

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9106210020 DOC.DATE: 91/06/17 NOTARIZED: NO DOCKET #  
 FACIL:50-361 San Onofre Nuclear Station, Unit 2, Southern Californ 05000361  
 50-362 San Onofre Nuclear Station, Unit 3, Southern Californ 05000362  
 AUTH.NAME AUTHOR AFFILIATION  
 ROSENBLUM,R.M. Southern California Edison Co.  
 RECIP.NAME RECIPIENT AFFILIATION  
 MARTIN,J.B. Region 5 (Post 820201)

SUBJECT: Forwards revised Table 1, "1990 Chemical Hazard Frequency"  
 for Hazardous Cargo Monitoring Rept submitted on 910215.  
 Table clearly indicates that sum of all toxic hazards  
 acceptably small.

DISTRIBUTION CODE: IE01D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 3  
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

### NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD5 PD	1 1	KOKAJKO, L.	1 1
INTERNAL:	ACRS	2 2	AEOD	1 1
	AEOD/DEIIB	1 1	AEOD/TPAB	1 1
	DEDRO	1 1	NRR MORISSEAU, D	1 1
	NRR SHANKMAN, S	1 1	NRR/DLPQ/LPEB10	1 1
	NRR/DOEA/OEAB	1 1	NRR/DREP/PEPB9H	1 1
	NRR/DRIS/DIR	1 1	NRR/DST/DIR 8E2	1 1
	NRR/PMAS/ILRB12	1 1	NUDOCS-ABSTRACT	1 1
	OE DIR	1 1	OGC/HDS3	1 1
	<u>REG FILE</u> 02	1 1	RGN5 FILE 01	1 1
EXTERNAL:	EG&G/BRYCE, J.H.	1 1	NRC PDR	1 1
	NSIC	1 1		

### NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 24 ENCL 24

*M/A-4*  
*[Signature]*



*Southern California Edison Company*

23 PARKER STREET  
IRVINE, CALIFORNIA 92718

June 17, 1991

R. M. ROSENBLUM  
MANAGER OF  
NUCLEAR REGULATORY AFFAIRS

TELEPHONE  
(714) 454-4505

U. S. Nuclear Regulatory Commission, Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, CA 94596-5368

Attention: Mr. J. B. Martin, Regional Administrator

Dear Sir:

SUBJECT: **Hazardous Cargo Monitoring Report,  
San Onofre Nuclear Generating Station,  
Units 2 and 3**

- References:
- 1) Letter from F. R. Nandy (SCE) to J. B. Martin (NRC) dated February 15, 1991, Subject: Docket Nos. 50-361 and 50-362, Hazardous Cargo Monitoring Report, San Onofre Nuclear Generating Station, Units 2 and 3
  - 2) Letter from D. E. Hickman (NRC) to K. P. Baskin (SCE) dated June 23, 1988, Subject: Safety Evaluation of the Offsite Hazards Evaluation at San Onofre Nuclear Generating Station, Units 2 and 3 (TAC Nos. 68015, 68016)
  - 3) Analysis of the Probability of a Toxic Gas Hazard for the San Onofre Nuclear Generating Station as a Result of Truck Accidents Near the Plant, dated February 28, 1981

Technical Specification 6.9.1.14 for both San Onofre Units 2 and 3 requires "Hazardous cargo traffic on Interstate 5 (I-5) and the AT&SF railway shall be monitored and the results submitted to the NRC Regional Administrator once every three years." The purpose of this letter is to provide a revised Table 1 "1990 Chemical Hazard Frequency" for the Hazardous Cargo Monitoring Report for San Onofre Units 2 and 3 which was submitted on February 15, 1991.

The revised Table clearly shows the sum of all toxic hazards is acceptably small,  $7.61 \times 10^{-7}$ /year compared to an allowable of  $10^{-6}$ /year for our conservative analysis. In Reference 2 the NRC requested Southern California Edison (SCE) to apply Standard Review Plan (SRP) 2.2.3, "Evaluation of Potential Accidents," by summing the risk of each toxic chemical to evaluate the total risk for toxic hazards. Although the 1990 survey results indicate the total risk for toxic hazards is acceptably small, Table 1 in the report did not include the sum of the risks from each toxic chemical.

