DESCRIPTION OF PROPOSED CHANGE AND
ENVIRONMENTAL AND SAFETY ANALYSES
PROPOSED CHANGE NO. 79 TO THE TECHNICAL SPECIFICATIONS
PROVISIONAL OPERATING LICENSE DPR-13

This is a request to revise Environmental Technical Specification 2.2.2 of Appendix B of Provisional Operating License DPR-13.

Reason for Change

San Onofre Units 2 and 3 are presently under construction immediately adjacent to San Onofre Unit 1. The cleaning, flushing and startup of the San Onofre Units 2 and 3 systems is scheduled to begin mid-1979. Due to increasing stricter waste water discharge requirements (i.e., discharge sulfates), disposal of the startup flushing waste water will be accomplished via a temporary waste water discharge system from San Onofre Units 2 and 3 to the San Onofre Unit 1 circulating water outfall tsunami structure. Since the quantity of sulfuric acid to be discharged from San Onofre Units 2 and 3 will be greater than is permitted by Environmental Technical Specification 2.2.2, the annual discharge limit of sulfuric acid from San Onofre Unit 1 must be increased. In addition, Table 5.8-1, "Maximum Design Concentration of Chemicals and Elements Added by the Station to the Cooling Water Discharge During Normal Operation," must be revised to reflect the increase in the quantity of sulfates discharged from San Onofre Unit 1.

The temporary waste water discharge system will be utilized until the San Onofre Units 2 and 3 circulating water system is placed in service.

Existing Specification

Technical Specification 2.2.2 currently reads:

> "The annual (calendar year) discharge of chemicals to the circulating water system shall not exceed the following limits without prior approval from the AEC.
>
> | | |
> |---|---|
> | Chromium: | 1,000 lbs. of $KCrO_4$ |
> | Boric Acid: | 170,000 lbs. of HBO_3 |
> | Phosphate: | 5,400 lbs. of $NaHPO_4$, Na_2HPO_4, Na_2PO_4 |
> | Sulfate: | 90,000 lbs. of H_2SO_4" |

The fourth paragraph of the Basis of Technical Specification 2.2.2 currently reads:

> "Sulfates in the form of sulfuric acid are added to the evaporator to assist in corrosion control by maintaining pH less than 7.5. The resulting maximum added concentration of the discharge, .073 ppm, has not

created an observed environmental impact. The specification provides assurance that release of sulfate will not exceed those which have not impacted the environment in the past."

Table 5.8-1 of Technical Specification 5.8.3 currently reads, in part:

"Chemical or Element	Maximum Added Release (lb/day)	Maximum Added Concentration (ppm) at Discharge
Sulfate	7.945	1.89"

Proposed Specification

Technical Specification 2.2.2 would be revised to read:

"The annual (calendar year) discharge of chemicals to the circulating water system shall not exceed the following limits without prior approval from the NRC.

Chromium: 1,000 lbs. of K_2CrO_4

Boric Acid: 170,000 lbs. of H_3BO_3

Phosphate: 5,400 lbs. of NaH_2PO_4
Na_2HPO_4
Na_3PO_4

Sulfate: Calendar Year 1979 - 1,785,000 lbs. of H_2SO_4
Calendar Year 1980 - 2,350,000 lbs. of H_2SO_4
Calendar Years
Beginning 1981 - 90,000 lbs. of H_2SO_4

The fourth paragraph of Basis of Technical Specification 2.2.2 would be revised to read:

"Sulfates in the form of sulfuric acid are added to the San Onofre Unit 1 flash evaporator to assist in corrosion control by maintaining pH less than 7.5. The resulting maximum added concentration at the discharge, .073 ppm, has not created an observed environmental impact. In addition, sulfuric acid is used in the regeneration of San Onofre Units 2 and 3 makeup demineralizers. Until the San Onofre Units 2 and 3 circulating water system is placed in service, neutralized regenerants with a final solution pH of 6.0 to 9.0 and a maximum added concentration at the discharge of 16 ppm, obtained during the cleaning, flushing and startup of San Onofre Units 2 and 3 systems, are temporarily discharged directly to the San Onofre Unit 1 circulating water outfall tsunami structure. Neutralized sulfuric acid (pH 6.0 to 9.0) has no deleterious effects on the ocean environment. In the remainder of the 1979 calendar year, 1,695,000 pounds of the total discharge limit of 1,785,000 pounds of H_2SO_4 is discharged from San Onofre Units 2 and 3. For the 1980 calendar year, 2,260,000 pounds of the total discharge limit of 2,350,000 pounds of H_2SO_4 is discharged from San Onofre Units 2 and 3. When the San

Onofre Units 2 and 3 circulating water system is placed in service, the discharge of sulfates in the form of sulfuric acid will be limited to that added to the San Onofre Unit 1 flash evaporator (i.e., 90,000 pounds). The specification provides assurance that releases of sulfate will not exceed those which have not impacted the environment in the past."

A double asterisk and associated footnote would be added to Table 5.8-1 of Technical Specification 5.8.3 as follows:

"Chemical or Element	Maximum Added Release (lb/day)	Maximum Added Concentration (ppm) at Discharge
Sulfate	7.945**	1.89**

** During the calendar years 1979 and 1980, the maximum added release (lb/day) and the maximum added concentration (ppm) at discharge is 14,250 and 17.9, respectively, from San Onofre Units 2 and 3 as described in Technical Specification 2.2.2."

The following typographical errors have also been identified:

$KCrO_4$ should be K_2CrO_4
HBO_3 should be H_3BO_3
$NaHPO_4$ should be NaH_2PO_4 and should be shown as a Phosphate
"mon-" in the third paragraph of the Basis should be "mono-"

Environmental and Safety Analyses

During the cleaning, flushing and startup of San Onofre Units 2 and 3 systems, sulfuric acid will be used in the regeneration of the makeup demineralizers. The regeneration will consume sulfuric acid and sodium hydroxide and will produce waste water (pH 6.0 to 9.0) which contains dissolved sodium sulfate. The theoretical maximum sulfate concentration of 4,500 ppm in a regeneration sump will occur when one cation and one anion bed are regenerated and the neutralized regenerant is discharged. This waste water is discharged directly to the San Onofre Unit 1 circulating water outfall tsunami structure. Dilution (290x) in the San Onofre Unit 1 circulating water system will reduce the sulfate concentration to 16 ppm at the discharge. Natural ocean water contains about 2,700 $\pm$ 50 ppm of sulfate.

The existing NPDES permit for San Onofre Unit 1 authorizes the discharge of San Onofre Units 2 and 3 waste water through the San Onofre Unit 1 circulating water system as an interim measure until the San Onofre Units 2 and 3 circulating water system is completed. This permit specifically recognizes that the demineralized regenerants from San Onofre Units 2 and 3 will contain dissolved sodium sulfate. No limit is imposed by the NPDES permit on sulfuric acid consumption. The only NPDES restriction on the discharge of sulfuric acid is that it be neutralized to yield a final solution pH of 6.0 to 9.0. Consumption of sulfuric acid must be reported on an annual basis to the cognizant Water Quality Control Board. Equivalent requirements are imposed by an existing NPDES permit issued for future use by San Onofre Units 2 and 3.

In addition to the environmental analysis discussed above, hydraulic and structural analyses have been performed to determine the affect of the temporary waste water discharge system on the San Onofre Unit 1 circulating water system. The results of the analyses indicate that the discharge of waste water from San Onofre Units 2 and 3 will not adversely affect the San Onofre Unit 1 circulating water systems.

Based on the environmental analysis discussed above, the discharge of neutralized sulfuric acid from San Onofre Units 2 and 3 does not result in a condition which significantly alters the impact of San Onofre Unit 1 on the environment. Based on the results of the hydraulic and structural analyses discussed above, the installation of the temporary waste water discharge system 1) does not involve an unreviewed safety question as defined in 10 CFR 50.59, nor does it present significant hazards consideration not described or implicit in the Final Safety Analysis, and 2) there is reasonable assurance that the health and safety of the public will not be endangered by the installation. However, the use of the temporary waste water discharge system will result in discharging sulfuric acid in a quantity greater than the current annual discharge limit at San Onofre Unit 1 and is the subject of the Proposed Change discussed above.

Supporting Benefit - Cost Analysis

Based on the Environmental and Safety Analyses presented above, the discharge of neutralized sulfuric acid from San Onofre Units 2 and 3 does not result in a condition which significantly alters the impact of San Onofre Unit 1 on the environment. In addition, the installation of the temporary waste water discharge system does not involve an unreviewed safety question as defined in 10CFR50.59, nor does it present significant hazards considerations not described or implicit in the Final Safety Analysis.

Accordingly, only the benefit-cost associated with offsite disposal versus the planned temporary onsite disposal has been examined. Based on estimates, hauling the San Onofre Units 2 and 3 waste water to an offsite disposal area would cost approximately $2.60 million. However, the installation and use of the temporary waste water discharge system from San Onofre Units 2 and 3 to the San Onofre Unit 1 circulating water outfall tsunami structure has been estimated to cost approximately $330,000. This represents a savings of at least $2.25 million at no cost to the environment.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 76 - 11

NPDES NO. CA0001228

WASTE DISCHARGE REQUIREMENTS
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
AND SAN DIEGO GAS AND ELECTRIC COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1
SAN DIEGO COUNTY

THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION (HEREAFTER BOARD), FINDS THAT:

1. ON DECEMBER 9, 1974, THIS REGIONAL BOARD ADOPTED ORDER NO. 74-93 (NPDES PERMIT NO. CA0001228), WASTE DISCHARGE REQUIREMENTS FOR SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1, SAN DIEGO COUNTY (HEREAFTER DISCHARGER).

2. SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1, IS LOCATED ON THE U.S. MARINE CORPS BASE, CAMP PENDLETON, SAN DIEGO COUNTY. ORDER NO. 74-93, AN INTERIM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT, PROVIDED REQUIREMENTS FOR THE DISCHARGE TO THE COASTAL WATERS OF THE PACIFIC OCEAN, A NAVIGABLE WATER OF THE UNITED STATES, OF ELEVATED TEMPERATURE WASTES FROM THE PRODUCTION OF ELECTRICITY IN A STEAM ELECTRIC GENERATING PLANT WITH A ONCE-THROUGH SALT WATER COOLING SYSTEM. ORDER NO. 74-93 EXPIRES JUNE 8, 1976.

3. ON DECEMBER 11, 1975, THE DISCHARGER SUBMITTED A REPORT OF WASTE DISCHARGE IN APPLICATION FOR RENEWAL OF THE EXISTING NPDES PERMIT FOR THE DISCHARGE TO THE PACIFIC OCEAN.

4. THE REPORT OF WASTE DISCHARGE DESCRIBES THE EXISTING DISCHARGE AS FOLLOWS:

DISCHARGE 001 (COMBINATION OF 001A COOLING WATER DERIVED FROM THE PACIFIC OCEAN; 001B STEAM GENERATOR BLOWDOWN; 001C LOW VOLUME WASTES, 001D SECONDARILY TREATED DOMESTIC SEWAGE AND 001E YARD DRAINS)

POINT OF DISCHARGE: LATITUDE 33°21'43" NORTH
LONGITUDE 117°33'46" WEST

AVERAGE FLOW RATE:

001 COMBINED DISCHARGE - 461.1 MILLION GALLONS PER OPERATING DAY (20.2 M^3/SEC)

001A COOLING WATER - 447.7 MILLION GALLONS PER OPERATING DAY (19.61 M^3/SEC)

001B STEAM GENERATOR BLOWDOWN - 21,600 GALLONS PER OPERATING DAY (0.00095 M^3/SEC)

001C LOW VOLUME WASTES - 13.3 MILLION GALLONS PER OPERATING DAY (0.58 M^3/SEC)

001D SECONDARILY TREATED DOMESTIC SEWAGE - 17,500 GALLONS PER OPERATING DAY (0.000 77 M^3/SEC)

001E YARD DRAINS - 87,000 GALLONS DAILY AVERAGE (0.0038 M^3/SEC)

AVERAGE TEMPERATURE: 80.0°F (26.7°C) WINTER
92.3°F (33.5°C) SUMMER

PH: MINIMUM 7.5; MAXIMUM 8.5

5. THE DISCHARGER REPORTED THAT PLANT OPERATIONS RESULT IN ADDITION TO THE DISCHARGE OF SODIUM HYPOCHLORITE, POTASSIUM CHROMATE, SULFURIC ACID AND BORIC ACID. THE ONLY REPORTED CHEMICAL ADDITION TO DISCHARGE 001A (COOLING WATER) WAS SODIUM HYPOCHORITE USED AS AN ALGICIDE.

6. THE COMPREHENSIVE WATER QUALITY CONTROL PLAN REPORT SAN DIEGO BASIN (9), ADOPTED BY THIS REGIONAL BOARD ON MARCH 17, 1975 AND APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD ON MARCH 20, 1975, ESTABLISHED WATER QUALITY OBJECTIVES FOR THE COASTAL WATERS OF THE PACIFIC OCEAN.

