



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD



SAN DIEGO REGION

Matthew Rodriguez
Secretary for
Environmental Protection

2375 Northside,
Suite 100, San Diego, CA 92108
Phone (619) 516-1990 Fax (619) 516-1994

Edmund G. Brown Jr.
Governor

ORDER NO. R9-2012-0006 AS AMENDED BY ORDER NO. R9-2014-0097
NPDES NO. CA0109258

WASTE DISCHARGE REQUIREMENTS
FOR LIQUID STONE HOLDINGS, LLC,
KOOCHENVAGNER'S BREWING COMPANY
DBA STONE BREWING CO.,
DISCHARGE TO THE PACIFIC OCEAN VIA THE SAN ELIJO OCEAN OUTFALL

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Table with 2 columns: Discharger, Name of Facility, Facility Address. Includes text: The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board, San Diego Region have classified this discharge as a minor discharge.

The discharge by Liquid Stone Holdings, LLC from the discharge point identified below is subject to waste discharge requirements as set forth in this Order:

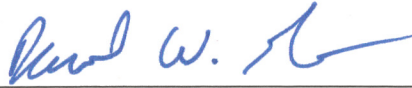
Table 2. Discharge Location

Table with 5 columns: Discharge Point, Effluent Description, Discharge Point Latitude, Discharge Point Longitude, Receiving Water. Row 1: 001, Brine Wastewaters, 33°, 06', 57" N, 117°, 07', 10" W, Pacific Ocean

Table 3. Administrative Information

Table with 2 columns: Description, Date. Rows include: This Order was adopted by the Regional Water Quality Control Board, San Diego Region on: February 8, 2012; This Order shall become effective on: April 1, 2012; This Order as amended by Order No. 2014-0097 shall become effective on: December 11, 2014; This Order shall expire on: March 31, 2017; The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than: 180 days prior to the Order expiration date

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on February 8, 2012 as amended by Order No. 2014-0097 on December 11, 2014.



David W. Gibson, Executive Officer

Table of Contents

I.	Facility Information.....	5
II.	Findings	6
III.	Discharge Prohibitions	10
IV.	Effluent Limitations and Discharge Specifications.....	11
	A. Effluent Limitations – Discharge Point No. 001	11
	B. Land Discharge Specifications – Not Applicable	16
	C. Reclamation Specifications – Not Applicable	16
V.	Receiving Water Limitations	17
	A. Surface Water Limitation	17
	B. Groundwater Limitations – Not Applicable	18
VI.	Provisions	18
	A. Standard Provisions.....	18
	B. Monitoring and Reporting Program (MRP) Requirements	20
	C. Special Provisions	20
	1. Reopener Provisions	20
	2. Special Studies, Technical Reports and Additional Monitoring Requirements	21
	3. Best Management Practices and Pollution Prevention – Not Applicable	22
	4. Construction, Operation and Maintenance Specifications – Not Applicable	22
	5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable	22
	6. Compliance Schedules – Not Applicable.....	22
VII.	Compliance Determination	22

List of Tables

Table 1.	Discharger Information.....	1
Table 2.	Discharge Location	1
Table 3.	Administrative Information.....	1
Table 4.	Facility Information.....	5
Table 5.	Basin Plan Beneficial Uses	7
Table 6.	Ocean Plan Beneficial Uses	8
Table 7.	Effluent Limitations.....	11
Table 8.	Performance Goals	11

List of Attachments

Attachment A – Definitions	A-1
Attachment B – Map	B-1
Attachment C – Flow Schematic	C-1
Attachment D – Standard Provisions.....	D-1
Attachment E – Monitoring and Reporting Program.....	E-1
Attachment F – Fact Sheet.....	F-1

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	Liquid Stone Holdings, LLC
Name of Facility	KoochenVagner's Brewing Company d/b/a Stone Brewing Co.
Facility Address	1999 Citracado Parkway
	Escondido, CA 92029
	San Diego County
Facility Contact, Title, and Phone	Timothy A Suydam, P.E., Sr. Water Operations Manager; (760) 294-7899 ext. 1451
Mailing Address	Same as Facility Address
Type of Facility	Brewery (Industrial Facility)
Facility Design Flow	0.10 million gallons per day (MGD)

