

**Sacramento
Cogeneration
Authority**

P.O. Box 15830, Sacramento, CA 95852-1830

**DOCKET
93-AFC-2**

DATE: MAR 14 1994

REC'D MAR 14 1994

Procter & Gamble Cogeneration Project

SCA 94-018

March 14, 1994

Mr. B.B. Blevins
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814
Attn: Dockets Unit

**RESPONSES TO HAZ MAT-5 AND EFFICIENCY-2 DATA REQUESTS FOR THE
PROCTER AND GAMBLE COGENERATION PROJECT (DOCKET NO. 93-AFC-02).**

Dear Mr. Blevins:

Please find enclosed 12 copies of the responses to the Haz Mat-5 and Efficiency-2 requests from the second set of data requests for the Procter and Gamble Cogeneration Project. If you have any questions regarding the responses, please telephone me at (916-732-6540).

Sincerely,

Diana Parker
Environmental Specialist

Enclosure

cc: Ron Simms, Walsh
Rich Chapman, Black & Veatch

**PROCTER & GAMBLE COGENERATION PROJECT
SACRAMENTO COGENERATION AUTHORITY**

**RESPONSES TO CEC DATA REQUESTS
(Set 2, dated February, 16, 1994)**

HAZ MAT-5

The following information is needed to assess the impacts of accidental release of ammonia during loading operations. The responses to data request HAZ MAT-2 and HAZ MAT-3 described a spill containment area consisting of a bermed apron and drain leading to a neutralization system. Staff cannot verify that the drains and/or the neutralization system are sufficient to contain a worst case release. The requested information is needed to evaluate the potential impacts of an accidental release of ammonia on the public.

Please provide the following information on and preliminary design drawings of the chemical drains and neutralization system. This should include a description of:

- a. the size and capacity of the drains and their ability to handle a worst case spill.
- b. the neutralization system such as location, transport mechanism of spilled material through the system, capacity, speed of treatment, possibility and prevention of overflow.
- c. containment of spilled material if the drains clog or the neutralization system backs up.

SCA RESPONSE:

Aqueous ammonia will be stored in a pressurized steel tank, located outdoors, west of the combustion turbine. The tank will be refilled from a delivery truck. An unloading station will be provided adjacent to the tank. The unloading station will be equipped with a safety shower. The delivery driver will fill the tank under the direction of plant operations personnel. Vapors from the storage tank will be vented back to the delivery tank during the filling process and will not be released to the atmosphere.

The ammonia storage facility will consist of a truck unloading station and a tank containment area. The ammonia unloading station will be curbed and will be provided with curb inlets which will route spills in the unloading area to the tank containment area. (See attached drawing of ammonia storage facility.)

The containment area will be a concrete pit and will be approximately 30 ft long by 15 ft wide and 4 ft deep. The containment wall will extend 12 inches above grade. The containment area will not contain floor drains.

The ammonia storage tank will be a horizontal 10,000 gallon tank which will allow storage of 1.5 times the volume of a delivery truck. The size of the containment area will allow for capture of 100 percent of the storage tank contents or 100 percent of the contents of a truck. The volume of the storage tank would be a worst case spill (up to 10,000 gallons).

A sump pump will be installed in the containment area to pump collected rain water to the neutralization tank. Control of the sump pump will be completely manual.

The containment area will contain a floating vapor suppression system. The vapor suppression system will limit the exposed surface area of the liquid ammonia, thereby limiting the vaporization of any spilled ammonia. The specific type of vapor suppression system will be determined during detailed design.