7. THE COMPREHENSIVE WATER QUALITY CONTROL PLAN REPORT ALSO CONTAINS THE FOLLOWING PROHIBITIONS FOR WATERS SUBJECT TO TIDAL ACTION:

NOTE: M^3/SEC = CUBIC METERS PER SECOND
°F (°C) = DEGREES FAHRENHEIT (DEGREES CENTIGRADE)

"THE DUMPING OR DEPOSITION FROM SHORE OR FROM VESSELS OF OIL, GARBAGE, TRASH OR OTHER SOLID MUNICIPAL OR AGRICULTURAL WASTES DIRECTLY INTO WATERS SUBJECT TO TIDAL ACTION OR ADJACENT TO WATERS SUBJECT TO TIDAL ACTION IN ANY MANNER WHICH MAY PERMIT IT TO BE WASHED INTO THE WATERS SUBJECT TO TIDAL ACTION IS PROHIBITED."

* * * * *

"DISCHARGE OF INDUSTRIAL WASTEWATERS EXCLUSIVE OF COOLING WATER, CLEAR BRINE OR OTHER WATERS WHICH ARE ESSENTIALLY CHEMICALLY UNCHANGED, INTO WATERS SUBJECT TO TIDAL ACTION IS PROHIBITED."

* * * * *

"THE DUMPING OR DEPOSITION OF CHEMICAL WASTES, CHEMICAL AGENTS OR EXPLOSIVES INTO WATERS SUBJECT TO TIDAL ACTION IS PROHIBITED."

8. THE COMPREHENSIVE WATER QUALITY CONTROL PLAN REPORT SAN DIEGO BASIN (9), ESTABLISHED THE FOLLOWING BENEFICIAL USES FOR THE COASTAL WATERS OF THE PACIFIC OCEAN:

   (A) INDUSTRIAL SERVICE SUPPLY
   (B) NAVIGATION
   (C) WATER CONTACT RECREATION
   (D) NON-WATER CONTACT RECREATION
   (E) OCEAN COMMERCIAL AND SPORTFISHING
   (F) PRESERVATION OF AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE
   (G) PRESERVATION OF RARE AND ENDANGERED SPECIES
   (H) MARINE HABITAT
   (I) FISH MIGRATION
   (J) SHELLFISH HARVESTING

9. THE WATER QUALITY CONTROL PLAN, OCEAN WATERS OF CALIFORNIA ADOPTED BY THE STATE WATER RESOURCES CONTROL BOARD ON JULY 6, 1972, ESTABLISHED WATER QUALITY OBJECTIVES AND EFFLUENT LIMITATIONS FOR THE DISPOSAL OF WASTES INTO THE COASTAL WATERS OF THE PACIFIC OCEAN.

10. ON FEBRUARY 25, 1975, THE STATE WATER RESOURCES CONTROL BOARD ADOPTED A REVISED VERSION OF THE WATER QUALITY CONTROL PLAN FOR CONTROL OF TEMPERATURE IN THE COASTAL AND INTERSTATE WATERS AND ENCLOSED BAYS AND ESTUARIES OF CALIFORNIA (THERMAL PLAN). THIS PLAN CONTAINED OBJECTIVES FOR DISCHARGES OF ELEVATED TEMPERATURE WASTES (EXISTING AND NEW DISCHARGES) TO COASTAL WATERS.

11. THE DISCHARGER CONDUCTED A THERMAL EFFECTS STUDY AS REQUIRED BY THE THERMAL PLAN. THE DISCHARGER CONCLUDED FROM THE THERMAL EFFECTS STUDY THAT THE DISCHARGE CAUSED NO PRIOR APPRECIABLE HARM TO THE AQUATIC COMMUNITIES OF THE COASTAL WATERS OF THE PACIFIC OCEAN AND NO SIGNIFICANT ADVERSE EFFECTS ON THE BENEFICIAL USES OF THE WATERS OF THE PACIFIC OCEAN. STAFF OF THE REGIONAL BOARD HAS REVIEWED THE THERMAL EFFECTS STUDY REPORTS AND CONCURRED WITH THE DISCHARGER'S CONCLUSIONS.

12. EFFLUENT LIMITATIONS, NATIONAL STANDARDS OF PERFORMANCE, AND TOXIC AND PRETREATMENT EFFLUENT STANDARDS ESTABLISHED PURSUANT TO SECTIONS 301, 302, 303(D), 304, 307, 316(B) AND 403 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND AMENDMENTS THERETO ARE APPLICABLE TO THE DISCHARGE.

13. ON OCTOBER 8, 1974, THE ENVIRONMENTAL PROTECTION AGENCY PROMULGATED EFFLUENT GUIDELINES AND STANDARDS FOR DISCHARGES FROM STEAM ELECTRIC POWER GENERATING PLANTS. THE GUIDELINES ESTABLISHED EFFLUENT LIMITATIONS FOR EXISTING SOURCES AND STANDARDS OF PERFORMANCE AND PRETREATMENT STANDARDS FOR NEW SOURCES.

14. UNDER THE ENVIRONMENTAL PROTECTION AGENCY'S EFFLUENT GUIDELINES AND STANDARDS, THE SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1 POWER PLANT, IS CLASSIFIED AS AN OLD UNIT.

15. ON DECEMBER 11, 1975, THE DISCHARGER SUBMITTED A REQUEST FOR DEVIATION FROM THE ENVIRONMENTAL PROTECTION AGENCY'S EFFLUENT LIMITATIONS FOR STEAM GENERATOR BLOWDOWN (001B), SEEKING A LESS STRINGENT LIMITATION ON IRON. THE DISCHARGER INDICATED THAT THE IRON CONCENTRATION IN STEAM GENERATOR BLOWDOWN EXCEEDED THE ENVIRONMENTAL PROTECTION AGENCY'S EFFLUENT LIMIT OF 1 MG/L FOR A PERIOD OF 12 TO 48 HOURS DURING AND IMMEDIATELY FOLLOWING START UP BUT WOULD NOT EXCEED 10 MG/L. THE FREQUENCY OF START UP, INCLUDING REFUELING, AVERAGED ABOUT FIVE TIMES PER YEAR.

16. IN A LETTER TO THIS REGIONAL BOARD DATED DECEMBER 19, 1975, THE DISCHARGER INDICATED THAT THE REQUEST FOR DEVIATION FROM THE ENVIRONMENTAL PROTECTION AGENCY'S LIMITATION ON IRON WAS BASED ON THE PROVISION IN SECTION 423.12(A) OF EFFLUENT GUIDELINES AND STANDARDS FOR STEAM ELECTRIC POWER GENERATING PLANTS. SECTION 423.12(A) ALLOWS THE STATE TO ESTABLISH EFFLUENT LIMITATIONS EITHER MORE OR LESS STRINGENT THAN THE LIMITATIONS ESTABLISHED IN EFFLUENT GUIDELINES AND STANDARDS, IF FACTORS RELATING TO THE EQUIPMENT OR FACILITIES INVOLVED, THE PROCESS APPLIED, OR OTHER SUCH FACTORS RELATED TO THE DISCHARGE ARE FUNDAMENTALLY DIFFERENT FROM THE FACTORS CONSIDERED IN THE ESTABLISHMENT OF THE GUIDELINES.

NOTE: MG/L = MILLIGRAMS PER LITER

17. THE DISCHARGER'S REQUEST FOR DEVIATION FROM THE ENVIRONMENTAL PROTECTION AGENCY'S EFFLUENT LIMITATIONS FOR STEAM GENERATOR BLOWDOWN HAS BEEN REVIEWED. THE DISCHARGE OF IRON FROM STEAM GENERATOR BLOWDOWN IN EXCESS OF THE 1 MG/L LIMITATION DURING THE START-UP PERIOD IS RECOGNIZED AS AN INFREQUENT INTERMITTENT DISCHARGE. THE START-UP PERIOD IS CONSIDERED TO BE DIFFERENT FROM DAILY NORMAL OPERATION AND FUNDAMENTALLY DIFFERENT FROM PROCESSES CONSIDERED IN THE ESTABLISHMENT OF THE GUIDELINES.

18. THE BOARD, IN ESTABLISHING THE REQUIREMENTS CONTAINED HEREIN, CONSIDERED FACTORS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

    (A) PAST, PRESENT, AND PROBABLE FUTURE BENEFICIAL USES OF WATER.

    (B) ENVIRONMENTAL CHARACTERISTICS OF THE HYDROGRAPHIC UNIT UNDER CONSIDERATION, INCLUDING THE QUALITY OF WATER AVAILABLE THERETO.

    (C) WATER QUALITY CONDITIONS THAT COULD REASONABLY BE ACHIEVED THROUGH THE COORDINATED CONTROL OF ALL FACTORS WHICH AFFECT WATER QUALITY IN THE AREA.

    (D) ECONOMIC CONSIDERATIONS.

19. THE BOARD HAS CONSIDERED ALL ENVIRONMENTAL FACTORS ASSOCIATED WITH THE DISCHARGE OF WASTE.

20. THE BOARD HAS NOTIFIED THE DISCHARGER AND ALL KNOWN INTERESTED PARTIES OF ITS INTENT TO PRESCRIBE WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE.

21. THE BOARD IN A PUBLIC MEETING HEARD AND CONSIDERED ALL COMMENTS PERTAINING TO THE DISCHARGE.

22. THIS ORDER SHALL SERVE AS A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PURSUANT TO SECTION 402 OF THE FEDERAL WATER POLLUTION CONTROL ACT, OR AMENDMENTS HERETO.

IT IS HEREBY ORDERED, THE SOUTHERN CALIFORNIA EDISON COMPANY AND THE SAN DIEGO GAS AND ELECTRIC COMPANY, IN ORDER TO MEET THE PROVISIONS CONTAINED IN DIVISION 7 OF THE CALIFORNIA WATER CODE AND REGULATIONS ADOPTED THEREUNDER AND THE PROVISIONS OF THE FEDERAL WATER POLLUTION CONTROL ACT, AND REGULATIONS AND GUIDELINES ADOPTED THEREUNDER, SHALL COMPLY WITH THE FOLLOWING:

A. EFFLUENT LIMITATIONS

1. DISCHARGE 001 (COMBINED DISCHARGE):

(A) THE TEMPERATURE OF THE DISCHARGE DURING NORMAL OPERATION SHALL NOT AVERAGE IN ANY 24-HOUR PERIOD MORE THAN 25°F (13.9°C) ABOVE THAT OF INCOMING OCEAN WATER. DURING HEAT TREATMENTS IT SHALL NOT EXCEED 125° (51.7°C) EXCEPT DURING THE ADJUSTMENT OF THE GATES AT WHICH TIME THE DISCHARGE TEMPERATURE SHALL NOT EXCEED 130°F (54.4°C). TEMPERATURE FLUCTUATIONS DURING GATE ADJUSTMENT ABOVE 125°F (51.7°C) SHALL NOT EXCEED THIRTY MINUTES.

(B) THE MONTHLY AVERAGE[1] FREE AVAILABLE CHLORINE DISCHARGED SHALL NOT EXCEED 0.2 MG/L (349 KG/DAY, 769 LBS/DAY[4]) AND THE DAILY MAXIMUM[2] FREE AVAILABLE CHLORINE DISCHARGED SHALL NOT EXCEED 0.5 MG/L (954 KG/DAY, 2102 LBS/DAY).

(C) DISCHARGE OF FREE AVAILABLE CHLORINE OR TOTAL RESIDUAL CHLORINE FROM ANY PLANT UNIT FOR MORE THAN TWO HOURS IN ANY ONE DAY OR FROM MORE THAN ONE UNIT IN THE PLANT AT ANY ONE TIME IS PROHIBITED.

(D) THE DISCHARGE OF RADIOACTIVITY SHALL NOT EXCEED THE LIMITS SPECIFIED IN TITLE 17, CHAPTER 5, SUBCHAPTER 4, GROUP 3, ARTICLE 5, SECTIONS 30285 AND 30287 OF THE CALIFORNIA ADMINISTRATIVE CODE.

(E) THE DISCHARGE OF POLYCHLORINATED BIPHENYLS IS PROHIBITED.

(F) THE pH OF THE EFFLUENT DISCHARGED SHALL BE WITHIN THE RANGE OF 6.0 TO 9.0.

(G) AFTER JULY 1, 1978, THE DISCHARGE SHALL NOT EXCEED THE FOLLOWING LIMITS:

CONSTITUENTS	UNIT OF MEASUREMENT	CONCENTRATION NOT TO BE EXCEEDED MORE THAN: 50% OF TIME	10% OF TIME
ARSENIC	MG/L	0.01	0.02
CADMIUM	"	0.02	0.03
TOTAL CHROMIUM	"	0.005	0.01
COPPER	"	0.2	0.3

NOTE: KG/DAY = KILOGRAMS PER DAY
LBS/DAY = POUNDS PER DAY

A LIST OF ALL FOOTNOTES REFERENCED WILL BE FOUND FOLLOWING THE LAST PAGE OF THE WASTE DISCHARGE REQUIREMENTS SECTION.

