs carry the legend "Trespassing or Loitering Forbidden by Law."
- D. The El Segundo Power, LLC Hazardous Waste Storage Area is located south of Unit 4 boiler adjacent to the west side of the hillside along the entry roadway to the plant. The storage area has a nine feet barb wire fence around the perimeter of the area. The storage area is constantly locked. Warning signs are posted at the entrance of the storage area in both English and Spanish. These signs carry the legend " Danger Hazardous Waste Area- Unauthorized Personnel Keep Out".
- E. The security procedures practiced at this facility are believed adequate to preclude entry be the public into the hazardous waste storage areas.

## PART IV

### HAZARDOUS WASTE INSPECTION PLAN

#### I. OBJECTIVE

- A. The purpose of this plan is to outline a schedule of equipment inspections in compliance with 40 CFR 265.15. This section requires the owner of a hazardous waste storage area to inspect the storage area on a set frequency basis to ensure problems are identified and corrected before a release of hazardous waste to the environment occurs.

#### II. REQUIREMENTS

- A. The Environmental Supervisors, Alex Sanchez and Steve Odabashian are responsible for implementing the inspection and monitoring program.
- B. Operations is assigned the responsibility to conduct the inspections on a once per shift frequency as indicated on the RCRA & Daily Inspection Report.
  1. The inspection consists of a walk down of all the facilities listed.
  2. Each facility is inspected for signs of leakage or spillage, equipment malfunctions, and deterioration.
  3. Conditions are recorded on the RCRA & Daily Inspection Report.
  4. Abnormal conditions are explained in the remarks section and corrective action noted. An abnormal condition is immediately brought to the attention of the Shift Supervisor.

#### III. RCRA & DAILY INSPECTION OBSERVATIONS

##### A. Retention Basins and Sumps

1. Inspect for signs of overflow, seepage, cracking, and deterioration of surfaces.
2. Empty retention basins are inspected for liner deterioration, settling and other signs which might indicate leakage could occur.
3. Freeboard is checked once per shift and recorded.
4. Freeboard or retention basins must not decrease to less than two feet.
5. Proper operation of the retention basin oil skimmer is also checked.

##### B. Tanks

1. Tanks and associated piping, pumps, valves and flanges are inspected for signs of leakage, and deterioration.

##### C. Sumps & Sump Pumps

1. Sumps & sump pumps are inspected to ensure that they are in operating condition and there are no signs of leakage.

##### D. Hazardous Waste Containerized Management Area

1. The area is inspected to ensure no barrels, drums or other containerized material in the area is leaking.

E. Containerized Chemical Storage Area

1. The area is inspected to ensure no drums or other containerized material in the area is leaking.

IV. RECORDS

A. The inspection is conducted using form the Daily RCRA Inspection Sheet.

1. On completion of the daily inspection, the operator performing the inspection signs the form and the form is routed to the Shift Supervisor.
2. The Shift Supervisor reviews the form for any required action. The form is then forwarded to the Environmental Supervisor for record retention.

RCRA & DAILY INSPECTION REPORT

STATION \_\_\_\_\_ DATE \_\_\_\_\_ INSPECTOR - DAY \_\_\_\_\_  
 INSPECTOR - NIGHT \_\_\_\_\_

EQUIPMENT RESULTS	DAYSHIFT	NIGHTSHIFT
SMUD SUMPS		
RECLAIM WATER BRINE TANK		
SPILL CONTROL AREA (INVENTORY)		
HAZARDOUS WASTE STORAGE AREA		
HAZARDOUS WASTE CONTAINERS		
PRIMARY FUEL OIL AREA		
SOUTH RETENTION BASIN LEAK DETECTOR		
SOUTH RETENTION BASIN LINER		
SOUTH RETENTION BASIN F/B		
NORTH RETENTION BASIN LINER		
NORTH RETENTION BASIN F/B		
RETENTION BASIN OIL SKIMMER		
FUEL OIL TANK AREA DRAIN EASEMENT		
UREA TANKS - AREA		
OILY WASTE SUMP 3P		
AMMONIA STORAGE AREA		
CHECK AMMONIA LEAK DETECTOR @ TANK		
CHECK UNDERGROUND AMMONIA DETECTOR		
SECONDARY FUEL OIL AREA 3/4		
HYPOCHLORITE TANK 3P		
BCW TANKS - PUMPS - HEAT EXCHANGERS		
CONTAINERIZED CHEMICAL STORAGE AREAS		
OILY WASTE SUMP 1P		
SECONDARY FUEL OIL AREA 1P		
HYPOCHLORITE TANK 1P		
LUBE OIL STORAGE TANKS		
TURBINE LUBE OIL RESERVOIRS 1-4		
TURBINE BOWSER FILTERS 1-4		
CHEVRON RECOVERY WELLS		
SEWAGE TREATMENT PLANT 1P		
SEWAGE TREATMENT PLANT 3P		
BARREL BUNG TOP- KEEP AT 15, ORDER AT 8		
BARREL OPEN TOP- KEEP AT 20, ORDER AT 15		
PLANT STORM DRAINS		
COMMENTS:		

\* PROVIDE COMMENTS FOR ABNORMAL CONDITIONS: N = NORMAL - A= ABNORMAL

- INCLUDE RETENTION BASIN FREEBOARD FIGURE IN FEET / INCHES
- INFORM SHIFT SUPERVISOR OF ALL ABNORMAL CONDITIONS
- FORWARD FORM TO THE ENVIRONMENTAL OFFICE

## PART V

### HAZARDOUS MATERIALS & WASTE MANAGEMENT TRAINING PLAN

#### I. OBJECTIVE

- A. The purpose of this plan is to outline the requirements of the personnel training program as specified by Title 22, California Code of Regulations.
- B. This program requires close coordination between the Environmental Supervisor and the Regional Plants Manager to ensure that all Station employees involved in the handling of hazardous materials are adequately trained.

#### II. PROGRAM REQUIREMENTS

- A. All plant personnel who, in the normal course of their job duties, are involved in the operation, maintenance, sampling, engineering or supervision of the hazardous material storage facilities shall annually be trained in the requirements of this Station Procedure.
- B. This training is designed to ensure each employee understands his role in the operation and maintenance of the facilities.
- C. The Regional Plants Manager shall ensure all personnel subject to the requirements of this program are adequately trained.
- D. The content of the personnel training program includes the following elements:
  - 1. Operating procedures for the individual hazardous material.
  - 2. Emergency operating procedures for each material during spills or leaks from the system.
  - 3. Inspection and monitoring procedures.
  - 4. Maintenance procedures to lessen exposure and eliminate discharge to the environment.
  - 5. Use of emergency equipment (breathing devices, fire fighting equipment, protective clothing, etc.).
  - 6. Application and use of communication equipment.
  - 7. Response to fires and explosions.
  - 8. Response to ground water contamination.
  - 9. Response to spill or releases.
- E. New and transfer employees shall complete the training program within six months of employment at this facility.
- F. Training records shall be maintained in the Station Environmental Training files.

## PART VI

### HAZARDOUS WASTE OPERATING RECORD

#### I. OBJECTIVE

- A. The purpose of this plan is to outline the requirements for and the content of the hazardous waste operating record as maintained at this generating station and as required by 40 CFR 265.73. This regulation requires an on-site hazardous waste operating record be maintained until such time as these hazardous waste facilities are retired.

#### II. RECORD RETENTION

- A. The station will maintain records in the "Hazardous Waste Management File" as indicated below.
1. The quantity of hazardous waste will be recorded each time the waste is removed from the facility for processing or hauling off-site to a Class 1 dump.
    - a. **RETENTION BASIN SOLIDS/SLUDGES**-When solids/sludges are transported off-site, the date and quantity will be recorded on the California Uniform Hazardous Waste Manifest, and copies of the manifest will be filed along with a summary sheet recording total waste removed each time the retention basin is cleaned.
    - b. **CHEMICAL CLEANING WASTE, LIQUID OR PROCESSED SLUDGE**-The individual California Uniform Hazardous Waste Manifest will be retained and summarized as in (A) above for all waste hauled off site.
    - c. **OTHER WASTE**-Waste from oil-water separators and the hazardous waste containerized storage are hauled off-site will be recorded on the California Uniform Hazardous Waste Manifest retained and summarized as in (A) above for all waste hauled off site.
  2. Records and results of all waste analyses including date sampled, type of sample and waste source will be maintained in the "Hazardous Waste Management File".
  3. Summary reports and details of all incidents involving spills or leaks will be maintained whenever it is necessary to implement the Hazardous Waste Release Contingency Plan.
  4. Daily RCRA Inspection Report records are maintained and kept on file in the Environmental Office.
  5. Ground water monitoring analyses are maintained on file in the Environmental Office.
  6. Copies of reports related to the hazardous waste facility required by federal or state agencies whether annual, quarterly, monthly or special are maintained on file in the Environmental Office.
  7. All closure and post closure cost estimates are maintained and located in the station central files.

**PART VII**  
**HAZARDOUS WASTE CLOSURE PLAN**

I. OBJECTIVE

- A. The purpose of this plan is to ensure safe, accountable decommissioning and decontamination of all hazardous waste facilities at El Segundo Power, LLC.

II. DATE OF CLOSURE

- A. Anticipated plant decommissioning is the year 2015.
- B. At this time El Segundo Power, LLC has no projected date for the decommissioning.
- C. The above date is based on an assumed 50 year remaining station life following the last unit commissioning. Actual station decommissioning may differ considerably from this estimate.