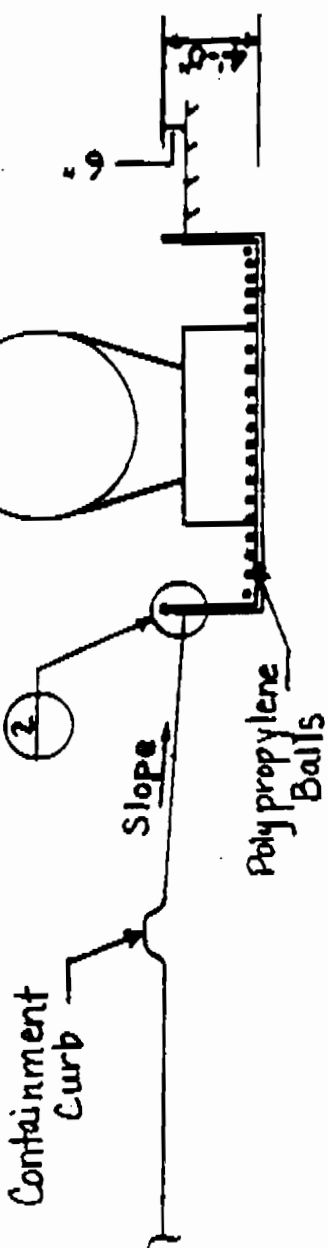
A sump will be installed in the ammonia storage containment basin to collect rain water. Plant operations personnel will visually inspect the containment area and will perform a pit analysis on the collected water to test for ammonia residual after a rainfall and prior to pumping the rain water to the neutralization tank. If ammonia is not detected, the collected rainwater may be discharged to the surface rainfall runoff discharge.

However, if ammonia is detected, the collected rainwater will be treated in place or will be routed to the neutralization tank for treatment prior to discharge. The neutralization tank will be located west of the Water Treatment Building as shown on the site arrangement (figure 3.3-1 of the AFC). The tank will be approximately 26 ft in diameter with a capacity of 97,000 gallons.

In the unlikely event of a spill, the aqueous ammonia will be contained within the containment area until such time as the contained liquid is recovered or removed from the site by authorized personnel in accordance with the plant's specific emergency response plan. This plan will be developed prior to plant operation.

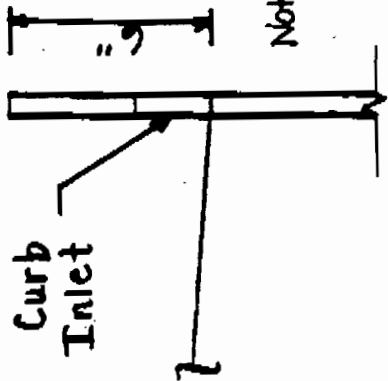
There will be no gravity drains from the ammonia storage containment area. Therefore, containment of an ammonia spill will not be contingent on a properly functioning drains system.