CONSTITUENTS	UNIT OF MEASUREMENT	CONCENTRATION NOT TO BE EXCEEDED MORE THAN 50% OF TIME	CONCENTRATION NOT TO BE EXCEEDED MORE THAN 10% OF TIME
LEAD	MG/L	0.1	0.2
MERCURY	"	0.001	0.002
NICKEL	"	0.1	0.2
SILVER	"	0.02	0.04
ZINC	"	0.3	0.5
CYANIDE	"	0.1	0.2
PHENOLIC COMPOUNDS	"	0.5	1.0
TOTAL CHLORINE RESIDUAL	"	1.0	2.0
AMMONIA (EXPRESSED AS NITROGEN)	"	40.	60.
TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS*	"	0.002	0.004
TOXICITY CONCENTRATION	TU	1.5	2.0
RADIOACTIVITY		NOT TO EXCEED THE LIMITS SPECIFIED IN TITLE 17, CHAPTER 5, SUBCHAPTER 4, GROUP 3, ARTICLE 5, SECTION 30285 AND 30287 OF THE CALIFORNIA ADMINISTRATIVE CODE.	

2. DISCHARGE 001B (STEAM GENERATOR BLOWDOWN)

(A) AFTER JULY 1, 1977, THE DISCHARGE OF AN EFFLUENT IN EXCESS OF THE FOLLOWING LIMITS IS PROHIBITED:

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* TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS SHALL BE MEASURED BY SUMMING THE INDIVIDUAL CONCENTRATIONS OF DDT, DDD, DDE, ALDRIN, BHC, CHLORDANE, ENDRIN, HEPTACHLOR, LINDANE, DIELDRIN, POLYCHLORINATED BIPHENYLS, AND OTHER IDENTIFIABLE CHLORINATED HYDROCARBONS.

NOTE: MG/L = MILLIGRAMS PER LITER
TU = TOXICITY UNITS

CONSTITUENTS	UNITS	MONTHLY[1] AVERAGE	DAILY[2] MAXIMUM
TOTAL SUSPENDED SOLIDS	MG/L	30	100
	KG/DAY	2.45	188
	LBS/DAY[4]	5.41	414
OIL AND GREASE	MG/L	15	20
	KG/DAY	1.23	37.6
	LBS/DAY	2.7	82.9
COPPER, TOTAL	MG/L	1.0	1.0
	KG/DAY	0.082	1.88
	LBS/DAY	0.18	4.14
IRON, TOTAL (DURING NORMAL OPERATION)	MG/L	1.0	1.0
	KG/DAY	0.082	1.88
	LBS/DAY	0.18	4.14

(8) IF THE DISCHARGER'S REQUEST FOR DEVIATION FROM THE EPA'S EFFLUENT LIMITATION FOR IRON IS APPROVED BY THE ADMINISTRATOR OF EPA, DURING AND IMMEDIATELY FOLLOWING THE STARTUP (UP TO 48 HRS.) THE DAILY MAXIMUM IRON DISCHARGE SHALL NOT EXCEED 10 MG/L.

3. DISCHARGE 001C (LOW VOLUME WASTES)

AFTER JULY 1, 1977, THE DISCHARGE OF AN EFFLUENT IN EXCESS OF THE FOLLOWING LIMITS IS PROHIBITED:

CONSTITUENTS	UNITS	MONTHLY[1] AVERAGE	DAILY[2] MAXIMUM
TOTAL SUSPENDED SOLIDS	MG/L	30	100
	KG/DAY	1510	5034
	LBS/DAY[4]	3329	11095
OIL AND GREASE	MG/L	15	20
	KG/DAY	755	1007
	LBS/DAY	1664	2219

4. DISCHARGE 001D (SECONDARILY TREATED DOMESTIC SEWAGE)

AFTER JULY 1, 1977, THE DISCHARGE OF AN EFFLUENT IN EXCESS OF THE FOLLOWING LIMITS IS PROHIBITED:

CONSTITUENTS	UNITS	MONTHLY[1] AVERAGE	WEEKLY[3] MAXIMUM
BIOCHEMICAL OXYGEN DEMAND, 5 DAY 20°C	MG/L	30	45
	KG/DAY	1.99	2.98
	LBS/DAY[4]	4.38	6.57
TOTAL SUSPENDED SOLIDS	MG/L	30	45
	KG/DAY	1.99	2.98
	LBS/DAY	4.38	6.57
pH	—	WITHIN THE RANGE OF 6.0 TO 9.0	

5. DISCHARGE 001E (YARD DRAINS)

THE MONTHLY AVERAGE[1] OF OIL AND GREASE DISCHARGED SHALL NOT EXCEED 10 MG/L AND THE DAILY MAXIMUM OIL AND GREASE DISCHARGED SHALL NOT EXCEED 15 MG/L.

B. RECEIVING WATER LIMITATIONS

1. THE DISCHARGE SHALL NOT CAUSE THE FOLLOWING LIMITS TO BE EXCEEDED OUTSIDE OF THE INITIAL DILUTION ZONE[5]:

CONSTITUENTS	UNITS	CONCENTRATION NOT TO BE EXCEEDED MORE THAN 50% OF TIME	10% OF TIME	MAXIMUM
GREASE AND OIL	MG/M^2	10.0	20.0	
FLOATING PARTICULATES	MG DRY WT/M^2	1.0	1.5	
TOXICITY	TOXICITY UNITS	—	—	0.05
RADIOACTIVITY		NOT TO EXCEED THE LIMITS SPECIFIED IN TITLE 17, CHAPTER 5, SUBCHAPTER 4, GROUP 3, ARTICLE 5, SECTION 30269 OF THE CALIFORNIA ADMINISTRATIVE CODE.		

NOTE: MG/M^2 = MILLIGRAMS PER SQUARE METER
MG DRY WT/M^2 = MILLIGRAMS DRY WEIGHT PER SQUARE METER

2. THE DISCHARGE SHALL NOT CAUSE CONCENTRATIONS OF COLIFORM ORGANISMS WITHIN A ZONE BOUNDED BY THE SHORELINE AND A DISTANCE OF 1000 FEET FROM THE SHORELINE OR THE 30-FOOT DEPTH CONTOUR, WHICHEVER IS FURTHER FROM THE SHORELINE, AND IN AREAS OUTSIDE OF THIS ZONE USED FOR BODY-CONTACT SPORTS, TO EXCEED A MOST PROBABLE NUMBER OF 1000 PER 100 ML (10 PER ML) IN MORE THAN 20 PERCENT OF THE SAMPLES AT ANY SAMPLING STATION IN ANY 30 DAY PERIOD; OR A MOST PROBABLE NUMBER OF 10,000 PER 100 ML (100 PER ML) IN ANY SINGLE SAMPLE WHEN VERIFIED BY A REPEAT SAMPLE TAKEN WITHIN 48 HOURS.

3. THE DISCHARGE SHALL NOT CAUSE THE CONCENTRATION OF TOTAL COLIFORM ORGANISMS IN ANY AREAS WHERE SHELLFISH MAY BE HARVESTED FOR HUMAN CONSUMPTION TO EXCEED A MEDIAN MOST PROBABLE NUMBER OF 70 PER 100 ML, WITH NOT MORE THAN 10 PERCENT OF THE SAMPLES EXCEEDING A MOST PROBABLE NUMBER OF 230 PER 100 ML.

4. THE DISCHARGE SHALL NOT CAUSE:

   (A) FLOATING PARTICULATES OR GREASE AND OIL TO BE VISIBLE AT ANY LOCATION;

   (B) AESTHETICALLY UNDESIRABLE DISCOLORATION ON THE OCEAN SURFACE AT ANY LOCATION;

   (C) THE MEAN OF THE TRANSMITTANCE OF NATURAL LIGHT OUTSIDE OF THE INITIAL DILUTION ZONE[5/] TO BE REDUCED BY MORE THAN ONE STANDARD DEVIATION FROM THE MEAN DETERMINED FOR UNAFFECTED WATERS DURING THE SAME PERIOD;

   (D) THE DISSOLVED OXYGEN CONCENTRATIONS OF WATERS OUTSIDE OF THE INITIAL DILUTION ZONE[5/] TO BE DEPRESSED MORE THAN 10 PERCENT FROM CONCENTRATIONS WHICH OCCUR NATURALLY;

   (E) THE pH OUTSIDE OF THE INITIAL DILUTION ZONE[5/] TO BE CHANGED MORE THAN 0.2 UNITS FROM THE pH WHICH OCCURS NATURALLY;

   (F) THE RATE OF DEPOSITION OF INERT SOLIDS AND THE CHARACTERISTICS OF INERT SOLIDS IN OCEAN SEDIMENTS TO BE CHANGED SUCH THAT BENTHIC COMMUNITIES ARE DEGRADED[6/];

   (G) THE DISSOLVED SULFIDE CONCENTRATION OF WATERS IN AND NEAR SEDIMENTS TO BE INCREASED BY MORE THAN ONE STANDARD DEVIATION FROM THE MEAN DETERMINED UNDER NATURAL CONDITIONS;

(H) THE CONCENTRATIONS OF HEAVY METALS, CYANIDE, PHENOLIC COMPOUNDS, TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS AND RADIOACTIVITY IN SEDIMENTS TO BE INCREASED BY MORE THAN ONE STANDARD DEVIATION FROM THE MEAN DETERMINED UNDER NATURAL CONDITIONS;

(I) THE CONCENTRATIONS OF ORGANIC MATERIALS IN MARINE SEDIMENTS TO BE INCREASED ABOVE THOSE WHICH COULD DEGRADE[6]/ MARINE LIFE;

(J) NUTRIENT MATERIALS IN CONCENTRATIONS THAT WOULD CAUSE OBJECTIONABLE AQUATIC GROWTHS OR DEGRADE[6]/ INDIGENOUS BIOTA;

(K) MARINE COMMUNITIES INCLUDING VERTEBRATE, INVERTEBRATE, AND PLANT SPECIES TO BE DEGRADED[6]/; OR

(L) ALTERATION OF NATURAL TASTE, ODOR, AND COLOR OF FISH, SHELLFISH OR OTHER MARINE RESOURCES USED FOR HUMAN CONSUMPTION.

5. THE DISCHARGE SHALL NOT CAUSE CLEARLY VISABLE DISCOLORATION IN THE RECEIVING WATERS RESULTING FROM PARTICULATE ENTRAINMENT. A TIME SCHEDULE FOR COMPLIANCE WITH THIS REQUIREMENT WILL BE DEVELOPED AT A LATER DATE.

C. PROVISIONS

1. THIS ORDER BECOMES EFFECTIVE ON JUNE 8, 1976.

2. THIS ORDER EXPIRES ON JUNE 8, 1981, AND SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY MUST FILE A REPORT OF WASTE DISCHARGE IN ACCORDANCE WITH TITLE 23, CALIFORNIA ADMINISTRATIVE CODE, NOT LATER THAN 180 DAYS IN ADVANCE OF SUCH DATE AS APPLICATION FOR ISSUANCE OF NEW WASTE DISCHARGE REQUIREMENTS. IF THE DISCHARGE HEREINBEFORE DESCRIBED IS TERMINATED PRIOR TO JUNE 8, 1981, THE DISCHARGER SHALL SO NOTIFY THE REGIONAL BOARD IN WRITING. IN THAT EVENT, THE REGIONAL BOARD MAY RESCIND THIS ORDER.

3. IN THE EVENT OF ANY CHANGE IN CONTROL OR OWNERSHIP OF LAND OR WASTE WASTE DISCHARGE FACILITIES PRESENTLY OWNED OR CONTROLLED BY THE DISCHARGER, THE DISCHARGER SHALL NOTIFY THE SUCCEEDING OWNER OR OPERATOR OF THE EXISTENCE OF THIS ORDER BY LETTER, A COPY OF WHICH SHALL BE FORWARDED TO THIS BOARD.

4. THESE REQUIREMENTS ARE ESTABLISHED ONLY FOR A MAXIMUM DISCHARGE OF 461.1 MILLION GALLONS PER DAY (20.2 M^3/SEC) OF COOLING WATER AND OTHER DISCHARGES AS DESCRIBED IN THE FINDINGS OF THIS ORDER AND THE DISCHARGER'S REPORT OF WASTE DISCHARGE.

5. THE DISCHARGE OF THERMAL WASTES SHALL COMPLY WITH LIMITATIONS NECESSARY TO ASSURE PROTECTION OF BENEFICIAL USES.

6. NEITHER THE TREATMENT NOR THE DISCHARGE OF POLLUTANTS SHALL CREATE A POLLUTION, CONTAMINATION OR NUISANCE AS DEFINED BY THE CALIFORNIA WATER CODE.

7. THE PLANT GROUNDS AND DRAINAGE SHALL BE MAINTAINED SO THAT NO POLLUTANTS ENTER THE STORM DRAINAGE SYSTEM. STORM RUNOFF SHALL BE ROUTED TO PRECLUDE CONTACT WITH CHEMICALS OR CONTAMINANTS.