9106210020 910617  
PDR ADOCK 05000361  
R PDR

*TEO/*  
*1/1*

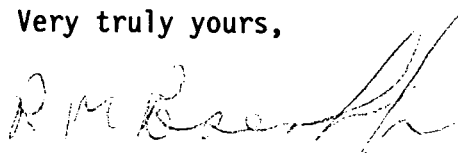
The revised Table 1 lists all toxic materials counted in the survey, plant risk from each toxic material, and the summation of all toxic risks. Several of the substances listed in Table 1 do not contribute to the total toxic hazard, and, as such, the individual toxic hazards for these chemicals are not included in the revised table. The bases for not including substances in the summation of the individual toxic hazard are as follows:

- 1) Automatic plant protection for ammonia, chlorine, and hydrocarbon gasses is currently provided by the Units 2/3 Toxic Gas Isolation System. The hydrocarbon detector provides isolation for all hydrocarbon gasses, including butane, propane, gasoline, jet fuel, and diesel fuel. Based on this protection, these substances do not contribute to the total toxic hazard.
- 2) The original toxic hazard evaluation, based on 1977 data and submitted to the NRC by Reference 3 in 1981, established the initial hazard frequency. Subsequent hazard updates were calculated by multiplying the initial hazard frequency by the ratios of (1) the current truck accident rate to the initial truck accident rate and (2) the current hazardous material shipment frequencies to the initial hazardous material shipment frequencies. The 1977 evaluation removed several substances from consideration based on the low likelihood of forming a vapor cloud. However, the 1990 hazard update conservatively assumed an initial hazard frequency of  $1.6 \times 10^{-9}$  per year, when the actual hazard frequency was zero. Because the initial hazard for these substances was zero, the hazard frequency for these chemicals has been removed from the revised table.

The enclosed information complies with the requirements of Technical Specification 6.9.1.14 for both San Onofre Units 2 and 3 and the NRC's Guidance on interpreting SRP 2.2.3 provided in Reference 2.

If you have any questions concerning the above information, please contact me.

Very truly yours,



Enclosure

cc: U. S. Nuclear Regulatory Commission, Document Control Desk  
C. W. Caldwell, USNRC Senior Resident Inspector, San Onofre Units 1, 2  
and 3

**1990 CHEMICAL HAZARD FREQUENCY**  
(Revised)

<u>Substance</u>	<u>Frequency of Plant Hazard (Per Year)</u>
Acetone	4.1E-8
Acetylene	6.5E-9
Ammonia <sup>1</sup>	--
Argon	6.5E-9
Batteries <sup>2</sup>	--
Benzene	<1.0E-9
Butane <sup>1</sup>	--
Butyl Acetate	1.0E-8
Carbon Dioxide	2.4E-8
Chlorine <sup>1</sup>	--
Crude Oil <sup>2</sup>	--
Diesel Fuel <sup>1</sup>	--
Formaldehyde	3.9E-7
Gasoline <sup>1</sup>	--
Hydraulic Oil <sup>2</sup>	--
Hydrochloric Acid	1.4E-8
Hydrogen	1.3E-8
Isopropyl Alcohol	8.6E-8
Jet Fuel <sup>1</sup>	--
Methyl Bromide	1.4E-8
Methyl Ethyl Ketone	2.0E-8
Methylene Chloride	5.1E-9
Motor Oil <sup>2</sup>	--
Muriatic Acid	5.1E-9
Naptha <sup>2</sup>	--
Nitrogen	5.1E-9
Perchloroethylene	7.6E-9
Propane <sup>1</sup>	--
Sulfuric Acid	6.8E-9
Toluene (Solvent)	9.1E-8
Vikane	1.0E-8
Xylene	4.5E-9

Total Hazard: 7.61E-7 yr<sup>-1</sup>

<sup>1</sup> Automatic plant protection provided by the Toxic Gas Isolation System.

<sup>2</sup> Analysis indicates this material does not pose a hazard to the site.