III. CLOSURE METHOD

A. Retention basins

- |                         |   |
|-------------------------|---|
| 1. Method of Closure    | Water drained to NPDES Discharge No. 002 in conformance with NPDES standards. Sediment removed offsite to an approved landfill disposal area.   |
| 2. Decontamination      | Basin liner washed with water containing industrial detergent to remove remaining surface scum. Spent wash water and wash sediment removed offsite to an approved landfill disposal area. |
| 3. Infiltration Control | Not required — All material removed from basins.  |

B. Sanitary waste treatment plants

- |                      |   |
|----------------------|---|
| 1. Method of Closure | Water drained to NPDES Discharge No. 001 and No. 002 in conformance with NPDES standards. Sediment removed offsite to a public owned treatment works (POTW)                                     |
| 2. Decontamination   | Basin liners washed down with water drained to NPDES Discharge No. 001 and No. 002 in conformance with NPDES standards. Wash sediment removed offsite to a public owned treatment works (POTW). |

C. Sumps, oil and grease removal system and associated piping

- |                    |  |
|--------------------|--|
| 1. Decontamination | Water flush all piping to oil-water separators. Pump out oil-water separators and remove |
|--------------------|--|

pumped out material offsite to an approved landfill disposal area.

D. Bearing cooling water tanks, associated piping and equipment

- |                      |  |
|----------------------|--|
| 1. Method of Closure | Water drained to retention basins.                             |
| 2. Decontamination   | Bearing cooling water tanks water flushed to retention basins. |

E. Lubricating oil reservoirs and associated piping

- |                      |   |
|----------------------|---|
| 1. Method of Closure | Oil drained from equipment and removed or sold for refuse. Unsold portions removed offsite to an approved landfill disposal area. |
| 2. Decontamination   | Sludge wiped out from reservoirs and disposed of to an approved landfill.   |

F. Waste storage area

- |                      |  |
|----------------------|--|
| 1. Method of Closure | All waste material removed offsite to an approved landfill disposal area.  |
| 2. Decontamination   | Waste storage area surface washed with water containing industrial detergent to remove any material buildup. Spent waste water and sediment removed offsite to an approved landfill disposal area. |

G. Bulk chemical storage tanks

- |                      |  |
|----------------------|--|
| 1. Method of Closure | Chemicals removed offsite or sold for reuse.   |
| 2. Decontamination   | Water flush to retention basins. Sediment removed offsite to an approved landfill disposal area. |

H. Miscellaneous: Containerized chemical or oil, gas cylinders

- |                      |   |
|----------------------|---|
| 1. Method of Closure | Removed offsite or sold for reuse. Unsold portions removed offsite to an approved landfill disposal area. |
|----------------------|---|

I. Structures, buildings and equipment

- |                      |  |
|----------------------|--|
| 1. Method of Closure | Inspect for hazardous waste materials. Remove any hazardous waste materials found offsite to an approved landfill disposal area. |
|----------------------|--|

IV. IMPLEMENTATION SCHEDULE

A. Closure Plan submittal

- |             |   |
|-------------|---|
| 1. Schedule | Submit at least 180 days prior to plant decommissioning date. |
|-------------|---|

2. Agency

Submit to El Segundo Fire Department CUPA who is the agent for the Region IX Administrator of the Environmental Protection Agency.

B. Closure Plan approval

1. Schedule

Received at least 90 days prior to plant decommissioning date.

2. Agency

Received from El Segundo Fire Department CUPA who is the agent for the Region IX Administrator of the Environmental Protection Agency.

C. Closure duration and verification of completion

1. Schedule

Closure completed within 180 days of receipt of final waste volume.

2. Certification

Submit certification of Closure Plan compliance to El Segundo Fire Department CUPA who is the agent for the Region IX Administrator of the Environmental Protection Agency.

3. Plot Plan

A plot plan indicating location and dimension of onsite disposal areas will not have to be submitted to the Environmental Protection Agency since all hazardous wastes are disposed offsite in approved landfill disposal areas. Submit a statement to this effect with the certification of Closure Plan compliance above.

**PART VIII**  
**HAZARDOUS WASTE RELEASE CONTINGENCY PLAN**

**I. OBJECTIVE**

- A. The purpose of this plan is to specify how station personnel will respond to any unplanned release of hazardous wastes to the air, soil, or surface water at El Segundo Power, LLC.
- B. This response includes notifying the proper authorities of the release, controlling and cleaning up the release and restoring the environment as required.

**II. RESPONSIBILITY**

- A. The Regional Plants Manager is responsible for establishing procedures for corrective action in the event of an unplanned release of hazardous wastes at El Segundo Power, LLC.
- B. The on duty Shift Supervisor is the emergency Response Coordinator (RC).
  - 1. The emergency Response Coordinator is responsible for providing 24 hour coverage for the purpose of implementing this plan and notifying the management staff and appropriate agencies in the event of an unplanned release of hazardous wastes.

**III. SOURCES OF HAZARDOUS WASTE**

- A. Chemicals used at this Station do not become hazardous wastes until they are no longer considered for use (discarded, spilled or leaked).
- B. Sources of hazardous waste are listed below.
  - 1. Spills and leaks of oil, e.g., distillate, lubricating oils, hydraulic oils, etc.
  - 2. Spills or leaks from station bulk chemical storage tanks listed below.

	<u>Material Stored</u>	<u>Tank Holding Capacity, gal.</u>
a. Ammonium Hydroxide	29.4%NH <sub>4</sub> OH	20,000
b. 3P Sodium Hypochlorite Storage Tank	12.5wt%NaOCl	3,700
c. 1P Sodium Hypochlorite Storage Tank	12.5wt%NaOCl	300

- 3. Spills or leaks from bearing cooling water (BCW) tanks listed below.

a. Unit 1 BCW Tank	Water containing 1,000 mg/l NaNO <sub>2</sub>	10,000
--------------------	--	--------

- |                       |  |        |
|-----------------------|--|--------|
| b. Unit 2 BCW Tank    | Water containing<br>1,000 mg/l NaNO <sub>2</sub> | 10,000 |
| c. Units 3&4 BCW Tank | Water containing<br>1,000 mg/l NaNO <sub>2</sub> | 50,000 |
4. Cracks or holes in the linings of station waste holdup or process facilities listed below.
    - a. General Waste Retention Basin
    - b. Chemical Cleaning Retention Basin
    - c. Makeup Demineralizer Spent Regenerant Sump
    - d. Units 1&2 Oil-Water Separator
    - e. Units 3&4 Oil-Water Separator
    - f. Retention basin oil skimmer
    - g. Storm drain oil skimmers
  5. Spills or leaks from station waste holdup or process facilities. (Same facilities listed in Paragraph. 4 above.)
  6. Cracks or holes in the walls of station sanitary waste treatment plants listed below.
    - a. Units 1&2 Area Sanitary Waste Treatment Plant
    - b. Units 3&4 Area Sanitary Waste Treatment Plant
  7. Any containerized chemical or waste barrel found to be leaking whose empty container is normally disposed offsite in a Class I landfill area.
  8. Spills or leaks from the SCR ammonia pump piping or piping run to ammonia injector skid.

#### IV. PLAN OUTLINE

- A. The following steps will be followed in the event of an imminent or confirmed release of hazardous waste from the facility:
  1. Discovery of the hazardous waste release source.
  2. Notification of the proper authorities.
  3. Evacuation of the plant if required.
  4. Containment and removal of the hazardous waste release.
  5. Restoration of the environment.
  6. Recording pertinent details of the incident

#### V. DISCOVERY

- A. Station personnel will monitor potential sources of hazardous waste release as part of the following programs:
  1. General inspection requirements instituted in conformance with 40 CFR 265.15.
  2. Normal station operator equipment inspection rounds each 12-hour shift.
  3. Normal station operator monitoring of bulk chemical deliveries to storage tanks.
  4. Hazardous waste operations and emergency response in conformance with 29 CFR 1910.120

#### VI. NOTIFICATION

- A. Upon discovery of an imminent or actual hazardous waste release, the Shift Supervisor (as the Response Coordinator) on shift shall be notified immediately.



- a. Region IX Administrator  
U.S. Environmental Protection  
Agency 215 Fremont Street  
San Francisco, California 94105
- b. This report must include:
  - 1) Name, address, and telephone number of the owner or operator;
  - 2) Name, address, and telephone number of facility;
  - 3) Date, time and type of incident (e.g., fire, explosion);
  - 4) Name and quantity of material(s) involved;
  - 5) The extent of injuries, if any;
  - 6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
  - 7) Estimated quantity and disposition of recovered material that resulted from the incident.

### VIII. PLANT EVACUATION PLAN AND ASSEMBLY AREAS

- A. Activation of the Station Emergency Warning System requires all Station personnel to report to their assigned Assembly Areas. Use of the Station Emergency Warning System is described in Station Procedure 7-2.
- B. In the event of an emergency situation and it is necessary to evacuate the Plant, all personnel on site are to report to their assigned Assembly Areas.
  1. If personnel are unable to assemble in their assigned areas due to physical impossibility they will report to the closest assembly area.
  2. See Attachment No. 3 for Plant evacuation routes.
  3. Personnel assembling out of their assigned areas must at the earliest possibility report to their assigned assembly area. This is necessary for the Response Coordinator to account for Station personnel.
- C. OPERATIONS PERSONNEL will report to their ASSIGNED CONTROL ROOM.
- D. STATION NON OPERATION, POWER GENERATION MAINTENANCE, OR OTHER PERSONNEL will report to the PARK AREA on the northwest corner of the plant.
- E. ALL CONTRACTOR PERSONNEL on site are expected to report to the PARK AREA on the northwest corner of the plant.
- F. SECURITY PERSONNEL are to remain at the MAIN GATE to assist with direction of emergency personnel and provide an accurate list of personnel on site.
  1. The Security Officer will report his status to the emergency Response Coordinator.
- G. ALTERNATE ASSEMBLY AREAS
  1. Non Operations personnel in the Plant area who are unable to report to their assigned assembly area because of Plant conditions will use the Control Rooms as an alternate assembly area.
    - a. At the earliest convenience these personnel are expected to report to their assigned assembly area.