8. THIS ORDER INCLUDES ITEMS 1, 3, 5 AND 7 OF THE ATTACHED "REPORTING REQUIREMENTS."

9. THIS ORDER INCLUDES ITEMS 1, 2, 4, 5, 6, 7, 8, 9, 10 AND 11 OF THE ATTACHED "STANDARD PROVISIONS."

10. THIS ORDER INCLUDES THE ATTACHED "GENERAL MONITORING AND REPORTING PROVISIONS."

11. THE DISCHARGER SHALL COMPLY WITH THE ATTACHED MONITORING AND REPORTING PROGRAM UPON THE EFFECTIVE DATE OF THIS ORDER.

12. THE DISCHARGER SHALL COMPLY WITH ANY STANDARDS WHICH MAY BE ESTABLISHED BY THE ENVIRONMENTAL PROTECTION AGENCY PURSUANT TO SECTION 316(B) OF THE FEDERAL WATER POLLUTION CONTROL ACT.

13. THE EFFLUENT MONITORING PROGRAM FOR DISCHARGE 001 (COMBINED DISCHARGE) INCLUDES MONITORING FOR CONSTITUENTS FOR WHICH EFFLUENT LIMITATIONS HAVE NOT BEEN ESTABLISHED. IF WARRANTED BY THE RESULTS OF THE MONITORING PROGRAM, THE BOARD MAY ESTABLISH EFFLUENT LIMITATIONS FOR THESE CONSTITUENTS.

14. THE DISCHARGE OF THERMAL WASTES SHALL COMPLY WITH LIMITATIONS NECESSARY TO ASSURE PROTECTION OF BENEFICIAL USES AND AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE.

I, LEONARD BURTMAN, EXECUTIVE OFFICER, DO HEREBY THE FOREGOING IS A FULL, TRUE, AND CORRECT COPY OF AN ORDER ADOPTED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION, ON JUNE 14, 1976.

Leonard Burtman

LEONARD BURTMAN
EXECUTIVE OFFICER

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

FOOTNOTE REFERENCES FOR WASTE DISCHARGE REQUIREMENTS OF ORDER NO. 76-11, (NPDES PERMIT NO. CA0001228 - SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY, SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1

1. THE MONTHLY AVERAGE SHALL BE THE ARITHMETIC MEAN, USING THE RESULTS OF ANALYSES OF ALL SAMPLES COLLECTED DURING ANY 30 CONSECUTIVE CALENDAR DAY PERIOD.

2. THE DAILY MAXIMUM SHALL BE DETERMINED FROM THE RESULTS OF A SINGLE GRAB SAMPLE OR FROM THE RESULT OF A SINGLE COMPOSITE SAMPLE COLLECTED OVER A PERIOD OF 24 HOURS.

3. THE WEEKLY AVERAGE SHALL BE THE ARITHMETIC MEAN, USING THE RESULTS OF ANALYSES OF ALL SAMPLES COLLECTED DURING ANY SEVEN (7) CONSECUTIVE CALENDAR DAY PERIOD.

4. THE DISCHARGE RATE IN POUNDS PER DAY IS OBTAINED FROM THE FOLLOWING CALCULATION FOR ANY CALENDAR DAY:

$$\text{DISCHARGE RATE (LBS/DAY)} = \frac{8.34}{N} \sum_{1}^{N} Q_1 C_1 ,$$

IN WHICH N IS THE NUMBER OF SAMPLES ANALYZED IN ANY CALENDAR DAY. Q_1 AND C_1 ARE THE FLOW RATE (MGD) AND THE CONSTITUENT CONCENTRATION (MG/L) RESPECTIVELY, WHICH ARE ASSOCIATED WITH EACH OF THE N GRAB SAMPLES WHICH MAY BE TAKEN IN ANY CALENDAR DAY. IF A COMPOSITE SAMPLE IS TAKEN, C_1 IS THE CONCENTRATION MEASURED IN THE COMPOSITE SAMPLE, AND Q_1 IS THE AVERAGE FLOW RATE OCCURRING DURING THE PERIOD OVER WHICH SAMPLES ARE COMPOSITED.

5. THE INITIAL DILUTION ZONE SHALL BE AS DEFINED IN THE WATER QUALITY CONTROL PLAN, OCEAN WATERS OF CALIFORNIA, ADOPTED BY THE STATE WATER RESOURCES CONTROL BOARD ON JULY 6, 1972.

6. DEGRADATION SHALL BE DETERMINED BY ANALYSIS OF THE EFFECTS OF WASTE DISCHARGE ON SPECIES DIVERSITY, POPULATION DENSITY, GROWTH ANOMALIES, DEBILITY, OR SUPPLANTING OF NORMAL SPECIES BY UNDESIRABLE PLANT AND ANIMAL SPECIES.

FOOTNOTE REFERENCES (CONT'D)

SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY, SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1

7. THE MONTHLY GEOMETRIC MEAN SHALL BE THE GEOMETRIC MEAN, USING THE RESULTS OF ANALYSES OF ALL SAMPLES COLLECTED DURING ANY 30 CONSECUTIVE CALENDAR DAY PERIOD.

8. THE WEEKLY GEOMETRIC MEAN SHALL BE THE GEOMETRIC MEAN, USING THE RESULTS OF ANALYSES OF ALL SAMPLES COLLECTED DURING ANY SEVEN (7) CONSECUTIVE CALENDAR DAY PERIOD.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 76 - 11
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
AND SAN DIEGO GAS AND ELECTRIC COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1
SAN DIEGO COUNTY

A. FISH ENTRAINMENT MONITORING

1. DURING HEAT TREATMENT PERIODS THE TOTAL WEIGHT OF EACH SPECIES OF FISH REMOVED FROM THE TRAVELING AND BAR SCREENS SHALL BE DETERMINED AND RECORDED.

   REPRESENTATIVE SUBSAMPLES OF EACH SPECIES COLLECTED SHALL BE TAKEN. THE NUMBER OF FISH IN EACH SUBSAMPLE SHALL BE RECORDED. THE LENGTH OF EACH FISH IN EACH SUBSAMPLE SHALL BE RECORDED.

   FOR SUBSAMPLES OF THOSE SPECIES CLASSIFIED BY THE STATE DEPARTMENT OF FISH AND GAME AS "RESIDENT" SPECIES, THE REPRODUCTIVE STATE OF EACH FISH SHALL BE DETERMINED AND RECORDED.

   RESULTS SHALL BE REPORTED TO THE REGIONAL BOARD ANNUALLY.

2. DURING THE FIRST THREE WEEKS OF NORMAL OPERATION FOLLOWING A HEAT TREATMENT, THE TOTAL WEIGHT AND NUMBER OF FISH, BY SPECIES, REMOVED FROM THE TRAVELING AND BAR SCREENS SHALL BE DETERMINED AND RECORDED FOR AT LEAST ONE CONTINUOUS 24-HOUR PERIOD PER WEEK. RESULTS SHALL BE REPORTED TO THE REGIONAL BOARD ANNUALLY.

3. DURING NORMAL OPERATION DURING THE PERIOD FROM THREE WEEKS AFTER A HEAT TREATMENT UNTIL THE NEXT HEAT TREATMENT, THE TOTAL WEIGHT AND NUMBER OF FISH, BY SPECIES, REMOVED FROM THE TRAVELING AND BAR SCREENS SHALL BE DETERMINED AND RECORDED FOR AT LEAST TWO CONTINUOUS 24-HOUR PERIODS PER WEEK. RESULTS SHALL BE REPORTED TO THE REGIONAL BOARD ANNUALLY.

B. COOLING WATER INTAKE MONITORING

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
TEMPERATURE	°F	MEASUREMENT	CONTINUOUS**	MONTHLY
TOTAL SUSPENDED SOLIDS*	MG/L	GRAB	MONTHLY	"
GREASE AND OIL *	"	"	"	"
TOTAL COPPER*	"	"	"	"

C. EFFLUENT MONITORING

1. DISCHARGE 001 (COMBINED DISCHARGE)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
FLOW	GPD	—	DAILY	MONTHLY
TEMPERATURE	°F	MEASUREMENT	CONTINUOUS **	"
TOTAL SUSPENDED SOLIDS*	MG/L	GRAB	MONTHLY	"
GREASE AND OIL *	LBS/DAY MG/L	"	"	"
TOTAL COPPER*	LBS/DAY MG/L	"	"	"
FREE AVAILABLE CHLORINE	LBS/DAY MG/L	"	"	"
pH	LBS/DAY UNITS	"	"	"
RADIOACTIVITY***				
TURBIDITY	JTU	"	SEMIANNUAL	SEMIANNUAL
METALS				
ARSENIC	MG/L	"	"	"
CADMIUM	"	"	"	"
TOTAL CHROMIUM	"	"	"	"
LEAD	"	"	"	"

NOTE: °F = DEGREES FAHRENHEIT
MG/L = MILLIGRAMS PER LITER
GPD = GALLONS PER DAY
LBS/DAY = POUNDS PER DAY
PCi/L = PICOCURIES PER LITER
JTU = JACKSON TURBIDITY UNITS

* COOLING WATER INTAKE SAMPLES AND EFFLUENT SAMPLES FROM DISCHARGE 001 TO BE COLLECTED SYNOPTICALLY.

** TEMPERATURE SHALL BE RECORDED AT A MINIMUM FREQUENCY OF ONCE EVERY TWO HOURS. THE AVERAGE AND MAXIMUM TEMPERATURE FOR EACH 24-HR. PERIOD SHALL BE REPORTED.

*** COPIES OF ALL REPORTS TO THE NRC PERTAINING TO MONITORING OF RADIOACTIVE WASTE DISPOSAL SHALL BE TRANSMITTED TO THE REGIONAL BOARD.

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
METALS (CONT'D)				
MERCURY	MG/L	GRAB	SEMIANNUAL	SEMIANNUAL
NICKEL	"	"	"	"
SILVER	"	"	"	"
ZINC	"	"	"	"
CYANIDE	"	"	"	"
PHENOLIC COMPOUNDS	"	"	"	"
AMMONIA (AS NITROGEN)	"	"	"	"
TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS*	"	"	"	"
TOXICITY CONCENTRATION	TU	"	"	"

2. DISCHARGE 001B (STEAM GENERATOR BLOWDOWN)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
FLOW	GPD	—	DAILY	MONTHLY
TOTAL SUSPENDED SOLIDS	MG/L LBS/DAY	24-HR. COMPOSITE	MONTHLY	"
GREASE AND OIL	MG/L LBS/DAY	GRAB	"	"
TOTAL COPPER**	MG/L LBS/DAY	24-HR. COMPOSITE	"	"
TOTAL IRON**	MG/L LBS/DAY	"	"	"

3. DISCHARGE 001C (LOW VOLUME WASTES)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
FLOW	GPD	—	DAILY	MONTHLY
TOTAL SUSPENDED SOLIDS	MG/L LBS/DAY	24-HR. COMPOSITE	MONTHLY	"
GREASE AND OIL	MG/L LBS/DAY	GRAB	"	"

NOTE: TU = TOXICITY UNITS

* TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS SHALL BE MEASURED BY SUMMING THE INDIVIDUAL CONCENTRATIONS OF DDT, DDD, DDE, ALDRIN, BHC, CHLORDANE, ENDRIN, HEPTACHLOR, LINDANE, DIELDRIN, POLYCHLORINATED BIPHENYLS, AND OTHER IDENTIFIABLE CHLORINATED HYDROCARBONS.

** DURING START-UP PERIODS, TOTAL COPPER AND TOTAL IRON SHALL BE ANALYZED DAILY.

4. DISCHARGE 001D (SECONDARILY TREATED DOMESTIC SEWAGE)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
FLOW	GPD	—	DAILY	MONTHLY
BIOCHEMICAL OXYGEN DEMAND (5 DAY 20°C)	MG/L LBS/DAY	3 GRABS*	MONTHLY	"
TOTAL SUSPENDED SOLIDS	MG/L LBS/DAY	"	"	"
PH	UNITS	"	"	"

5. DISCHARGE 001E (YARD DRAINS)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
OIL AND GREASE	MG/L	GRAB	MONTHLY	MONTHLY

D. RECEIVING WATER AND SEDIMENT MONITORING

RECEIVING WATER AND SEDIMENT MONITORING SHALL BE CONDUCTED AS SPECIFIED BELOW. STATION LOCATION, SAMPLING, SAMPLE PRESERVATION AND ANALYSIS, WHEN NOT SPECIFIED, SHALL BE BY METHODS DESCRIBED IN THE DISCHARGER'S REPORT TITLED "ENVIRONMENTAL SURVEILLANCE," SUBMITTED TO THE REGIONAL BOARD ON FEBRUARY 19, 1976, OR APPROVED BY THE EXECUTIVE OFFICER. THE MONITORING PROGRAM MAY BE MODIFIED BY THE EXECUTIVE OFFICER AT ANY TIME.