Ammonia Storage Tank



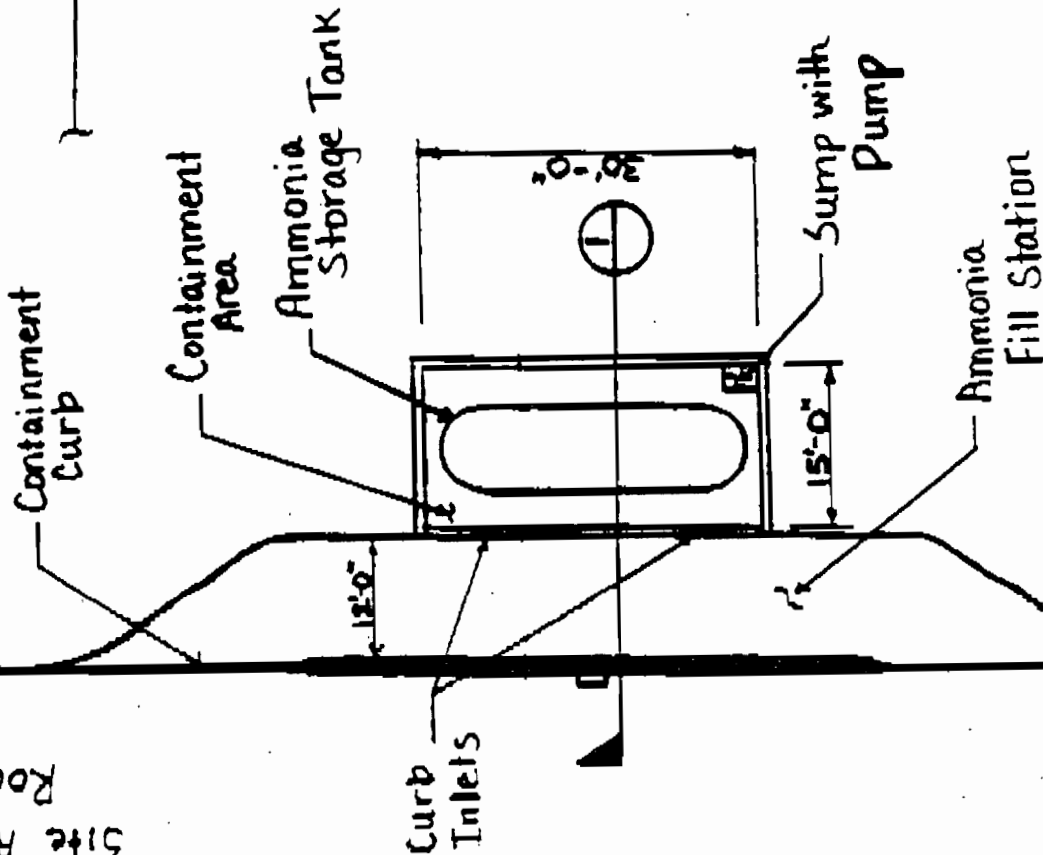
Section 1

Note: Curb Inlet is a Screened opening 2" X 6" in curb.



Detail 2

Site Access Road



SACRAMENTO COGENERATION AUTHORITY
 PROCTER & GAMBLE COGENERATION PROJECT
 AMMONIA STORAGE FACILITY

EFFICIENCY - 2

As a result of recent news reports regarding operational changes at the Procter & Gamble Manufacturing Facility, applicant must address the following:

- a. quantify any changes in steam deliveries to the host facility.
- b. quantify any changes in calculation of these standards.
- c. describe any changes in the projected power plant operating regimen required in order to qualify as a cogeneration power plant.

SCA RESPONSE:

The Steam Sales Agreement between SMUD and Procter and Gamble commits SMUD to provide all of P&G's steam requirements up to 120,000 pounds per hour (PPH). There is no commitment from P&G to maintain any average or continuous steam demand. For design purposes, P&G estimated that 65,000 PPH would be representative of their steady state steam load. Both Ray Parks, Plant Manager, and Paul Helman, Operations Manager, have stated the reductions in operations at the Sacramento Plant will not impact the Steam Sales Agreement. The portion of the plant that is being closed accounts for only 8 percent of the steam load on an annual basis and that the demand from it was intermittent. P&G still estimates that their boiler operation is 65,000 PPH. Consequently, the steam supply design basis remains unchanged and no changes to the efficiency calculations or the operating regimen in order to qualify as a cogeneration facility are required.

STATE OF CALIFORNIA

**State Resources Conservation
and Development Commission**

In the matter of:)	Docket No. 93-AFC-2
)	
Application for Certification)	PROOF OF SERVICE
of the Sacramento Cogeneration)	(rev. 12/3/93)
Authority's Procter & Gamble)	
Cogeneration Project)	
_____)	

PROOF OF SERVICE

I, Evangeline Parchamento, declare that on March 14, 1994, I deposited copies of the attached responses to Haz Mat-5 and Efficiency-2 Data Request for the Procter and Gamble Cogeneration Project (Docket No. 93-AFC-02) in the United States mail at Sacramento, California, with first class postage thereon fully prepaid and addressed to the following:

APPLICANT

Ms. Susan Strachan, Manager
Projects Permitting & Licensing
SMUD
Box 15830
Sacramento, CA 95852-1830

Steve Cohn
Senior Attorney
SMUD
P.O. Box 15830
Sacramento, CA 95852-1830

INTERESTED AGENCIES

Richard Johnson
Division Chief
Sacramento Metro AQMD
8411 Jackson Road
Sacramento, CA 95826

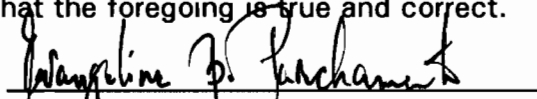
Ray Menebroker, Chief Project
Assessment Branch
Stationary Source Division
California Air Resources Board
P. O. Box 2815
Sacramento, CA 95814

Ed Schnabel
Sacramento Metropolitan Water District
5331 Walnut Avenue
Sacramento, CA 95841

CALIFORNIA ENERGY COMMISSION
(Docket Unit - 12 copies required)

Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814

I declare under penalty of perjury that the foregoing is true and correct.



Signature

Attachment