- b. This is necessary for the Response Coordinator to account for Station personnel.
2. Operations personnel unable to report to their assigned Control Room shall assemble in the parking area.
  - a. However, at the earliest possibility they are to report to their assigned Control Room for accounting purposes.
- b. This is necessary for the Response Coordinator to account for Station personnel.

#### IX. CONTAINMENT AND REMOVAL OF HAZARDOUS WASTE RELEASES

- A. El Segundo Shift Supervisors are trained only to the Hazwoper Operations level. The Shift Supervisors are restricted to function in a defensive manner only.
- B. El Segundo Operations personnel are trained only to the Hazwoper Operations level. The operations personnel shall identify and report the existence of a spill or leak.
- C. Consider leaks or spills exempt from the reporting requirements of this plan unless personal injury is involved, or if the spill, vapors or fumes extend beyond the station property lines or enters navigable waters.
  2. Containment and removal of the Hazardous Material or Hazardous Waste Release
    - a. The first order of business is to be in agreement with the Administering Agency and if necessary State and Federal Authorities as to a response plan.

#### X. SPILLS AND LEAKS

When considering the control and clean-up of a hazardous material spill or leak, it is necessary to develop agreement with the Administering Agency and if necessary, State and Federal Authorities, as to a response plan.

##### A. OILS LUBRICATING OILS, HYDRAULIC OILS, ETC.

1. Station personnel will refer to the Station Order EL O-6 "Oil Spill and Hazardous Substances Spill Contingency Plan", for all matters involving station oils and oil systems other than the legal notification requirements of this contingency plan.
2. Refer to product MSDS for proper safety procedures.

##### B. BULK CHEMICAL STORAGE TANKS

###### 1. AQUEOUS AMMONIA

- a. All operations are to be carried out using established safety procedures for the chemical involved.
- b. Refer to produce MSDS for proper safety procedures.
- c. Contain spills and contact clean up contractor. Neutralize only as necessary to protect human health and the environment. Spill should only be flushed to retention basin to protect life or to avoid environmental damage.

###### 2. SODIUM HYPOCHLORITE STORAGE TANKS

###### a. CORRECTIVE ACTION

- 1). Same as for sulfuric acid.
3. Neutralize or otherwise treat the waste in the retention basin as required to meet NPDES Discharge Permit standards prior to draining to NPDES Discharge No. 002.

C. SPILLS OR LEAKS FROM BEARING COOLING WATER TANKS

1. CORRECTIVE ACTION

- a. Same as for ammonium hydroxide.

D. CRACKS OR HOLES IN THE LININGS OF SANITARY WASTE FACILITIES

1. CORRECTIVE ACTION

- a. Isolate the sanitary waste treatment plant. Call in a vacuum truck to allow the tank to be pumped out and flushed. Dispose of all material removed offsite at Public Owned Treatment Works (POTW)
- b. Determine whether the ground beneath the tank has been contaminated and remove any contaminated soil offsite to an approved Class I disposal site.
- c. Fill in the ground around the tank as required, repair the wall and return the sanitary waste treatment plant to service.

E. SPILLS OR LEAKS FROM WASTE HOLDUP FACILITIES

1. CORRECTIVE ACTION

- a. For leaks
  - 1) Treat spilled liquid wastes from leak in accordance with the requirements for spills described below in (B).
  - 2) Treat the source of the leak in accordance with the requirements for cracks or holes in the linings of station waste holdup or process facilities described in item d above.
- b. For spills
  - 1) Divert flow around or isolate the process facility. Allow the level to go down with drainage via the normal discharge point.
  - 2) Divert spilled waste back into the facility which overflowed. If not possible divert into the nearest drain line or facility which routes back to the overflowed facility. If still not possible divert to another facility which is equal to or better than the overflowed facility.
  - 3) For example, sump overflows may be diverted to another sump or to the retention basins via station drains. If one retention basin overflows, the spillage may be directed to the other retention basin.
  - 4) If the facility discharge point is plugged treat the remaining liquid in the facility. Bringing it into conformance with the facility normal discharge requirements. Then pump out the liquid to the facility normal discharge point. Unplug or repair the discharge point and return the facility to normal operation. Remove any sediment taken from the facility offsite to an approved Class I disposal site.
  - 5) If the spill was dammed or otherwise contained, all materials used must be thoroughly cleaned by service water flushing or, if this is not possible, removed offsite to an approved Class I disposal site.

F. LEAKING CONTAINERIZED CHEMICALS OR WASTE DRUMS

1. CORRECTIVE ACTION

- a. Refer to product MSDS for proper safety procedures.
- b. Transfer remaining material in the container to another suitable container.
- c. Contain spills and contact cleanup contractor. Neutralize only as necessary to protect human health and the environment. Spill should only be flushed to retention basin to protect life or to avoid environmental damage.

- d. Remove any contaminated material including soil, offsite to an approved Class I disposal site.

#### XI. RESTORATION OF THE ENVIRONMENT

- A. When any hazardous release results in ground contamination, the contaminated ground will be dug up and removed offsite to an approved Class I disposal site.
- B. The resulting hole will be filled in with uncontaminated soil.

#### XII. OPERATING RECORD OF INCIDENT

- A. The Regional Plants Manager will insure a Hazardous Waste Management Log is maintained.
- B. The log shall contain a record of the time, date and details of each incident which requires implementation of this contingency plan.

#### XIII. CONTINGENCY PLAN DISTRIBUTION

- A. A copy of the contingency plan and all revision to the plan must be:
  1. Maintained at the station at the following locations:
    - a. Hazardous Waste Management Files
    - b. Shift Supervisor's Office
  2. Submitted, to the El Segundo Fire Department which is the local administering agency. Additional copies may upon request be submitted to other State and local agencies as required.

#### XIV. ADDITIONAL FACTS

- A. The control room at Units 3&4 are manned on a 24-hour basis. Units 1 & 2 control room is manned on an as needed basis. Any indications of hazardous materials leaks receive immediate attention and correction.
- B. The station is sufficiently illuminated at night to maintain the ability to detect hazardous materials releases.
- C. EL Segundo Power, LLC Order EL-A2, outlines fire protection contingency actions, responsibilities and procedures. Station personnel will refer to these directives for all matters involving fires and fire protection other than the legal notification requirements of this contingency plan.
- D. El Segundo Power, LLC Order DS 10, Station Order 116, and Station Procedure 7-1 outline emergency response plans and emergency evacuation plan information, responsibilities and procedures. Station personnel will refer to these directives for all matters involving emergency response plans and emergency evacuation procedures.

- E. Station emergency equipment for handling unplanned hazardous materials releases are listed in Attachment 2.
- F. The plant manager and staff are equipped with cell phones to provide for communication in emergencies.
- G. In the event of an earthquake, the shift supervisor will be responsible for inspecting the Retention Basin and Chemical Cleaning Basin. The liners will be inspected for damage, and the monitoring wells will be inspected to determine if there is leakage. The shift supervisor shall also assure that the ammonia transfer line, tank area, and vaporization skid areas are inspected for leaks.

Attachment No. 1

MAJOR EMERGENCY TELEPHONE LIST

FIRST RESPONSE

911

FIRE DEPARTMENTS

El Segundo Fire Department 911/(310) 322-4416  
Manhattan Beach Fire Department (310) 545-5679

POLICE DEPARTMENTS

El Segundo Police Department 911/(310) 322-2425  
Manhattan Beach Police Department (310) 545-4566

PRIMARY MEDICAL CARE

Concentra Medical Centers (310) 215-1600  
6033 W. Century Blvd., Suite 200  
Los Angeles, CA 90045

HOSPITALS

RFK Medical Center (310) 973-1711  
4500 West 116th St.  
Hawthorne, Ca. 90250

PARAMEDICS & AMBULANCES

El Segundo Fire Department Paramedics 911

EMERGENCY RESPONSE COORDINATORS:

Shift Supervisor:	Home Telephone Number	Cell
Business Telephone Number:		
Eugene Fitzhugh		
Wayne Forsyth		
Robert Rea		
Tracy Woolton		
Non- Operations		
Alex Sanchez	(310) 615-6351	(310) 529-3280
Steve Odabashian	(310) 615-6331	(310) 529-3281

EL SEGUNDO POWER MANAGEMENT STAFF

Audun Aaberg	(310) 615-6342	(310) 529-3257
Mark deCastro	(310) 615-6026	(310) 529-3258
Keith Goodner	(310) 615-6027	(310) 529-3261
Ahmad Sanati	(310) 615-6025	(310) 529-3260

**ATTACHMENT 2**  
**EMERGENCY EQUIPMENT**  
**EL SEGUNDO POWER, LLC**

1. Emergency fire fighting equipment:
  - Refer to Procedure A2 (Fire Protection)
2. On-site spill washing and control:
  - a. Station service water connections and fire hydrants located around the station.
  - b. Spill control material is stored in the Spill Containment Materials shack located at the northeast corner of the south parking lot.
  - c. Lined concrete dikes built around the makeup demineralizer sulfuric acid and caustic storage tanks to contain tank spills.
  - d. Double lined Sodium Hypochlorite storage tanks to contain tank spills.
3. First aid equipment:
  - Refer to Procedure A1 (Safety Program)
  - Refer to Procedure A12 (Emergency Treatment)
4. Communication Systems:
  - a. Edison PAX internal phone system. Station public address number 6526.
  - b. Normal outside telephone.
  - c. Two-way radios for use on and near the site.
  - d. Cell phones to contact staff off site.