DISPERSION AREA STATIONS: THE DISPERSION AREA ZONES AND SAMPLING STATIONS ARE SHOWN ON FIGURES 1 AND 2. A NARRATIVE DESCRIPTION OF THE PRECISE LOCATIONS OF THE SURVEILLANCE ZONES AND STATIONS SHALL BE FURNISHED BY THE DISCHARGER WITHIN 180 DAYS AFTER THE ADOPTION OF THIS ORDER. ZONE AND STATION DESIGNATIONS AND THE FIGURE WHERE EACH IS SHOWN ARE AS FOLLOWS:

NOTE: MPN/100 ML = MOST PROBABLE NUMBER PER 100 MILLILITERS

* DURING THE DAY SHIFT, MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS.

ZONE	STATION	FIGURE
0A	0A-1 TO 0A-12	1
1A	1A-1, 1A-2	1
2A	2A-1, 2A-2	1
2B	2B-1	1
3A	3A-1	1
0A	1 TO 12, B0, X0, C0, D0	2
0B	13, 14, E0, F0	2
1A	18 TO 24	2
1B	25	2
2A	26 TO 32, 34 TO 36	2
2B	33	2
3A	16	2
3B	17	2
4A	37	2
4B	38	2

REFERENCE AREA STATIONS: REFERENCE AREA ZONES AND STATIONS ARE SHOWN ON FIGURES 1 AND 2. A NARRATIVE DESCRIPTION OF PRECISE LOCATIONS OF THE STATIONS SHALL BE FURNISHED BY THE DISCHARGER WITHIN 180 DAYS AFTER THE ADOPTION OF THIS ORDER. ZONE AND STATION DESIGNATIONS AND THE FIGURE WHERE EACH IS SHOWN ARE AS FOLLOWS:

ZONE	STATION	FIGURE
6	6-1 TO 6-5	1
6	39 TO 41	2
5	15	2

INTERTIDAL STATIONS: INTERTIDAL ZONES AND STATIONS ARE SHOWN ON FIGURE 1. A NARRATIVE DESCRIPTION OF THE PRECISE LOCATIONS OF THE STATIONS SHALL BE FURNISHED BY THE DISCHARGER WITHIN 180 DAYS AFTER THE ADOPTION OF THIS ORDER. ZONE AND STATION DESIGNATIONS AND THE FIGURE WHERE EACH IS SHOWN ARE AS FOLLOWS:

ZONE	STATION	FIGURE
0A	I-2, I-3	1
3A	I-1	1
2A	I-4	1
2A	I-5	1

1. RECEIVING WATER MONITORING SHALL BE CONDUCTED AS FOLLOWS:

DETERMINATIONS	UNITS	STATIONS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
pH	UNITS	0A-1, 0A-4, 6-1	GRAB	BIMONTHLY
TEMPERATURE	°F	0A-9, 6-4 (NEAR SURFACE, MIDDEPTH, NEAR BOTTOM)	---	EVERY TWO HOURS
		I-1, I-3, I-4, I-5	---	BIMONTHLY
		1 THROUGH 41 (SURFACE AND DEPTH PROFILE)	---	BIMONTHLY
		AERIAL INFRARED RADIOMETRY	---	ONCE PER CALENDAR QUARTER
LIGHT TRANSMITTANCE	METER (SECCHI DISK)	1 THROUGH 41, X0, C0, D0, E0, F0	GRAB	BIMONTHLY
	%/M	1 THROUGH 41, X0, C0, D0, E0, F0	GRAB	BIMONTHLY

NOTE: %/M = PERCENT PER METER

DETERMINATIONS	UNITS	STATIONS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
TURBIDITY	—	AERIAL PHOTOGRAPH	GRAB	ONCE PER CALENDAR QUARTER
DISSOLVED OXYGEN	MG/L	0A-1, 0A-4, 6-4	GRAB	BIMONTHLY
CHLORINE	MG/L	0A-1, 0A-9 THROUGH 0A-12, 6-4	GRAB	BIMONTHLY
CHLORINE DEMAND	MG/L	0A-1, 0A-9 THROUGH 0A-12, 6-4	GRAB	BIMONTHLY
COLIFORM	MPN/100 ML	X0, 36 AND AT STATIONS LOCATED 300 FEET (1) UP-COAST, (2) DOWNCOAST, (3) OFFSHORE, (4) IN-SHORE OF STATION X0	GRAB	BIMONTHLY
METALS				ONCE PER
CHROMIUM	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	CALENDAR QUARTER
COPPER	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
NICKEL	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
IRON	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
ZOOPLANKTON (WATER COLUMN)	IDENTIFICATION, AND ENUMERATION	0A-7, 0A-10, 1A-2, 1A-1, 2A-1, 2A-2, 6-4	—	BIMONTHLY
PHYTOPLANKTON (NEAR SURFACE)	IDENTIFICATION AND ENUMERATION	0A-7, 0A-10, 1A-2, 1A-1, 2A-1, 2A-2, 6-4	—	BIMONTHLY
PHYTOPLANKTON (NEAR BOTTOM)	IDENTIFICATION AND ENUMERATION	0A-7, 0A-10, 1A-2 1A-1, 2A-1, 2A-2, 6-4	—	BIMONTHLY
NEKTON	IDENTIFICATION	0A-2, 0A-6, 0A-8, 6-2 6-3, 6-4	—	ONCE PER CALENDAR QUARTER

2. BOTTOM SEDIMENT MONITORING SHALL BE CONDUCTED AS FOLLOWS:

DETERMINATIONS	UNITS	STATIONS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
METALS				
CHROMIUM	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
COPPER	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
NICKEL	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
IRON	MG/L	0A-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
BENTHIC ROCK HABITAT	IDENTIFICATION AND ENUMERATION	0A-1, 0A-3, 0A-5, 0A-7, 6-1 THROUGH 6-5, 28-1, 3A-1	—	ONCE PER CALENDAR QUARTER
KELP SED STUDY	—	6-5, 28-1, 3A-1	GRAB	ONCE PER CALENDAR QUARTER
SETTLING PLATES BIOTA	IDENTIFICATION AND ENUMERATION	0A-1, 6-4	—	ONCE PER CALENDAR QUARTER
INTERTIDAL ROCK HABITAT	IDENTIFICATION AND ENUMERATION	1-1 THROUGH 1-5	—	ONCE PER CALENDAR QUARTER

3. RECEIVING WATER AND SEDIMENT MONITORING REPORTS SHALL BE SUBMITTED TO THE BOARD ACCORDING TO THE DATES IN THE FOLLOWING SCHEDULE:

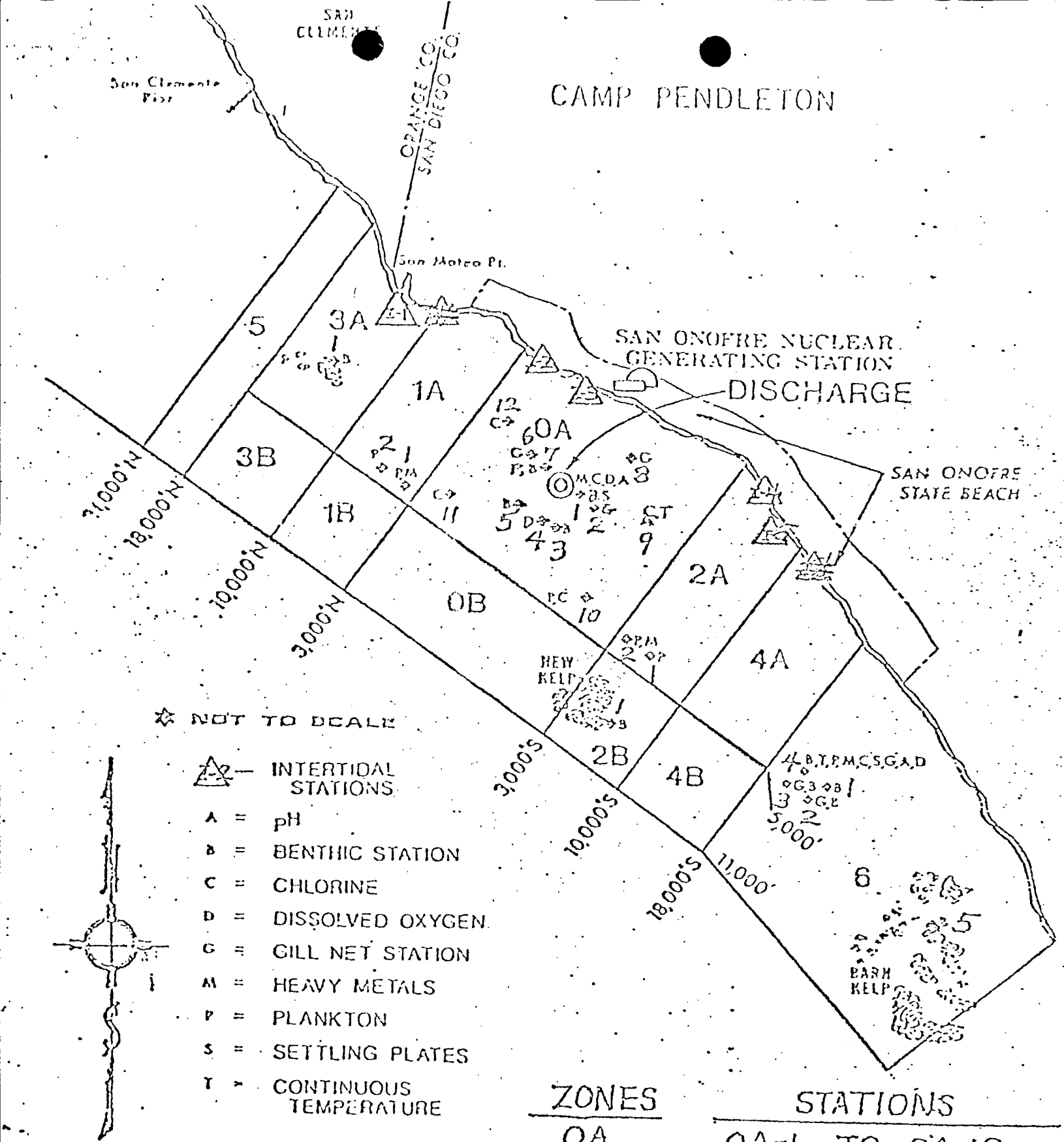
A. AN ANNUAL SUMMARY AND PRELIMINARY REPORT SHALL BE SUBMITTED BEFORE MARCH 31 OF EACH YEAR.

B. A REPORT CONTAINING DETAILED ANALYSES OF THE DATA SHALL BE SUBMITTED BY JULY 1 OF EACH YEAR.

C. THE ANNUAL REPORT REQUIREMENT IN THE "GENERAL PROVISIONS FOR REPORTING" WILL NOT APPLY TO THE RECEIVING WATER AND SEDIMENT MONITORING.

ORDERED BY Leonard Burtman

LEONARD BURTMAN
EXECUTIVE OFFICER
JUNE 14, 1976

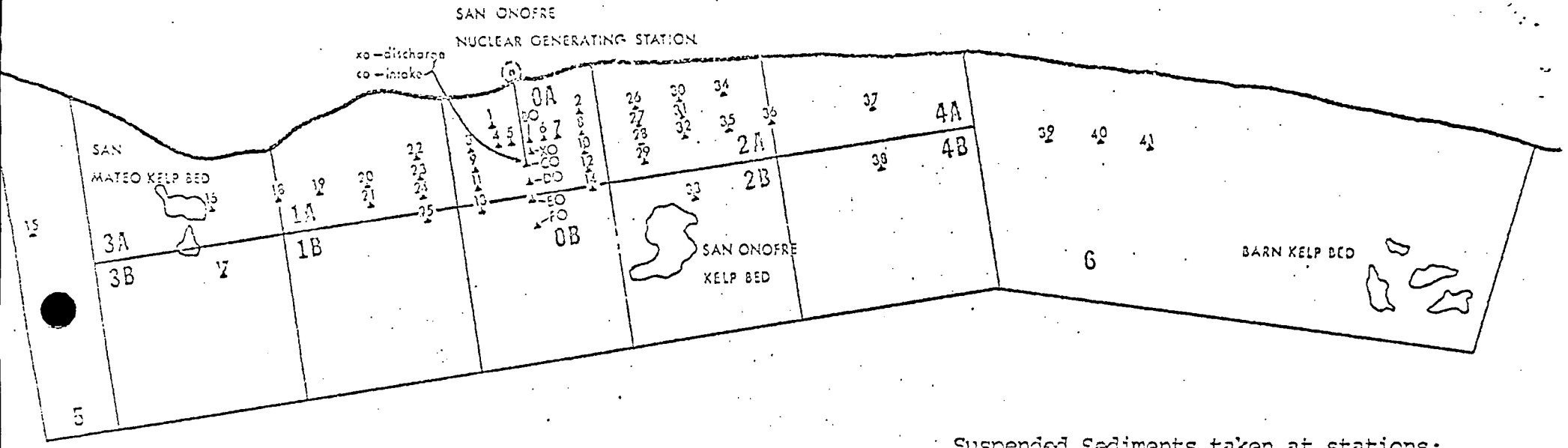


ZONES	STATIONS
0A	0A-1 TO 0A-12
1A	1A-1, 1A-2
2A	2A-1, 2A-2
2B	2B-1
3A	3A-1
6	6-1 TO 6-5

Figure 1

NITORING & REPORTING PROGRAM
No. 76-11

HYDROGRAPHIC MONITORING STATIONS



ENVIRONMENTAL
SURVEILLANCE ZONES

Suspended Sediments taken at stations:
1, 2, 10 & 14.

Bottom Sediments taken at stations:
1, 4, 5, 6, 7, 8, 9, 10, 11, 14, 23, 24, 27, 28, 35, BO, CO, DO & EO.

△ All temperature-depth profile stations and all turbidity stations.

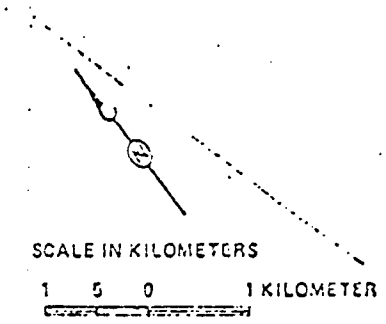


FIGURE 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

REPORTING REQUIREMENTS

1. THE DISCHARGER SHALL FILE WITH THE BOARD AND THE REGIONAL ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY TECHNICAL REPORTS ON SELF-MONITORING WORK PERFORMED ACCORDING TO THE DETAILED SPECIFICATIONS CONTAINED IN ANY MONITORING AND REPORTING PROGRAM AS DIRECTED BY THE EXECUTIVE OFFICER.

*2. THE DISCHARGER SHALL FILE A WRITTEN REPORT WITH THE BOARD WITHIN 90 DAYS AFTER THE AVERAGE DRY-WEATHER WASTE FLOW FOR ANY MONTH EQUALS OR EXCEEDS 75 PERCENT OF THE DESIGN CAPACITY OF HIS WASTE TREATMENT AND/OR DISPOSAL FACILITIES. THE DISCHARGER'S SENIOR ADMINISTRATIVE OFFICER SHALL SIGN A LETTER WHICH TRANSMITS THAT REPORT AND CERTIFIES THAT THE POLICYMAKING BODY IS ADEQUATELY INFORMED ABOUT IT. THE REPORT SHALL INCLUDE:

   AVERAGE DAILY FLOW FOR THE MONTH, THE DATE ON WHICH THE INSTANTANEOUS PEAK FLOW OCCURRED, THE RATE OF THAT PEAK FLOW, AND THE TOTAL FLOW FOR THAT DAY.

   THE DISCHARGER'S BEST ESTIMATE OF WHEN THE AVERAGE DAILY DRY-WEATHER FLOW RATE WILL EQUAL OR EXCEED THE DESIGN CAPACITY OF HIS FACILITIES.

   THE DISCHARGER'S INTENDED SCHEDULE FOR STUDIES, DESIGN, AND OTHER STEPS NEEDED TO PROVIDE ADDITIONAL CAPACITY FOR HIS WASTE TREATMENT AND/OR DISPOSAL FACILITIES BEFORE THE WASTE FLOW RATE EQUALS THE CAPACITY OF PRESENT UNITS. (REFERENCE: SECTIONS 13260, 13267(B), AND 13268, CALIFORNIA WATER CODE.)

**3. THE DISCHARGER SHALL NOTIFY THE BOARD NOT LATER THAN 180 DAYS IN ADVANCE OF IMPLEMENTATION OF ANY PLANS TO ALTER PRODUCTION CAPACITY OF THE PRODUCT LINE OF THE MANUFACTURING, PRODUCING OR PROCESSING FACILITY BY MORE THAN TEN PERCENT. SUCH NOTIFICATION SHALL INCLUDE ESTIMATES OF PROPOSED PRODUCTION RATE, THE TYPE OF PROCESS, AND PROJECTED EFFECTS ON EFFLUENT QUALITY. NOTIFICATION SHALL INCLUDE SUBMITTAL OF A NEW REPORT OF WASTE DISCHARGE AND APPROPRIATE FILING FEE.

*4. THE DISCHARGER SHALL NOTIFY THE BOARD OF (A) NEW INTRODUCTION INTO SUCH WORKS OF POLLUTANTS FROM A SOURCE WHICH WOULD BE A NEW SOURCE AS DEFINED IN SECTION 306 OF THE FEDERAL WATER POLLUTION CONTROL ACT, OR AMENDMENTS THERETO, IF SUCH SOURCE WERE DISCHARGING POLLUTANTS TO THE WATERS OF THE UNITED STATES, (B) NEW INTRODUCTIONS OF POLLUTANTS INTO SUCH WORKS FROM A SOURCE WHICH WOULD BE SUBJECT TO SECTION 301 OF THE FEDERAL WATER

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* PUBLICLY OWNED FACILITIES ONLY
** FOR NONPUBLIC FACILITIES ONLY

POLLUTION CONTROL ACT, OR AMENDMENTS THERETO, IF IT WERE DISCHARGING SUCH POLLUTANTS TO THE WATERS OF THE UNITED STATES, (c) A SUBSTANTIAL CHANGE IN THE VOLUME OR CHARACTER OF POLLUTANTS BEING INTRODUCED INTO SUCH WORKS BY A SOURCE INTRODUCING POLLUTANTS INTO SUCH WORKS AT THE TIME THE WASTE DISCHARGE REQUIREMENTS WERE ADOPTED. NOTICE SHALL INCLUDE A DESCRIPTION OF THE QUANTITY AND QUALITY OF POLLUTANTS AND THE IMPACT OF SUCH CHANGE ON THE QUANTITY AND QUALITY OF EFFLUENT FROM SUCH PUBLICLY OWNED TREATMENT WORKS. A SUBSTANTIAL CHANGE IN VOLUME IS CONSIDERED AN INCREASE OF TEN PERCENT IN THE MEAN DRY-WEATHER FLOW RATE. THE DISCHARGER SHALL FORWARD A COPY OF SUCH NOTICE DIRECTLY TO THE REGIONAL ADMINISTRATOR.

5. THE DISCHARGER SHALL FILE WITH THE BOARD A REPORT OF WASTE DISCHARGE AT LEAST 120 DAYS BEFORE MAKING ANY MATERIAL CHANGE OR PROPOSED CHANGE IN THE CHARACTER, LOCATION OR VOLUME OF DISCHARGE.

**6. THIS BOARD REQUIRES THE DISCHARGER TO FILE WITH THE BOARD, WITHIN 90 DAYS AFTER THE EFFECTIVE DATE OF THIS ORDER, A TECHNICAL REPORT ON HIS PREVENTIVE (FAIL-SAFE) AND CONTINGENCY (CLEANUP) PLANS FOR CONTROLLING ACCIDENTAL DISCHARGES, AND FOR MINIMIZING THE EFFECT OF SUCH EVENTS. THE TECHNICAL REPORT SHOULD:

IDENTIFY THE POSSIBLE SOURCES OF ACCIDENTAL LOSS, UNTREATED WASTE BYPASS, AND CONTAMINATED DRAINAGE. LOADING AND STORAGE AREAS, POWER OUTAGE, WASTE TREATMENT UNIT OUTAGE, AND FAILURE OF PROCESS EQUIPMENT, TANKS AND PIPES SHOULD BE CONSIDERED.

EVALUATE THE EFFECTIVENESS OF PRESENT FACILITIES AND PROCEDURES AND STATE WHEN THEY BECAME OPERATIONAL.

DESCRIBE FACILITIES AND PROCEDURES NEEDED FOR EFFECTIVE PREVENTIVE AND CONTINGENCY PLANS.

PREDICT THE EFFECTIVENESS OF THE PROPOSED FACILITIES AND PROCEDURES AND PROVIDE AN IMPLEMENTATION SCHEDULE CONTAINING INTERIM AND FINAL DATES WHEN THEY WILL BE CONSTRUCTED, IMPLEMENTED, OR OPERATIONAL. (REFERENCE: SECTIONS 13267(B) AND 13268, CALIFORNIA WATER CODE.)

THIS BOARD, AFTER REVIEW OF THE TECHNICAL REPORT, MAY ESTABLISH CONDITIONS WHICH IT DEEMS NECESSARY TO CONTROL ACCIDENTAL DISCHARGES AND TO MINIMIZE THE EFFECTS OF SUCH EVENTS. SUCH CONDITIONS MAY BE INCORPORATED AS PART OF THIS ORDER, UPON NOTICE TO THE DISCHARGER.

**7. THE DISCHARGER SHALL SUBMIT TO THE BOARD, BY JANUARY 30 OF EACH YEAR, AN ANNUAL SUMMARY OF THE QUANTITIES OF ALL CHEMICALS LISTED BY BOTH TRADE AND CHEMICAL NAMES, WHICH ARE USED FOR COOLING AND/OR BOILING WATER TREATMENT AND WHICH ARE DISCHARGED.

** FOR NONPUBLIC FACILITIES ONLY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

STANDARD PROVISIONS

1. THE REQUIREMENTS PRESCRIBED HEREIN DO NOT AUTHORIZE THE COMMISSION OF ANY ACT CAUSING INJURY TO THE PROPERTY OF ANOTHER, NOR PROTECT THE DISCHARGER FROM HIS LIABILITIES UNDER FEDERAL, STATE, OR LOCAL LAWS, NOR GUARANTEE THE DISCHARGER A CAPACITY RIGHT IN THE RECEIVING WATERS.

2. THE DISCHARGE OF ANY RADIOLOGICAL, CHEMICAL, OR BIOLOGICAL WARFARE AGENT OR HIGH LEVEL RADIOLOGICAL WASTE IS PROHIBITED.

*3. THE DISCHARGER SHALL REQUIRE ANY INDUSTRIAL USER OF THE TREATMENT WORKS TO COMPLY WITH APPLICABLE SERVICE CHARGES AND TOXIC AND PRETREATMENT STANDARDS PROMULGATED IN ACCORDANCE WITH SECTIONS 204(B), 307, AND 308 OF THE FEDERAL WATER POLLUTION CONTROL ACT OR AMENDMENTS THERETO. THE DISCHARGER SHALL REQUIRE EACH INDIVIDUAL USER TO SUBMIT PERIODIC NOTICE (OVER INTERVALS NOT TO EXCEED NINE MONTHS) OF PROGRESS TOWARD COMPLIANCE WITH APPLICABLE TOXIC AND PRETREATMENT STANDARDS DEVELOPED PURSUANT TO THE FEDERAL WATER POLLUTION CONTROL ACT OR AMENDMENTS THERETO. THE DISCHARGER SHALL FORWARD A COPY OF SUCH NOTICE TO THE BOARD AND THE REGIONAL ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY.

4. THE DISCHARGER SHALL PERMIT THE REGIONAL BOARD:

   (A) ENTRY UPON PREMISES IN WHICH AN EFFLUENT SOURCE IS LOCATED OR IN WHICH ANY REQUIRED RECORDS ARE KEPT;

   (B) ACCESS TO COPY ANY RECORDS REQUIRED TO BE KEPT UNDER TERMS AND CONDITIONS OF THIS ORDER;

   (C) INSPECTION OF MONITORING EQUIPMENT OR RECORDS, AND

   (D) SAMPLING OF ANY DISCHARGE.

5. ALL DISCHARGES AUTHORIZED BY THIS ORDER SHALL BE CONSISTENT WITH THE TERMS AND CONDITIONS OF THIS ORDER. THE DISCHARGE OF ANY POLLUTANT MORE FREQUENTLY THAN OR AT A LEVEL IN EXCESS OF THAT IDENTIFIED AND AUTHORIZED BY THIS ORDER SHALL CONSTITUTE A VIOLATION OF THE TERMS AND CONDITIONS OF THIS ORDER.

6. THE DISCHARGER SHALL MAINTAIN IN GOOD WORKING ORDER AND OPERATE AS EFFICIENTLY AS POSSIBLE ANY FACILITY OR CONTROL SYSTEM INSTALLED BY THE DISCHARGER TO ACHIEVE COMPLIANCE WITH THE WASTE DISCHARGE REQUIREMENTS.

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* PUBLICLY OWNED FACILITIES ONLY.

7. COLLECTED SCREENINGS, SLUDGES, AND OTHER SOLIDS REMOVED FROM LIQUID WASTES SHALL BE DISPOSED OF AT A LEGAL POINT OF DISPOSAL, AND IN ACCORDANCE WITH THE PROVISIONS OF DIVISION 7.5 OF THE CALIFORNIA WATER CODE. FOR THAT PURPOSE OF THIS REQUIREMENT, A LEGAL POINT OF DISPOSAL IS DEFINED AS ONE FOR WHICH WASTE DISCHARGE REQUIREMENTS HAVE BEEN PRESCRIBED BY A REGIONAL WATER QUALITY CONTROL BOARD AND WHICH IS IN FULL COMPLIANCE THEREWITH.

8. AFTER NOTICE AND OPPORTUNITY FOR A HEARING, THIS ORDER MAY BE TERMINATED OR MODIFIED FOR CAUSE, INCLUDING, BUT NOT LIMITED TO:

   (A) VIOLATION OF ANY TERM OR CONDITION CONTAINED IN THIS ORDER;

   (B) OBTAINING THIS ORDER BY MISREPRESENTATION, OR FAILURE TO DISCLOSE FULLY ALL RELEVANT FACTS;

   (C) A CHANGE IN ANY CONDITION THAT REQUIRES EITHER A TEMPORARY OR PERMANENT REDUCTION OR ELIMINATION OF THE AUTHORIZED DISCHARGE.