**APPENDIX N  
OPERATIONS PLANS**

**APPENDIX N-4  
Emergency Preparedness and Emergency Response Plan**

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# EMERGENCY PREPAREDNESS AND EMERGENCY RESPONSE PLAN

## Hazwoper

### OSHA Employee Emergency Plan and Fire Prevention Plan

### Resource Conservation and Recovery Act Contingency Plan and Emergency Procedures

### EPA Risk Management Plan

Station Control Center:	(310) 615-6303
El Segundo Fire Department Fire Department:	911
Police and Ambulance:	911

El Segundo Power LLC  
301 Vista del Mar  
El Segundo, California, 90245  
(310) 615-6313

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## EMERGENCY PREPAREDNESS AND EMERGENCY RESPONSE PLAN

### INTRODUCTION

The purpose of this Station Procedure is to establish a course of action in the event of an emergency at El Segundo Generation, LLC. The standard for emergency response plans is derived from the Code of Federal Regulations HAZWOPER 29CFR 1910.120; 2) OSHA Employee Emergency Plan and Fire Prevention Plan 29CFR 1910.38; 3) the Resource Conservation and Recovery Act (RCRA) 40CFR 265.50; 4) and El Segundo Power, LLC operating procedures and standards that define the procedures to effectively respond to natural or man-made events in a manner that addresses the safety and protection of employees, the public, and the environment.

Emergency notification procedures are also stated in 1) CERCLA (Comprehensive Environmental Response, Compensation and Liability Act/Superfund) from 40CFR 302.6; and 2) SARA Title III/EPCRA (Emergency Planning and Community Right-to-Know Act) from 40CFR 355.40.

The term emergency involves acts of nature or man that can hinder the normal operation of this plant in a manner to cause concern for the safety and well-being of personnel and equipment. It encompasses, but is not limited to, the following emergency categories: 1) flood; 2) earthquake; 3) lightning; 4) fires; 5) explosions; 6) disruption of critical facilities, such as oil and gas supply; 7) enemy attack; 8) civil disturbance; 9) plane crash; 10) tidal wave and 11) hazardous material release. This plan also addresses procedures for personnel to seek medical assistance in non-major emergency situations.

The priority of this plan includes the following: 1) protection of life; 2) protection of the environment; 3) protection of property; 4) restoration of electric service; and the 5) restoration or safe shutdown of critical facility functions.

Emergency response actions beyond the capabilities of our Station personnel will be deferred to qualified outside agencies. Periodically, the Station's hazardous chemical storage facilities, this response plan, and the Station's fire protection system will be reviewed with the El Segundo Fire Department per regulatory requirements.

This Station Procedure will be separated in three parts; Part 1-Emergency Preparedness Guidelines; Part 2-Hazardous Material Emergency and Major Emergency Response and Part 3-Containment and Removal of Hazardous Wastes. The Hazardous Material Emergency response is designed to protect both employees and the environment.

## PART 1

### EMERGENCY PREPAREDNESS GUIDELINES

#### I. EMERGENCY PLANNING AND COORDINATION WITH OUTSIDE AGENCIES

- A. The El Segundo Fire Department (ESFD) has been contacted and understands they may be called to provide resources in an emergency situation.
- B. El Segundo Fire Department personnel will respond to any emergency hazardous chemical spill, leak or fire beyond the response capabilities of the Station operations and maintenance forces.
- C. The Fire Department will be contacted by the Shift Supervisor, Operations Manager, or Environmental Staff.

#### II. AREAS OF PREPAREDNESS

- A. First-aid supplies are maintained in First Aid kits throughout the Plant. Additional first aid supplies are located in the free stock area of the warehouse. The location of the Station emergency equipment is noted in Attachment #7.
- B. Emergency response equipment is located in both Units 1 & 2, and 3 & 4 Control Rooms. This includes backboard stretchers and other emergency equipment.
- C. A bomb threat procedure is located in Attachment No.4.
- D. A copy of this procedure will be kept in both Control Rooms and the Shift Supervisor's office,
- E. On an annual basis the phone list associated with the emergency plan will be updated.
- F. Annually, the Station will have each employee verify the accuracy of their emergency phone numbers.

#### III. EMERGENCY RESPONSE TRAINING

- A. All Station employees receive initial training and refresher training as required in the following topics:
  - 1) Hazard Communication
  - 2) HAZWOPER (Operations and Awareness level)
  - 3) Risk Management Plan
  - 4) Fire Prevention and Response
  - 5) Emergency Preparedness

- 6) First Aid Procedures
- 7) Respiratory Protection

- B. In addition to other topics, first aid training is conducted as required and specifically covers CPR, burns and shock treatment.
- C. Emergency response procedure training shall be conducted initially and on an as needed basis. This training should include various emergency scenarios to expose the work force to the possible responses necessary during a major emergency. Emergency procedures shall be a part of each new employee's orientation.
- D. All Operations personnel will receive initial and annual refresher training equivalent to HAZWOPER "First Responder Awareness Level."
- E. All Shift Supervisors will receive initial and annual refresher training equivalent to HAZWOPER "Operations". The Shift Supervisor will act as the emergency Response Coordinator (RC) until relieved by a qualified Incident Commander.

#### IV. EMERGENCY MEDICAL TREATMENT AND FIRST AID

- A. Emergency response equipment is located in both Units 1 & 2, and 3 & 4 Control Rooms.
- B. See Attachment No. 6 for a location of Station Emergency Equipment.

#### V. COMMUNICATIONS

- A. All emergency communications requesting outside agency assistance are initially routed through the Units 3 & 4 Control Room at 310 615-6303.
- B. The Control Room is the Incident Response Center, unless otherwise directed by the Shift Supervisor or Incident Commander.
- C. The Station's public address number is PAX 6-526.
- D. Security Officer has a cell phone.
- E. The Shift Supervisors have cell phones.
- F. The Station Emergency Warning System has a dedicated public address as well as an audible warning siren and strobe light system for notification to Station personnel of an emergency or a need to evacuate the plant and go to assigned assembly areas.
  - 1. Procedure "Operation of the Station Emergency Warning System" details this system.

#### VI. PREVENTION

- A. Operations personnel perform daily inspections of facilities and chemical transfer equipment.
  - 1. Minor leaks, spills, or deterioration are noted and reported.

2. Hazardous chemical storage tanks, drums, containers, and transfer lines are labeled and identified.
- B. See Attachment No. 5 for a copy of the RCRA & Daily Inspection sheet.
  - C. Prevention methods include spill reservoirs around bulk chemical tanks, and routine fire equipment inspections. Also shovels, sand, sand bags, and other absorbents are located in the spill prevention locker at the bottom of the roadway.

## VII. SITE SECURITY AND CONTROL

- A. The El Segundo Generating Station site is surrounded with perimeter fencing. Within the boundary of the perimeter fencing are the boilers, electrical switchyard, fuel oil tanks, and all Station buildings.
- B. The fence construction is chain link topped with barbed wire. The fence is eight feet high. The perimeter fencing is inspected daily by Station personnel. Any openings through or under the fence are reported to station management. Repairs are effected expeditiously.
- C. Entry to the Station is monitored by a security officer 16 hours a day, five days a week. During off hours entry is monitored by a video/card reader entry system. The on-duty Security Officer controls access to the plant site. The general public is not allowed entry to the plant. Visitors are escorted about the plant by qualified personnel.
- D. Warning signs are posted on the perimeter fencing at appropriate intervals. These signs carry the legend "No Trespassing - Private Property".
- E. The Station is sufficiently illuminated at night to maintain the ability to detect hazardous waste leaks or spills.
- F. The security procedures practiced at this facility are adequate to prevent entry by the public into the hazardous material facility areas.

## VIII. EMERGENCY PROCEDURES

- A. This section defines the responsibilities of all Station personnel and the appropriate course of action necessary in the event of a major emergency.
  1. As an emergency evolves, corresponding amounts of disorder and human emotion also develop to complicate the situation.
  2. An emergency can be too large in scope for Station personnel to handle alone and may require the combined efforts of all Station personnel and other outside organizations.
- B. Throughout any major event or emergency, the Station will utilize the following incident response system:
  1. The on-duty Shift Supervisor serves as the on-site response coordinator until relieved by a qualified Incident Commander.

2. The "Incident Response System" is a limited emergency management structure designed to minimize the impact of an incident until qualified emergency response personnel can gain control of the event.
3. Upon arrival at the Station, the Incident Commander will clearly notify Station personnel that he/she is the Incident Commander and is taking responsibility for direction of all personnel on-site. Beginning at that time, Station personnel will provide full assistance to the Incident Commander for the duration of the emergency.

#### IX. LINES OF AUTHORITY

A. During an emergency the lines of authority will be established as follows:

1. SHIFT SUPERVISOR
  - a. The on duty Shift Supervisor will function as the emergency "Response Coordinator" (RC).
2. FACILITY MANAGEMENT STAFF
  - a. Station Manager
  - b. Manager of Operations
  - c. Manager of Maintenance
  - d. Business Manager

#### X. PERSONNEL ROLES

A. **ALL STATION PERSONNEL SHALL TAKE NO ACTIONS WHICH CAUSE UNSAFE OR UNHEALTHY EXPOSURE TO THE HAZARD.**

B. **SHIFT SUPERVISORS:**

1. The on-duty Shift Supervisor The emergency Shift Supervisor is responsible for controlling, coordinating, and managing emergency response activities for the Station until a qualified Incident Commander arrives.
2. The Shift Supervisor will take initial control of the emergency. The Shift Supervisor will assess the need for outside assistance and, if required, direct personnel to arrange for required outside assistance such as fire agencies, local police and paramedics.
3. The Shift Supervisor takes action to limit the extent of damage, minimize hazards to personnel and the public, but only within the limits of the training provided to on-site personnel.
4. In addition, the Shift Supervisor obtains enough information to quickly assess the problem and as soon as practicable makes the proper notifications per regulatory requirements. The Shift Supervisor will also notify the Management Staff. If appropriate, the Shift Supervisor will direct announcements made over the Station Public Address and Emergency Warning systems.
5. If necessary the Shift Supervisor will authorize activation of the Plant Emergency Warning System notifying personnel to evacuate the plant. See Procedure "Activation of the Station Emergency Warning System"

C. STATION MANAGER:

1. As soon as time permits, the Shift Supervisor will call the Plant Manager or his designated representative to determine the best course of action. This may include an orderly plant shut down and evacuation provided that the situation merits this level of action.
2. The Management Staff will be composed of people who are knowledgeable in their particular fields and will provide support to the Incident Commander when he/she arrives on-site.

H. NON OPERATIONS PERSONNEL

1. In an emergency Mechanical and Technical personnel are to report to their respective shops and should remain there unless directed elsewhere by supervisors.
2. In an emergency Clerical personnel are to report to the Administration Building and should remain there unless directed elsewhere by supervisors.
3. In an emergency Storeroom personnel are to report to the Storeroom and should remain there unless directed elsewhere by supervisors.

XI. PLANT EVACUATION PLAN AND ASSEMBLY AREAS

- A. Activation of the Station Emergency Warning System requires all Station personnel to report to their assigned Assembly Areas. Use of the Station Emergency Warning System is described in Station Procedure 7-2.
- B. In the event of an emergency situation and it is necessary to evacuate the Plant, all personnel on site are to report to their assigned Assembly Areas.
  1. If personnel are unable to assemble in their assigned areas due to physical impossibility they will report to the closest assembly area.
  2. See Attachment No. 8 for Plant evacuation routes.
  3. Personnel assembling out of their assigned areas must at the earliest possibility report to their assigned assembly area. This is necessary for the Shift Supervisor to account for Station personnel.
- C. OPERATIONS PERSONNEL will report to their ASSIGNED CONTROL ROOM.
- D. STATION NON OPERATION, POWER GENERATION MAINTENANCE, OR OTHER PERSONNEL will report to the PARK AREA on the northwest corner of the plant.
- E. ALL CONTRACTOR PERSONNEL on site are expected to report to the PARK AREA on the northwest corner of the plant.
- F. SECURITY PERSONNEL are to remain at the MAIN GATE to assist with direction of emergency personnel and provide an accurate list of personnel on site. The Security Officer will report his status to the Incident Commander or to the Emergency Response Coordinator by phone.

G. ALTERNATE ASSEMBLY AREAS

1. Non Operations personnel in the Plant area who are unable to report to their assigned Assembly Area because of Plant conditions will use the Control Rooms as an Alternate Assembly Area.
  - a. At the earliest convenience these personnel are expected to report to their assigned Assembly Area.
  - b. This is necessary for the Incident Commander or Emergency Response Coordinator to account for Station personnel.
2. Operations personnel unable to report to their assigned Control Room shall assemble in the park area.
  - a. However, at the earliest possibility they are to report to their assigned Control Room for accounting purposes.
  - b. This is necessary for the Incident Commander or Emergency Response Coordinator to account for Station personnel.

## PART 2

### HAZARDOUS WASTE RELEASE OR MAJOR DISASTER EMERGENCY CONTINGENCY PLAN

#### I. PURPOSE

- A. Emergency Response regulations under Hazwoper defines the limits on response to hazardous chemical leak or spill.
- B. The purpose of this section is to specify how Station personnel at El Segundo Generating station will respond to any unplanned release of hazardous wastes to the air, soil or surface water.
- C. This response includes notifying the proper authorities of the release, controlling/cleaning up the release, and restoring the environment as required.

#### II. PLAN OUTLINE

- A. The following steps will be followed in the event of an imminent or confirmed release of hazardous waste:
  - 1. Discovery of the hazardous waste release source.
  - 2. Notification of the proper authorities. See Notification, this Part, Section XII.
  - 3. Containment and removal of the hazardous waste release ( including decontamination ).
  - 4. Restoration of the environment.
  - 5. Recording pertinent details of the incident.

#### III. RESPONSIBILITY

- A. The duty Shift Supervisor is responsible for implementing this plan.

#### IV. SOURCES OF HAZARDOUS WASTE

- A. Chemicals used at this station do not become hazardous wastes until they are no longer useful. Where at all possible materials will be reused, recycled, or reclaimed.
- B. This procedure is designed to be used with the "Oil and Hazardous Spill Contingency Plan, "Risk Management Plan", "Spill Prevention, "Control Use of the Station Emergency Warning System and "Hazardous Materials and Waste Management Plan."
  - 1. These plans detail sources and locations of hazardous materials found on site.
  - 2. These plans detail the emergency spill response plans and procedures for hazardous materials stored on site.
  - 3. These plans include"
    - a. Spills and leaks of oil (i.e., lubricating oils, hydraulic oils, etc).

- b. Spills or leaks from station bulk chemical storage tanks.
  - 1). Underground Ammonia Storage Tank
  - 2). Units 1 & 2 Sodium Hypochlorite Tank
  - 3). Units 3 & 4 Sodium Hypochlorite Tank
  - 4). Hydrogen
- c. Spills or leaks from station chemical barrels.
  - 1). Hydrazine
  - 2). Ammonium Hydroxide (Aqua ammonia)
- d. Cracks or holes in the linings of the Station retention basin.
- e. Cracks or holes in the walls of the Station sanitary waste treatment plants.
- f. Makeup demineralizer spent regenerant sump.
- g. Spills or leaks from Units 1 & 2 oil water separator.
- h. Spills or leaks from Units 3 & 4 oil water separator
- j. Spills or leaks from any containerized chemical found to be leaking whose empty container is normally disposed offsite in a Class 1 landfill area.
- j. Spills or leaks from the Hazardous Waste Management Area.

#### V. PERSONAL PROTECTIVE EQUIPMENT AND EMERGENCY EQUIPMENT

A. Personal protective equipment is located in the tool room and the warehouse.

- 1. This includes:
  - a. Impervious gloves
  - b. Rubber boots
  - c. Acid suits
  - d. Respirators and cartridges
  - e. Face shields
  - f. Goggles
  - g. Disposable coveralls
- 2. Attachment No. 7 has a complete detail of Station emergency equipment location.

B. Personnel performing emergency response clean up operations shall wear personal protective equipment that adequately addresses the hazards.

#### VI. LEVELS OF RESPONSE

##### A. NON-EMERGENCY RESPONSE

- 1. Involves a hazardous chemical leak or spill where there is no immediate or urgent need to take actions to stop the leak or spill.
- 2. This indicates there is no immediate hazard to the health or safety of employees, the environment, or equipment.

##### B. EMERGENCY RESPONSE USING IN-HOUSE CAPABILITIES

- 1. Involves an incidental release of a hazardous material from a leak or spill where there is an immediate or urgent need to take actions to stop the leak or spill.
- 2. Involves an incidental release of a hazardous material from a leak or spill where operations personnel can control the problem by defensive methods from safe distances.

C. EMERGENCY RESPONSE USING OUTSIDE AGENCY CAPABILITIES

1. Involves an emergency response to hazardous material leak or spill where there is an immediate or urgent need to take aggressive action requiring a close and potentially unsafe approach to the substance in order to affect control or stoppage of the leak or spill.
2. Station personnel would not perform these responses.

VII. LEVELS OF EMERGENCY ACTIONS

A. OPERATIONS PERSONNEL

1. Operations personnel in the immediate work area will perform the initial response to reports or discoveries of hazardous chemical leaks, spills, fires or other hazardous conditions.
2. Operations personnel are trained to the Hazwoper First Awareness Level.
3. Operations personnel will assess the situation from a safe distance and notify the Shift Supervisor only.

B. NON OPERATIONS PERSONNEL

1. Non Operations personnel are not trained to handle this type of emergency.
2. Non Operations personnel shall report the incident to the best of their ability, immediately and as accurately as possible, to the Shift Supervisor. **THEY SHALL IN NO WAY PARTICIPATE IN THE CONTROL OR MITIGATION OF THE SITUATION OTHER THAN TO ASSIST WITH SECURING THE AREA UNTIL HELP ARRIVES.**

VIII. EMERGENCY RECOGNITION

- A. All releases, fires, explosions, plane crashes, earthquakes, and tsunamis are emergency situations.
- B. Leaks or spills of hazardous materials which pose an immediate health or safety hazard to personnel or are beyond the response capabilities of the workers in the immediate area are to be considered an emergency situation.
- C. Only the duty Shift Supervisor can downgrade a situation headed towards normalcy. If an Incident Commander arrives on-site to manage an emergency, only the Incident Commander can downgrade the situation.
- D. All emergency situations are to be immediately communicated to the Units 3 & 4 Control Room and to the duty Shift Supervisor for appropriate hazard assessment and action.

IX. DISCOVERY

- A. Station personnel monitor potential sources of hazardous waste at a minimum of a least once every twelve hours. As such they are apt to locate potential problems and/or discover actual problems.
- B. The monitoring program is accomplished by the "RCRA & Daily Inspection" which is filled out twice per day.