9. IF A TOXIC EFFLUENT STANDARD OR PROHIBITION (INCLUDING ANY SCHEDULE OF COMPLIANCE SPECIFIED IN SUCH EFFLUENT STANDARD OR PROHIBITION) IS ESTABLISHED UNDER SECTION 307(A) OF THE FEDERAL WATER POLLUTION CONTROL ACT, OR AMENDMENTS THERETO, FOR A TOXIC POLLUTANT WHICH IS PRESENT IN THE DISCHARGE AUTHORIZED HEREIN AND SUCH STANDARD OR PROHIBITION IS MORE STRINGENT THAN ANY LIMITATION UPON SUCH POLLUTANT IN THIS ORDER, THE BOARD WILL REVISE OR MODIFY THIS ORDER IN ACCORDANCE WITH SUCH TOXIC EFFLUENT STANDARD OR PROHIBITION AND SO NOTIFY THE DISCHARGER.

10. THERE SHALL BE NO DISCHARGE OF HARMFUL QUANTITIES OF OIL OR HAZARDOUS SUBSTANCES, AS SPECIFIED BY REGULATION ADOPTED PURSUANT TO SECTION 311 OF THE FEDERAL WATER POLLUTION CONTROL ACT, OR AMENDMENTS THERETO.

11. IN THE EVENT THE DISCHARGER IS UNABLE TO COMPLY WITH ANY OF THE CONDITIONS OF THIS ORDER DUE TO:

   (A) BREAKDOWN OF WASTE TREATMENT EQUIPMENT;

   (B) ACCIDENTS CAUSED BY HUMAN ERROR OR NEGLIGENCE; OR

   (C) OTHER CAUSES SUCH AS ACTS OF NATURE,

   THE DISCHARGER SHALL NOTIFY THE EXECUTIVE OFFICER BY TELEPHONE AS SOON AS HE OR HIS AGENTS HAVE KNOWLEDGE OF THE INCIDENT AND CONFIRM THIS NOTIFICATION IN WRITING WITHIN TWO WEEKS OF THE TELEPHONE NOTIFICATION. THE WRITTEN NOTIFICATION SHALL INCLUDE PERTINENT INFORMATION EXPLAINING REASONS FOR THE NONCOMPLIANCE AND SHALL INDICATE WHAT STEPS WERE TAKEN TO CORRECT THE PROBLEM AND THE DATES THEREOF, AND WHAT STEPS ARE BEING TAKEN TO PREVENT THE PROBLEM FROM RECURRING.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

GENERAL MONITORING AND REPORTING PROVISIONS

GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

UNLESS OTHERWISE NOTED, ALL SAMPLING, SAMPLE PRESERVATION, AND ANALYSES SHALL CONFORM TO THE U. S. ENVIRONMENTAL PROTECTION AGENCY APPROVED TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS DESCRIBED IN PART 136, VOLUME 38 (No. 199) OF FEDERAL REGISTER PUBLISHED ON OCTOBER 16, 1973, OR THE LATEST EDITION OF FEDERAL REGISTER, OR AS APPROVED BY THE EXECUTIVE OFFICER. ALL ANALYSES SHALL BE PERFORMED IN A LABORATORY CERTIFIED TO PERFORM SUCH ANALYSES BY THE CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH OR A LABORATORY APPROVED BY THE EXECUTIVE OFFICER.

EFFLUENT SAMPLES SHALL BE TAKEN DOWNSTREAM OF ANY ADDITION TO THE TREATMENT WORKS AND PRIOR TO MIXING WITH THE RECEIVING WATERS.

THE DISCHARGER SHALL CALIBRATE AND PERFORM MAINTENANCE PROCEDURES ON ALL MONITORING INSTRUMENTS AND EQUIPMENT TO INSURE ACCURACY OF MEASUREMENTS, OR SHALL INSURE THAT BOTH ACTIVITIES WILL BE CONDUCTED.

A GRAB SAMPLE IS DEFINED AS AN INDIVIDUAL SAMPLE COLLECTED IN FEWER THAN 15 MINUTES.

A COMPOSITE SAMPLE IS DEFINED AS A COMBINATION OF NO FEWER THAN EIGHT INDIVIDUAL SAMPLES OBTAINED OVER THE SPECIFIED SAMPLING PERIOD. THE VOLUME OF EACH INDIVIDUAL SAMPLE IS PROPORTIONAL TO THE DISCHARGE FLOW RATE AT THE TIME OF SAMPLING. THE SAMPLING PERIOD SHALL EQUAL THE DISCHARGE PERIOD, OR 24 HOURS, WHICHEVER PERIOD IS SHORTER.

GENERAL PROVISIONS FOR REPORTING

FOR EVERY ITEM WHERE THE REQUIREMENTS ARE NOT MET, THE DISCHARGER SHALL SUBMIT A STATEMENT OF THE ACTIONS UNDERTAKEN OR PROPOSED WHICH WILL BRING THE DISCHARGE INTO FULL COMPLIANCE WITH REQUIREMENTS AT THE EARLIEST TIME AND SUBMIT A TIME-TABLE FOR CORRECTION.

BY JANUARY 30 OF EACH YEAR, THE DISCHARGER SHALL SUBMIT AN ANNUAL REPORT TO THE BOARD. THE REPORT SHALL CONTAIN BOTH TABULAR AND GRAPHICAL SUMMARIES OF THE MONITORING DATA OBTAINED DURING THE PREVIOUS YEAR. IN ADDITION, THE DISCHARGER SHALL DISCUSS THE COMPLIANCE RECORD AND THE CORRECTIVE ACTIONS TAKEN OR PLANNED WHICH MAY BE NEEDED TO BRING THE DISCHARGE INTO FULL COMPLIANCE WITH THE WASTE DISCHARGE REQUIREMENTS.

GENERAL MONITORING AND REPORTING PROVISIONS

THE DISCHARGER SHALL MAINTAIN ALL SAMPLING AND ANALYTICAL RESULTS, INCLUDING STRIP CHARTS; DATE, EXACT PLACE, AND TIME OF SAMPLING; DATE ANALYSES WERE PERFORMED; ANALYST'S NAME; ANALYTICAL TECHNIQUES USED; AND RESULTS OF ALL ANALYSES. SUCH RECORDS SHALL BE RETAINED FOR A MINIMUM OF THREE YEARS. THIS PERIOD OF RETENTION SHALL BE EXTENDED DURING THE COURSE OF ANY UNRESOLVED LITIGATION REGARDING THIS DISCHARGE OR WHEN REQUESTED BY THE BOARD AND THE REGIONAL ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY. MONITORING RESULTS SHALL BE SUBMITTED ON FORMS PROVIDED BY THE BOARD.

MONITORING REPORTS SHALL BE SIGNED BY:

(A) IN THE CASE OF CORPORATIONS, BY A PRINCIPAL EXECUTIVE OFFICER AT LEAST OF THE LEVEL OF VICE-PRESIDENT OR HIS DULY AUTHORIZED REPRESENTATIVE IS RESPONSIBLE FOR THE OVERALL OPERATION OF THE FACILITY FROM WHICH THE DISCHARGE ORIGINATES;

(B) IN THE CASE OF A PARTNERSHIP, BY A GENERAL PARTNER;

(C) IN THE CASE OF A SOLE PROPRIETORSHIP, BY THE PROPRIETOR;

(D) IN THE CASE OF A MUNICIPAL, STATE OR OTHER PUBLIC FACILITY, BY EITHER A PRINCIPAL EXECUTIVE OFFICER, RANKING ELECTED OFFICIAL, OR OTHER DULY AUTHORIZED EMPLOYEE.

THE DISCHARGER SHALL MAIL A COPY OF EACH MONITORING REPORT ON THE APPROPRIATE FORM TO BE SUPPLIED BY THE BOARD TO:

EXECUTIVE OFFICER
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
6154 MISSION GORGE ROAD, SUITE 205
SAN DIEGO, CALIFORNIA 92120

REGIONAL ADMINISTRATOR
ENVIRONMENTAL PROTECTION AGENCY
100 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA 94111

ATTENTION: PERMITS BRANCH

DISCHARGER SAN ONOFRE NUCLEAR GENERATING STATION UNIT 1 ORDER NO. [redacted]-11 NPDES NO. CA0001228

DISCHARGE NO. 001 SAMPLE LOCATION

REPORT FREQUENCY MONTHLY DUE

FOR REPORTING PERIOD

				Monthly Average		Daily Maximum	
Constituents	Units	Sample Type	Day/Time of Sample	Sample Value	Required Value	Sample Value	Required Value
Intake 1/							
Total Suspended Solids	mg/L	grab	✓	✓			
Grease and Oil	"	"	✓	✓			
Total Copper	"	"	✓	✓			
Discharge 001 1/ 4/	mg/L	grab	✓	✓			
Total Suspended Solids	lbs/day	"	✓	✓			
Grease and Oil	mg/L	"	✓	✓			
	lbs/day	"	✓	✓			
Total Copper	mg/L	"	✓	✓			
	lbs/day	"	✓	✓			
Free Available Chlorine	mg/L	"	✓	✓	0.2	✓	0.5
	lbs/day	"	✓	✓	749	✓	2102
pH	Units	"	✓	✓	6.0 to 9.0	✓	

1/ Cooling water intake samples and effluent samples from Discharge 001 to be collected synoptically.

4/ Copies of all reports to the NRC pertaining to monitoring of radiactive waste disposal shall be transmitted to the Regional Board.

SCHARGER SAN ONOFRE NUCLEAR GENERATING STATION UNIT 1 ORDER NO. [redacted]11 NPDES NO. CA0001228

ISCHARGE NO. 001B, 001C SAMPLE LOCATION

EPORT FREQUENCY Monthly DUE

OR REPORTING PERIOD

ONSTITUENTS	UNITS	SAMPLE TYPE	DAY/TIME OF SAMPLE	MONTHLY AVERAGE		DAILY MAXIMUM	
				SAMPLE VALUE	REQUIRED VALUE	SAMPLE VALUE	REQUIRED VALUE
ISCHARGE 001B							
OTAL SUSPENDED SOLIDS	MG/L	24-HR. COMPOSITE	✓	✓	30 3/	✓	100 3/
	LBS/DAY	24-HR. COMPOSITE	✓	✓	5.41 3/	✓	414 3/
REASE AND OIL	MG/L	GRAB	✓	✓	15 3/	✓	20 3/
	LBS/DAY	"	✓	✓	2.7 3/	✓	82.9 3/
TOTAL COPPER 2/	MG/L	24-HR. COMPOSITE	✓	✓	1.0 3/	✓	1.0 3/
	LBS/DAY	24-HR. COMPOSITE	✓	✓	0.18 3/	✓	0.18 3/
TOTAL IRON 2/	MG/L	24-HR. COMPOSITE	✓	✓	1.0 3/	✓	1.0 3/
	LBS/DAY	24-HR. COMPOSITE	✓	✓	0.18 3/	✓	4.14 3/
ISCHARGE 001C							
OTAL SUSPENDED SOLIDS	MG/L	24-HR. COMPOSITE	✓	✓	30	✓	100
	LBS/DAY	24-HR. COMPOSITE	✓	✓	3,329	✓	11,095
REASE AND OIL	MG/L	GRAB	✓	✓	15	✓	
	LBS/DAY	"	✓	✓	1,664	✓	2,219

2/ DURING START-UP PERIODS, ANALYZE DAILY.

3/ AFTER JULY 1, 1977.