- C. Operations performs equipment inspection rounds during each shift.
- D. Operations monitors every bulk chemical delivery to Station storage tanks.
- E. See Attachment No. 6 for the RCRA & Daily Inspection Sheet.

X. EMERGENCY ALERTING AND RESPONSE PROCEDURES

- A. The Control Room at Units 3 & 4 is manned on a 24 hour basis. Any indication of hazardous waste leaks or spills receive immediate attention and corrective action.
- B. The duty Shift Supervisor shall be immediately notified upon discovery of an imminent or actual emergency that is likely to require an emergency response.
- C. The duty Shift Supervisor is responsible for notifying Station personnel, outside response agencies, and Station management.
- D. These procedures should be followed in the event of a suspected or actual emergency :
  - 1. The First Responder notifies the Units 3 & 4 Control Room Operator.
  - 2. The First Responder evacuates and secures the area.
  - 3. Control Room notifies the duty Shift Supervisor.
  - 4. The duty Shift Supervisor assesses the nature and extent of the emergency.
  - 5. Appropriate level of response initiated. (See Section VI of this part)
    - a. Non-emergency
    - b. Emergency, need in-house response capability
    - c. Emergency, need outside response capability
  - 6. Decontamination
  - 7. Response critiques and follow-up.

XI. SAFE DISTANCES AND REFUGE

- A. Pre-determining safe distances for a hazardous chemical emergency is often difficult since it depends on quantities released, nature of the material, wind direction, and other unpredictable factors.
- B. Safe areas and refuges would typically be those areas upwind, upgrade, and away from the source of the hazard.
  - 1. This is offered only as a guideline since a bulk chemical delivery truck failure may contaminate an otherwise safe area.
  - 2. Actual safe distances and areas of refuge may be determined by the duty Shift Supervisor or Incident Commander based on the nature and extent of the emergency.

## XII. NOTIFICATION

### A. WHO

1. Upon discovery of an imminent or actual hazardous waste release the duty Shift Supervisor will be notified immediately.
2. The Shift Supervisor assumes control of the emergency response.
3. The Shift Supervisor is responsible for notifying Station personnel and management of the emergency.
  - a. The Shift Supervisor is responsible for coordination and implementation of the contingency plan until relieved by an Incident Commander or until termination of the incident.
4. The Shift Supervisor will also make the necessary notifications to the proper regulatory agencies.
5. Attachment 1 of this procedure contains the emergency call out list. The following are to be notified:
  - a. Plant Manager
  - b. The Environmental Supervisor will make notifications to all regulatory agencies. If unable to reach the Environmental Supervisor the Shift Supervisor will make the following notifications:
    - 1). ANY SIGNICANT HAZARDOUS WASTE RELEASE
      - a) El Segundo City Fire Department
      - b) California Office of Emergency Services
      - c) National Response Center
    - 2). ANY HAZARDOUS WASTE SPILL TO NAVIGABLE WATERS
      - a) Regional Response Center-Duty Officer United States Coast Guard Long Beach, California
  - c. In addition to the above notifications the Station shall also notify the following:
    - 1) NRG Regional Environmental Manager
    - 2) Chevron U.S.A. refinery Environmental coordinator.
6. In all notifications, a reasonable estimate of the quantity of spillage shall be reported.
  - a. For major spills, a reasonable estimate of the quantity of spillage shall be reported.
  - b. For hazardous substances spills, report approximate gallons in the case of liquids and pounds in the case of solids.

### B. WHEN

1. The regulation requires notification of any hazardous materials or hazardous wastes release which occurs in any period less than 24 hours and which exceeds the "reportable quantity", or RQ. See Attachment 2 for reportable quantities.
  - a. For many hazardous materials and hazardous wastes, the RQ is one pound. Since a pint of water is about one pound, spilling as little as a pint requires notification.
  - b. Any releases **which could threaten human health, or the environment, outside the facility** are to be reported.
  - c. The timing on reports is given "**as soon as there is knowledge of any release.**"
    - 1). The priority is on timeliness.
    - 2). However, a balance must be struck between acting to report and

acting to contain and prevent damage. Reporting within the first hour has generally been acceptable with respect to reporting.

- a). Name and telephone of the reporter.
  - b). Name and address of facility.
  - c). Time and type of incident (e.g., release, fire).
  - d). Name and quantity of material(s) involved, to the extent known.
  - e). The extent of injuries, if any.
  - f). The possible hazards to the human health, or the environment, outside the facility.
2. The reporting requirements for **extremely hazardous** chemicals (**hydrazine**) are more stringent.
- a. Any releases **which could threaten human health, or the environment, outside the facility** are to be reported when they occur.
  - b. The timing of the report is a critical issue.
  - c. Emergency notification is to be made immediately.
  - d. The report (and any emergency response) can not be delayed in order to provide the complete information.
    - 1). The priority is clearly on the timeliness of the initial report rather than the completeness or level of detail.
  - e. The person making the reports should make the report first to the agency with the most immediate responsibility, generally the nearest or most local level. This means calling 911.
  - f. The State Office of Emergency Services must be notified as well. The report must include:
    - 1). The chemical name or identity of any substance involved in the release.
    - 2). An estimated quantity of the chemical released.
    - 3). The time and duration of the release.
    - 4). The media into which the release occurred.
    - 5). The extent or dispersion of the release, and any environmental feature of concern ( e.g., body of water) which is threatened or which has been contaminated as a result of the release.
    - 6). Actions taken to respond to and contain the release, and the effect of those actions.
    - 7). Whether assistance from the National Response Team or other environmental agency may be advisable.
    - 8). The names and telephone numbers of the person or persons to contact for further information on the release or related matters.
3. Within 10 days following an incident that required notification and implementation of the hazardous material/waste release portion of this contingency plan, the Station shall submit a written report on the incident to the organization who received the verbal notification.

### PART 3

## CONTAINMENT AND REMOVAL OF HAZARDOUS WASTES

- I. ALL STATION PERSONNEL SHALL TAKE NO ACTIONS WHICH CAUSE UNSAFE OR UNHEALTHY EXPOSURE TO THE HAZARD. ALL SPILLS SHALL BE HANDLED USING THE APPROPRIATE PERSONNEL PROTECTIVE EQUIPMENT AND FOLLOWING THE PROSCRIBED PROCEDURES.
- II. SPILLS OR LEAKS
  - A. Petroleum products - Lubricating oils, hydraulic oils, etc. Station personnel will refer to procedure 6 for proper disposal of oils from Station oil systems.
  - B. Hazardous Materials
    1. Ammonia, Hypochlorite, Spills or leaks from the bearing cooling water system, and leaking containerized chemicals, etc. Station personnel will refer to the procedure for proper handling and disposal of Station hazardous wastes spills.
    2. Cracks or holes in the walls of the station sanitary waste treatment plant. Station personnel will refer to Procedure for proper handling and disposal of Station hazardous wastes spills.
- III. RESTORATION OF THE ENVIRONMENT
  - A. When any hazardous release results in ground contamination, the contaminated ground will be treated, as required, to render the contaminant harmless or the contaminated ground will be dug up and the ground removed offsite to an approved landfill disposal area (Class 1 dump).
  - B. The resulting hole will be filled in with uncontaminated soil.
- IV. CONTINGENCY PLAN DISTRIBUTION
  - A. A copy of this contingency plan must be:
    1. Maintained at the Station;
    2. Submitted to the local fire department and emergency response teams which may be called upon to provide emergency services.

El Segundo Power, LLC  
By: NRG El Segundo Operations Inc.,  
It's Authorized Agent

By:   
Audun Aaberg  
Regional Manager

Attachment No. 1

MAJOR EMERGENCY TELEPHONE LIST

FIRST RESPONSE

911

FIRE DEPARTMENTS

El Segundo Fire Department 911/(310) 322-4416  
Manhattan Beach Fire Department (310) 545-5679

POLICE DEPARTMENTS

El Segundo Police Department 911/(310) 322-2425  
Manhattan Beach Police Department (310) 545-4566

PRIMARY MEDICAL CARE

Concentra Medical Centers (310) 215-1600  
6033 W. Century Blvd., Suite 200  
Los Angeles, CA 90045

HOSPITALS

RFK Medical Center (310) 973-1711  
4500 West 116th St.  
Hawthorne, Ca. 90250

PARAMEDICS & AMBULANCES

El Segundo Fire Department Paramedics 911

EMERGENCY RESPONSE COORDINATORS:

Shift Supervisor:	Home Telephone Number	Cell
Business Telephone Number:	(310) 615-6313	
Eugene Fitzhugh		
Wayne Forsyth	(909) 205-1342	
Robert Rea	(626) 446-8037	
Tracy Woolton		
Non- Operations		
Alex Sanchez	(310) 615-6351	(310) 529-3280
Steve Odabashian	(310) 615-6331	

EL SEGUNDO POWER MANAGEMENT STAFF

Audun Aaberg	(310) 615-6342	(310) 529-3257
Mark deCastro	(310) 615-6026	(310) 529-3258
Keith Goodner	(310) 615-6027	(310) 529-3261
Ahmad Sanati	(310) 615-6025	(310) 529-3260

CONTACTS FOR ANY SIGNIFICANT RELEASE

National Response Center (800) 424-8802  
California Office of Emergency Services (800) 852-7550

ANY HAZARDOUS WASTE SPILL TO NAVIGABLE WATERS

Regional Response Center-Duty Officer  
United States Coast Guard (562) 980-4450  
Long Beach, California (562) 980-4444

LOCAL ADMINISTERING AGENCY

El Segundo City Fire Department 911 OR  
(310) 322-4412

KEY MISCELLANEOUS

California Regional Water Quality Control Board (213) 576-6600  
California Department of Fish and Game (310) 590-5132  
California Highway Patrol (213) 620-4700  
LA County Lifeguard (310) 939-7200

VACUUM TRUCK/HAZARDOUS WASTE CLEAN-UP & DISPOSAL CONTRACTORS

Ancon Environmental (310) 548-8300  
IT Group (800) 334-0004

SUPPLIES & EQUIPMENT

Lab Safety Supply Company (800) 356 - 0783

FUEL GAS

Southern California Gas. Co. (800) 427-2000  
Chevron (310) 615-5000

Attachment 2

REPORTABLE QUANTITIES OF HAZARDOUS SUBSTANCES

(partial listing only including substances found in steam generation plants)

Material	Reportable Quantity (pounds)
Ammonium Hydroxide	1,000
Asbestos	1
Hydrazine	1
Petroleum Distillates-See NOTE 2 below	****
Sodium Hypochlorite	1,000

NOTE 1: Reportable quantities are expressed in pounds of the pure substance (100% basis). Spills of diluted chemicals must be corrected to the 100% basis. Assistance in making calculations may be obtained from Division Chemical staff.

NOTE 2: Any amount of oil that causes a sheen on navigable water, or any amount of oil that leaves station property is a reportable amount. Oil spilled on station property that is contained, not a threat to human health, or environment does not need to be reported. Normal clean up activities should take place.

Attachment 3

MEDIA INTERFACE GUIDELINES

1. Since the interface with the news media is always a sensitive area, it will be handled by a qualified El Segundo Power, LLC spokesperson, i.e. either the Plant Manager, Operations Manager or his/her representative. Employees are to be instructed not to make statements or to answer questions from media personnel. Any questions directed to them, on or off the job, are to be referred to the designated spokesperson. Until this qualified spokesperson arrives and has been briefed on the situation, the senior on-site supervisor will be responsible for maintaining the media interface.
2. No persons other than emergency agency and El Segundo Power, LLC personnel will be allowed on-site until adequate security and plant reliability has been established, as determined by the senior management representative on the premises. It will be extremely important to keep the plant entrance clear for emergency vehicles. The Security Officer will direct all unauthorized vehicles to park elsewhere.

Attachment 4

BOMB THREAT PROCEDURE

Any Station employee receiving a bomb threat is to remain calm and attempt to:

1. Encourage conversation with the caller.
2. Listen for voice identifying characteristics (sex, accent, and background noises).
3. Attempt to find out from the caller answers like-- where, what, why, how, who or what organization is involved?
4. Attempt to find answers to the following:
  - a. When is the bomb going to explode?
  - b. Where is the bomb right now?
  - c. What kind of bomb is it?
  - d. What is the description of the bomb (size, shape, container, color)?
  - e. What will cause the bomb to explode?
  - f. What was the motive for placing the bomb?
5. After concluding the call, the employee shall immediately report the call to Shift Supervisor and to no one else because:
  - a. Time is of the essence; and
  - b. The psychological effect upon other employees; and
  - c. To avoid the possibility of panic.
6. The Shift Supervisor shall immediately notify:
  - a. Police (call 911)
  - b. Plant Manager or his designated representative
  - c. Guard to restrict access to the plant, alert for emergency vehicle access.
7. Evacuation of employees from threatened areas:
  - a. Employee access shall be prohibited to threatened areas.
  - b. If need be the area, and all areas adjacent to the area should be evacuated.
  - c. If necessary the plant should be evacuated of all personnel.

Attachment 5  
 RCRA & DAILY INSPECTION REPORT

STATION \_\_\_\_\_ DATE \_\_\_\_\_ INSPECTOR - DAY \_\_\_\_\_  
 INSPECTOR - NIGHT \_\_\_\_\_

EQUIPMENT	RESULTS	
	DAYSHIFT	NIGHTSHIFT
SMUD SUMPS		
RECLAIM WATER BRINE TANK		
SPILL CONTROL AREA (INVENTORY)		
HAZARDOUS WASTE STORAGE AREA		
HAZARDOUS WASTE CONTAINERS		
PRIMARY FUEL OIL AREA		
SOUTH RETENTION BASIN LEAK DETECTOR		
SOUTH RETENTION BASIN LINER		
SOUTH RETENTION BASIN F/B		
NORTH RETENTION BASIN LINER		
NORTH RETENTION BASIN F/B		
RETENTION BASIN OIL SKIMMER		
FUEL OIL TANK AREA DRAIN EASEMENT		
UREA TANKS - AREA		
OILY WASTE SUMP 3P		
AMMONIA STORAGE AREA		
CHECK AMMONIA LEAK DETECTOR @ TANK		
CHECK UNDERGROUND AMMONIA DETECTOR		
CHECK AMMONIA TRANSFER LINE		
CHECK INJECTION SKID		
SECONDARY FUEL OIL AREA 3/4		
HYPOCHLORITE TANK 3P		
BCW TANKS - PUMPS - HEAT EXCHANGERS		
CONTAINERIZED CHEMICAL STORAGE AREAS		
OILY WASTE SUMP 1P		
SECONDARY FUEL OIL AREA 1P		
HYPOCHLORITE TANK 1P		
LUBE OIL STORAGE TANKS		
TURBINE LUBE OIL RESERVOIRS 1-4		
TURBINE BOWSER FILTERS 1-4		
CHEVRON RECOVERY WELLS		
SEWAGE TREATMENT PLANT 1P		
SEWAGE TREATMENT PLANT 3P		
BARREL BUNG TOP- KEEP AT 15, ORDER AT 8		
BARREL OPEN TOP- KEEP AT 20, ORDER AT 15		
PLANT STORM DRAINS		
COMMENTS:		

- \* PROVIDE COMMENTS FOR ABNORMAL CONDITIONS: N = NORMAL - A= ABNORMAL
- \* INCLUDE RETENTION BASIN FREEBOARD FIGURE IN FEET / INCHES
- \* INFORM SHIFT SUPERVISOR OF ALL ABNORMAL CONDITIONS
- \* FORWARD FORM TO THE ENVIRONMENTAL OFFICE.

Attachment 6  
EMERGENCY EQUIPMENT LOCATION

Units 1 & 2 Control Room :

Burn Pak (1)  
Mini Burn Pak (1)  
Water Gel med (2) lg (1)  
Backboards (3)

Units 3 & 4 Control Room :

Burn Pak (1)  
Mini Burn Pak (1)  
Water Gel med (2) lg (1)  
Backboards (3)

First Aid Kit Locations:

1 & 2 Control Room-#24	Security Truck vehicle #6810-#16
3 & 4 Control Room-#24	1 & 2 Gantry Crane-#16
Maintenance Shop-#24	3 & 4 Gantry Crane-#16
Storeroom-#24	Operation Truck vehicle #7007-#16
Administration Bldg-#24	Maintenance Truck vehicle # 5902-#16
Security Office-#24	GMC Carryall vehicle #7094-#16
1 & 2 Chemical Lab-#16	Ford Wagon vehicle #1213-#16
3 & 4 Chemical Lab-#16	Mobile Crane-#16
Foreman's Office 1-#16	
Foreman's Office 2-#1	

Additional first aid supplies are located in the First Aid storage supply locker in the Free stock area of the Storeroom

Safety Shower Location:

3 & 4 Chem area	1 & 2 Chem area
3 P Hypochlorite area	1P Hypochlorite area
1 & 2 Chem Lab	3 & 4 Chem Lab
1 & 2 Hypochlorite Day Tank	1 & 2 Chem Barrel Storage Area
3 & 4 Chem Barrel Storage Area	3P Battery Room
1P Battery Room	1P Burner Cleaning Shack
Unit 3 Burner Cleaning Shack	Unit 4 Burner Cleaning Shack
OP Chem Storage Area	Ammonia Underground Storage Tank
Smud Bldg east end	Unit 4 Ammonia Vaporization skid

Attachment 7

EMERGENCY ACTION CHECKLIST

**Duty Shift Supervisor – Emergency Response Coordinator**  
Action to Consider

The Emergency Response System will be utilized in all major emergencies. The Shift Supervisor is the Emergency Response Coordinator. The function of the Emergency Response Coordinator is to protect the employees, public and environmental, without going beyond the limits of employee training. The primary function of the Emergency Response Coordinator will be to isolate the affected area to prevent additional hazards or injuries, assess the magnitude of the emergency, and report it promptly and accurately to the appropriate agencies for assistance. The Emergency Response Coordinator shall maintain control over the situation by providing guidance to all personnel on-site until he/she is relieved by a qualified Incident Commander. At that time, the Emergency Response Coordinator will provide full assistance to the Incident Commander in the resolution of the emergency.