DISCHARGER SELF-MONITORING REPORT 1084 (12-74)

SAN ONOFRE NUCLEAR GENERATING STATION

DISCHARGER UNIT 1 ORDER NO. 80-11 NPDES NO. CA0001228

DISCHARGE NO. 001D, 001E SAMPLE LOCATION

REPORT FREQUENCY MONTHLY DUE

FOR REPORTING PERIOD

CONSTITUENTS	UNITS	SAMPLE TYPE	DAY/TIME OF SAMPLE	AVERAGE		DAILY MAXIMUM	
				SAMPLE VALUE	REQUIRED VALUE	SAMPLE VALUE	REQUIRED VALUE
DISCHARGE 001D							
BIOCHEMICAL OXYGEN DEMAND	MG/L	GRAB	✓	✓	30	✓	45
	LBS/DAY	"	✓	✓	4.38	✓	6.57
	MG/L	"	✓	✓	30		
	LBS/DAY	"	✓	✓	4.38	✓	✓
	MG/L	"	✓	✓	30		
	LBS/DAY	"	✓	✓	4.38		
TOTAL SUSPENDED SOLIDS	MG/L	"	✓	✓	30	✓	45
	LBS/DAY	"	✓	✓	4.38	✓	6.57
	MG/L	"	✓	✓	30		
	LBS/DAY	"	✓	✓	4.38	✓	✓
	MG/L	"	✓	✓	30		
	LBS/DAY	"	✓	✓	4.38		
pH	UNITS	"	✓ ✓ ✓	✓ ✓ ✓	6.0 TO 9.0	✓	6.0 TO 9.0
DISCHARGE 001E							
GREASE & OIL	MG/L	GRAB	✓	✓	10	✓	15

SIGNED (UNDER PENALTY OF PERJURY)

DATE

SAN ONOFRE NUCLEAR GENERATING STATION

DISCHARGER: UNIT 1 ORDER NO. 78-11 NPDES NO. CA0001228

DISCHARGE NO. 001 SAMPLE LOCATION

REPORT FREQUENCY SEMIANNUAL DUE

FOR REPORTING PERIOD

				Concentrations Not To Be Exceeded More Than			
				50% of the Time		10% of the Time	
Constituents	Units	Sample Type	Day/Time of Sample	Sample Value	Required Value	Sample Value	Required Value
Turbidity	JTU	GRAB	✓	✓			
Metals							
Arsenic	mg/L	"	✓	✓	0.01	✓	0.02
Cadmium	"	"	✓	✓	0.02	✓	0.03
Total Chromium	"	"	✓	✓	0.005	✓	0.01
Lead	"	"	✓	✓	0.1	✓	0.2
Mercury	"	"	✓	✓	0.001	✓	0.002
Nickel	"	"	✓	✓	0.1	✓	0.02
Silver	"	"	✓	✓	0.02	✓	0.04
Zinc	"	"	✓	✓	0.3	✓	0.5
Cyanide	"	"	✓	✓	0.1	✓	0.2
Phenolic Compounds	"	"	✓	✓	0.5	✓	1.0
Ammonia (as N)	"	"	✓	✓	40	✓	60
Total Identifiable Chlorinated Hydrocarbons	"	"	✓	✓	0.002	✓	0.004
Toxicity Concentration	TU	"	✓	✓	1.5	✓	2.0

SIGNED (UNDER PENALTY OF PERJURY)

DATE

DISCHARGER MONITORING REPORT FO[illegible] (4-73)

DAILY LOG

SAN ONOFRE NUCLEAR GENERATING STATION
UNIT 1

DISCHARGER _____ ADDRESS _____

MONTH/YEAR _____ ORDER/RESOLUTION 76-11 REPORT FREQUENCY MONTHLY

DATE	DISCHARGE FLOW (MGD)					DISCHARGE 001 TEMP. MINUS INTAKE TEMP. = Δ T (°F)	
	001	001B	001C	001D	001E	DAILY AVERAGE 1/ T (REQT 25°F)	DAILY MAXIMUM 2/ Δ T
1							
2							
3							
4							
5							
6							
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26							
27							
28							
29							
30							
31							
AVERAGE							

1/ RECORD DAILY VALUES HERE. ATTACH HOURLY VALUES ON SEPARATE SHEETS.

2/ REQUIREMENTS = 125°F DURING HEAT TREATMENTS.

SIGNED _____ DATE _____

(UNDER PENALTY OF PERJURY)

DISCHARGER MONITORING REPORT FORM (6-76)

DISCHARGER SAN ONOFRE NUCLEAR GENERATING STATION UNITS 1, 2 & 3 ORDER NOS. 76-11 & 76-21

NPDES NOS. CA0001228 (UNIT 1) AND CA0003395 (UNITS 2 & 3)

REPORT FREQUENCY ANNUAL DUE MARCH 31, _____

FOR REPORTING PERIOD _____

NOTE: PLEASE ATTACH THE ANNUAL SUMMARY AND PRELIMINARY RECEIVING WATER REPORT AS SPECIFIED BY SECTION D OF THE MONITORING AND REPORTING PROGRAM OF ORDER NO. 76-11 (21). USE THIS FORM AS A COVER SHEET AND SUBMIT THE REPORT TO THIS OFFICE BY MARCH 31, _____.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 1 TO ORDER NO. 76 - 11

NPDES NO. CA0001228

AN ADDENDUM MODIFYING THE WASTE DISCHARGE REQUIREMENTS OF ORDER NO. 76-11 FOR SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1 TO ALLOW FOR THE INCLUSION OF STARTUP FLUSH AND TEST WASTEWATERS FROM UNITS NOS. 2 AND 3 CONSTRUCTION

The California Regional Water Quality Control Board, San Diego Region (hereafter Regional Board), finds that:

1. On June 14, 1976, this Regional Board adopted Order No. 76-11 (NPDES No. CA0001228), WASTE DISCHARGE REQUIREMENTS FOR SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1, SAN DIEGO COUNTY.

2. The existing discharge is located at Latitude 33°21'34" North and Longitude 117°33'46" West and consists of a combination of the following discharges for a total of 461.1 million gallons per day (MGD): 001A - Cooling Water of 447.7 MGD; 001B - Steam Generator Blowdown of 0.0216 MGD; 001C - Low Volume Wastes of 13.3 MGD; 001D - Secondarily Treated Domestic Sewage of 0.0175 MGD; and 001E - Yard Drainage of 0.087 MGD.

3. On October 12, 1977, the discharger submitted a Report of Waste Discharge in application for a modification of the existing NPDES Permit.

4. The discharger proposes to add a discharge to the San Onofre Nuclear Generating Station Unit 1 outfall consisting of wastewaters associated with the construction of the adjacent generating Unit Nos. 2 and 3. The wastewaters would consist of startup hydrostatic test and flush waters and possibly concrete aggregate wash waters; the wastewater volume would average 0.083 MGD with the daily maximum flow approaching 0.573 MGD.

5. The discharger reports that the Unit Nos. 2 and 3 testing activity would result in an intermittent discharge, into the Unit No. 1 outfall, from December 1977 until 1982. The total volume of hydrostatic test and flush waters to be discharged would be approximately 17,285,000 gallons.

6. The potable water supplied by the City of San Clemente would be used to flush all structures except for pipelines made of stainless steel. A demineralizer unit (cation and anion exchange) would provide demineralized water for the testing and flushing of the stainless steel lines.

Spent regenerants, containing impurities present in the potable water plus regenerating acids and bases, would be treated to raise the pH to acceptable levels and then discharge with the flush and test wastes to the Unit No. 1 outfall.

7. The demineralized water used to test and flush the stainless steel lines would contain hydrazine (an oxygen scavenger) in concentrations ranging from 30 to 50 mg/ℓ. The discharger conducted a toxicity test of hydrazine and found that the 96-hour TL_m (50% survival) to be 3.4 mg/ℓ for the three spine stickleback (Gasterosteus aculeatus).

8. The discharger reports that approximately 20 percent of the volume of wastewater to be discharged from the hydrostatic test and flush operation would contain hydrazine.

9. The discharger reports that under normal operating conditions the flow in the Unit No. 1 circulating system is 320,000 gpm and that the largest instantaneous flow from the test and flush operation would be 1,100 gpm thus providing a dilution factor of 290 to 1.

10. The discharger reports that if the flows through Unit No. 1 are reduced (for maintainance, emergencies, etc.) so that the diluted concentration of hydrazine would exceed 1.0 mg/ℓ, the test and flush wastewaters would be diverted to an existing 4.0 million gallon impervious pond for storage until the Unit No. 1 circulating flows would allow a diluted discharge to continue. Wastewater from a sand and gravel washing plant is also discharged to this impervious pond; therefore, any discharge of test and flush wastewater from the pond would also contain wastewater from the sand and gravel washing operation. The discharger reports that the wastewater from the sand and gravel washing plant has a turbidity of 95 Jackson Turbidity Units (JTU) and that the effluent from the pond would have a turbidity of 5 JTU.

11. In addition to the wastes described above (spent regenerating compounds, hydrazine, and turbidity), the discharger reports that the hydrostatic flush and test wastewater could contain rust particles, oil and grease, and additional turbidities flushed from the pipelines by the wash waters.

12. The Regional Board has notified the discharger and all known interested parties of its intent to allow the discharge of hydrostatic test and flush wastewaters to the Unit No. 1 outfall.

13. The Regional Board in a public meeting heard and considered all comments pertaining to the proposed action.

Addendum No. 1 to Order No. 76-11

IT IS HEREBY ORDERED, That Order No. 76-11 (NPDES Permit No. CA0000122) is modified to include the discharge of hydrostatic test and flush wastewaters to the Unit No. 1 outfall as follows:

1. The allowable flow rate of discharge 001 (Combined Discharge) is increased from 461.1 MGD to 461.7 MGD per operating day.

2. Discharge 001F (Hydrostatic Test and Flush at Unit Nos. 2 and 3) is added to Order No. 76-11.

   (a) The concentration of hydrazine (after dilution) in Unit No. 1 outfall shall not exceed 0.34 mg/ℓ.

   (b) The discharge of hydrostatic test and flush waters shall conform to the following:

		Limitation	
Constitutents	Units	30-day[1/] average	Daily[2/] maximum
Flow	gpd	83,000	573,000
Grease & Oil	mg/ℓ	10	15
	lbs/day[3/]	6.9	71.7
Floating particulates	mg/ℓ	1.0	2.0
	lbs/day	0.7	9.6
Suspended solids	mg/ℓ	50	75
	lbs/day	34.6	358
Settleable solids	mℓ/ℓ	0.1	0.2
Turbidity	JTU	50	75
pH	units	from 6.0 to 9.0 at all times	
Hydrazine	mg/ℓ	50	50
Ammonia	mg/ℓ	40	60
	lbs/day	27.6	287

   (c) Discharge 001F shall not cause the Receiving Water Limitations of Order No. 76-11 to be violated.

   (d) The discharger shall comply with the additions to Self-Monitoring and Reporting Program No. 76-11 as specified by the Executive Officer.

Note: mℓ/ℓ = milliliters per liter
gpd = gallons per day
mg/ℓ = milligrams per liter
lbs/day = pounds per day
JTU = Jackson Turbidity Units

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

Footnote references for waste discharge requirements of Addendum No. 1 to Order No. 76-11, (NPDES Permit No. CA0001228 - Southern California Edison Company and San Diego Gas and Electric Company, San Onofre Nuclear Generating Station, Unit 1).

1. The 30-day average shall be the arithmetic mean, using the results of analyses of all samples collected during any 30 consecutive calendar day period.

2. The daily maximum shall be determined from the results of a single grab sample or from the result of a single composite sample collected over a period of 24 hours.

3. The discharge rate in pounds per day is obtained from the following calculation for any calendar day:

$$\text{Discharge Rate (lbs/day)} = \frac{8.34}{N} \sum_{1}^{N} Q_1 C_1 ,$$

in which N is the number of samples analyzed in any calendar day. Q_1 and C_1 are the flow rate (MGD) and the constituent concentration (mg/ℓ respectively, which are associated with each of the N grab samples which may be taken in any calendar day. If a composite sample is taken, C_1 is the concentration measured in the composite sample, and Q_1 is the average flow rate occurring during the period over which samples are composited.

ADDENDUM No. 1 TO ORDER No. 76-11

I, LEONARD BURTMAN, EXECUTIVE OFFICER, DO HEREBY CERTIFY THE FOREGOING IS A FULL, TRUE, AND CORRECT COPY OF AN ADDENDUM ADOPTED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION, ON NOVEMBER 28, 1977.

Leonard Burtman

LEONARD BURTMAN
EXECUTIVE OFFICER

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 1 TO ORDER NO. 76 - 11

MONITORING AND REPORTING PROGRAM NO. 76 - 11
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
AND SAN DIEGO GAS AND ELECTRIC COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1
SAN DIEGO COUNTY

In addition to the requirements of Monitoring and Reporting Program No. 76-11, the Southern California Edison and San Diego Gas and Electric Company shall comply with the following:

EFFLUENT MONITORING

1. Discharge 001 (Combined Discharge)

   The concentration of hydrazine* shall be determined monthly by grab sample with the results reported monthly.

2. Discharge 001F (Hydrostatic Test and Flush at Unit Nos. 2 and 3).

Constituents	Units	Sample type	Minimum frequency of analysis	Reporting frequency
Flow	gpd	-	Daily	Monthly
Grease & Oil	mg/ℓ lbs/day	Grab	Monthly	"
Floating particulates	mg/ℓ lbs/day	"	"	"
Suspended solids	mg/ℓ lbs/day	"	"	"
Settleable solids	mℓ/ℓ	"	"	"
Turbidity	JTU	"	"	"
pH	units	"	"	"
Hydrazine*	mg/ℓ	"	"	"
Ammonia	mg/ℓ lbs/day	"	"	"

Note: mg/ℓ = milligrams per liter
mℓ/ℓ = milliliters per liter
lbs/day = pounds per day
JTU = Jackson Turbidity Units
gpd = gallons per day

*The Hydrazine concentrations shall be determined on the day of the month when the Hydrazine concentration is the greatest.

ADDENDUM No. 1 TO ORDER No. 76-11

MONITORING AND REPORTING PROGRAM No. 76-11

ORDERED BY Leonard Burtman

LEONARD BURTMAN
EXECUTIVE OFFICER
NOVEMBER 28, 1977