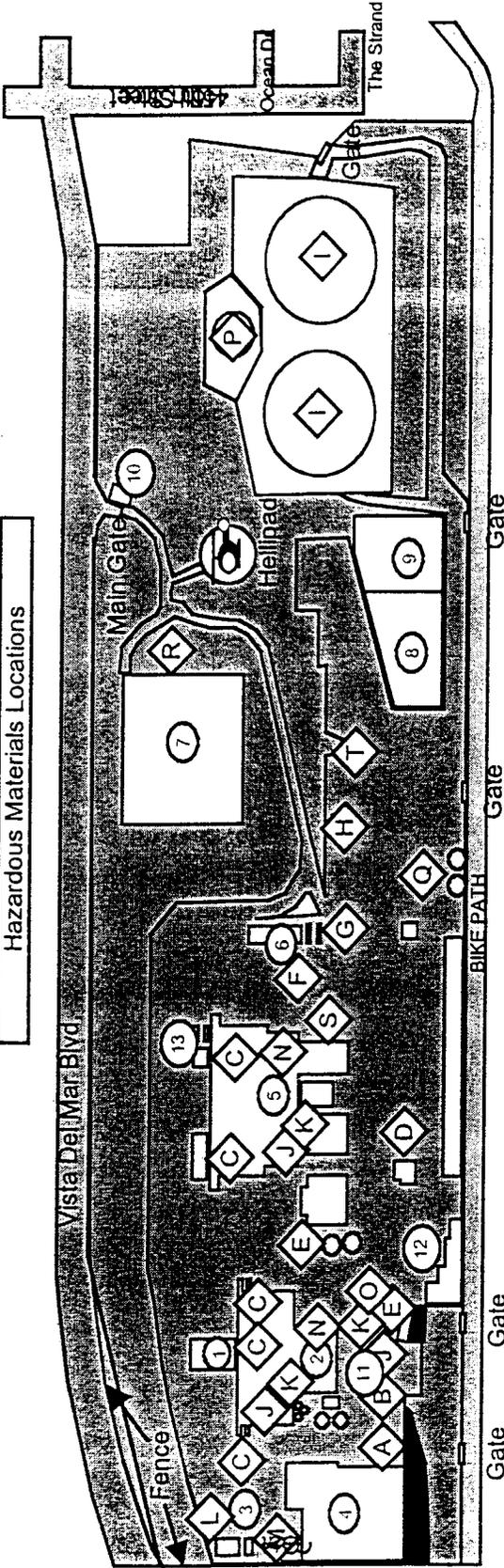
The Emergency Area will be isolated, staging and decontamination will be established as needed.

1. Assemble injured at a central location for ambulance and helicopter pick-up.
2. Have first aid supplies and equipment delivered to the area where injured are assembled.
3. Account for all personnel.
4. Determine if hazardous materials are involved and if they can be safely handled.
5. Organize a qualified team to contain the situation. use outside agencies as needed.
6. Assess damage for reporting purposes.
7. Call out additional personnel as required.
8. Establish a command center.
9. Secure plant perimeter. Establish "hot, warm and cold zones".
10. Inform key management of situation.
11. Communicate to plant personnel status of situation.

# EL SEGUNDO POWER, LLC

## EL SEGUNDO GENERATING STATION

Hazardous Materials Locations



### ○ BUILDINGS / STRUCTURES

- 1 Administration Building
- 2 Units 1 & 2
- 3 Paint Shop
- 4 Warehouse & Maintenance Shop
- 5 Units 3 & 4
- 6 Demineralizer Building (Retired)
- 7 Switchyard (Retained by Edison)
- 8 Waste Water Retention Basin
- 9 Acid Retention Basin (Retired)
- 10 Security Guard Station
- 11 Chemical Storage Room
- 12 Technical Shop
- 13 Crane Garage

### ◇ MATERIALS STORAGE

- A Compressed Gas Bottles
- B Diesel Fuel
- C Lubricating Tanks
- D Hydrogen Storage
- E Sodium Hypochlorite
- F Sulfuric Acid
- G Sodium Hydroxide
- H Hazardous Waste Storage Area
- I Fuel Oil (Retained by Edison)
- J Hydrazine
- K Ammonium Hydroxide
- L Paints and Paint Thinner
- M Solvent Degreaser

- N Lubricating Oil Drums
- O Betz Powerline (Sodium Nitrite)
- P Cutter Stock
- Q Urea Storage Tanks
- R Aqueous Ammonia Storage Tank
- S Aqueous Ammonia Injection Skip
- T Fuel Gas

<b>EL SEGUNDO POWER, LLC</b>	
Hazardous Materials Locations	
Not to Scale	Date: 6/16/99
AS/TMP	



**APPENDIX N  
OPERATIONS PLANS**

**APPENDIX N-5  
NRG Safety Program**

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# **The NRG SAFETY PROGRAM**

1. Goal.....is to *facilitate an injury free work place*

2. Objectives are..... to take *specific action to .....*

...REDUCE ACCIDENT/INJURY DUE TO *EMPLOYEE ACTION*

...REDUCE ACCIDENT/INJURY DUE TO *FACILITY CONDITION*

...DEFINE AND EFFECTIVELY ADDRESS *KEY SAFETY ISSUES*

...ACHIEVE AND MAINTAIN COMPLIANCE WITH THE *SPIRIT AND INTENT OF REGULATORY AGENCY SAFETY REQUIREMENTS*

...EFFECTIVELY PROVIDE THE NECESSARY & REQUIRED *SAFETY TRAINING FOR EMPLOYEES AND MANAGEMENT*

...ESTABLISH AND EFFECT THE MEANS AND METHODS TO *IMPLEMENT THE SAFETY PROGRAM AND MAINTAIN CONTINUED SAFETY PROGRAM SUCCESS*



# **NRG SAFETY PROGRAM ELEMENTS**

- I. SAFETY REFERENCE LIBRARY
- II. ACCIDENT INVESTIGATION AND REPORTING
- III. EMPLOYEE ACTION ACCIDENT REDUCTION
- IV. FACILITY CONDITION ACCIDENT REDUCTION
- V. KEY SAFETY ISSUES
- VI. SAFETY MEETINGS
- VII. SAFETY TRAINING
- VIII. SAFETY PROGRAM MANAGEMENT AND MAINTENANCE

# **NRG SAFETY PROGRAM ELEMENTS & DESCRIPTION**

## **ELEMENT 1 - Safety Reference Library**

Federal OSHA General Industry, Federal OSHA Construction, State OSHA standards and their sources (primarily ANSI, ASTM, NFPA, and related government pubs). Also include applicable National Safety Council (NSC), American Society of Safety Engineers (ASSE), American Congress of Governmental Industrial Hygienist (ACGIH), National Institute of Occupational Safety and Health (NIOSH), Bureau of National Affairs occupational Safety & Health Reporter, and misc. other safety organizations. The effort includes a directive defining who is responsible, where the references are located, how they are cataloged, how they are maintained, and how to use them. Training materials should be a section of the Safety Reference Library.

## **ELEMENT 2 - Accident Investigation & Reporting**

All accidents/near misses to be reported & investigated. A single form to be completed by supervisor discussing incident/accident with employee, the accident/incident discussed with all facility personnel at the earliest opportunity, the draft form forwarded to a competent person for smoothing, recording, recordkeeping, and reporting. All investigations to be reviewed by upper levels of management. Supervisor and involved employee to discuss the incident with various upper management levels dependent upon severity. Copy of accident investigation to be filed in employee & supervisor personnel records. Accident investigation to be included in safety performance review of employee, supervisor, management. Competent person to chart accidents by person, supervisor, cause, location, type of injury / maintain incident rates. Accidents to be discussed as required part of safety meeting agenda.

## **ELEMENT 3 - Employee Action Accident Reduction Activities**

Before shift stretching and flexibility exercises, formal safety observation by supervisors, Job Safety Analysis by employees, risk assessments by competent persons, Personal Safety Objectives as needs are indicated, improved control of the work process by planning & implementing maintenance programs including Job Instruction Sheets concept, safety awareness videos at shift start, and may include critical behaviors inventories. Activities incorporated in effective tailgate conference concepts.

## **ELEMENT 4 - Facility Condition Accident Reduction Activities**

Accident analysis, implementing safety action item system/addressing safety action items, and facility inspections/audit/survey (self inspection and external inspection with emphasis on self inspection).

## **ELEMENT 5 - Key Safety Issues**

Policy, training, and necessary actions involving; New Employee Orientation, Management/Supervisor/Employee general safety training (incl. safety program concepts), Emergency Action Plans (Fire, Medical Emergency, Natural Disaster, Hazardous Substance), Lockout /Tagout Tags, Confined Spaces, Respiratory Protection, Hazardous Substances, Hearing Conservation, Housekeeping, Fire Fighting, Fire protection, Personal Protective Equipment, and motivation in safety.

## **ELEMENT 6 - Safety Meetings**

Scheduled Safety meetings with agenda that includes; discussion of previous accidents, discussion of employee JSA 's, providing scheduled safety training, discussion of status submitted safety action items, hearing & resolving of new safety concerns, and distribution of at-home safety handout.

## **ELEMENT 7 - Safety Training**

Schedule, & provide (in regular safety meetings, and formal training sessions) the following safety training; General management/supervisor safety training (safety program concepts), strain prevention, hot/cold environments, hand tool safety, 1st aid/CPR, fire protection, fire fighting, respiratory protection, personal protective equipment, equipment control/safety tags, hearing conservation, material handling, compressed gas handling, power tool safety, electrical safety, housekeeping, confined spaces, Hazardous substances, ladders/lifts/scaffolds, safety references/codes, heavy equipment safety, pressure vessels/air receivers, shop equipment safety, safety observation (JSA, risk assessment, personal safety objectives etc.), emergency action plans, welding/cutting safety, accident investigation, safe driving, general steam plant safety, machine guarding.

## **ELEMENT 8 - Safety Program Management & Maintenance**

Quantifiable, pro-active safety performance evaluations for employees, supervisors, management, and the facility. Supervisor evaluations based entirely on good supervisor safety practices and safety program responsibilities, next level management based primarily on supervisor performance, other levels of management depend on management structure. Develop, implement, maintain necessary recordkeeping for all safety program activities. Develop, implement and adhere to minimum safety qualification standards at all levels of management.