II. FINDINGS

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

A. Background. Liquid Stone Holdings, LLC submitted a Report of Waste Discharge, dated October 24, 2011, and applied for a National Pollutant Discharge Elimination System (NPDES) permit authorization to discharge up to 0.10 million gallons per day (MGD) of reverse osmosis brine wastewater from Stone Brewing Co. to the City of Escondido's Industrial Brine Collection System (IBCS). The IBCS discharges to the Pacific Ocean through the Escondido Land Outfall and the San Elijo Ocean Outfall. The application was deemed complete on November 18, 2011. On April 29, 2014, the Discharger requested the San Diego Water Board amend the permit to include the discharge of blow down water from an evaporative cooling tower, increase the maximum discharge from 70,000 gallons per day (GPD) to 100,000 GPD, and reduce the toxicity monitoring to one species annually from three species annually. The request for permit amendment was deemed complete on June 10, 2014.

KoochenVagner's Brewing Company is the operator of Stone Brewing Co. (facility). Liquid Stone Holdings, LLC owns the property at 1999 Citracado Parkway on which the facility is located. Together KoochenVagner's Brewing Company and Liquid Stone Holdings, LLC are hereinafter referred to as Discharger.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. Stone Brewing Co. is a brewery production facility, restaurant, and retail merchandise shop located in Escondido, California. The facility proposes to discharge brine wastewater generated by an on-site reverse osmosis (RO) system and blowdown water from evaporative cooling towers to the City of Escondido's Industrial Brine Collection System (IBCS). The RO system provides advanced treatment to treated industrial wastewater from the facility. The evaporative cooling towers are used as heat exchangers for various brewing processes. A maximum of 0.10 MGD of RO feed water, brine wastewater from the RO system, and blowdown water from the evaporative cooling towers may be discharged into the IBCS.

Brine wastewater will be discharged from Discharge Point 001 (see Table 2) to the Pacific Ocean, a water of the United States via the Escondido Land Outfall and the San Elijo Ocean Outfall. Attachment B provides a map of the area around the facility. Attachment C provides a flow schematic of the facility.

The City of Escondido (City) owns and operates the IBCS and allows industrial dischargers that meet City requirements to discharge industrial brine wastewater into the system. As the owner of the IBCS the City of Escondido allocates capacity within the IBCS prior to allowing a new discharge and enters into an agreement with the prospective discharger to authorize the new connection. The agreement specifies volume and flow restrictions to the system and may also include additional requirements on the discharge.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

D. Background and Rationale for Requirements. The San Diego Water Board developed the requirements in this Order based on information submitted as part of the application and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations¹, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state’s narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

H. Water Quality Control Plans. The San Diego Water Board adopted a Water Quality Control Plan for the San Diego Region (hereinafter Basin Plan) on September 8, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for the Pacific Ocean and other receiving waters addressed through the plan. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved by the State Water Resources Control Board (State Board). In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Pacific Ocean are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Pacific Ocean	Industrial service supply; navigation; contact water recreation; non-contact water recreation; commercial and sports fishing; preservation of biological habitats of special significance; wildlife habitat; rare, threatened, or endangered species; marine habitat; aquaculture; migration of aquatic organisms; spawning, reproduction, and/or early development, and shellfish harvesting.

Requirements of this Order implement the Basin Plan.

The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal waters. Requirements of this Order implement the Thermal Plan.

¹ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

- I. California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005 and 2009. The State Water Board adopted the latest amendment on September 15, 2009 and it became effective on March 10, 2010. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table 6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
Outfall 001	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting

In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

- J. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- K. Stringency of Requirements for Individual Pollutants.** This Order contains technology-based requirements for individual pollutants. The technology-based effluent limitations consist of restrictions on grease and oil, total suspended solids (TSS), settleable solids, turbidity, and pH. Restrictions on these constituents are discussed in section IV.B of the Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.
- L. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The San Diego Water Board’s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- M. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed.
- N. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

- O. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the San Diego Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- P. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The San Diego Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- Q. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsection VI.A. of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- R. Executive Officer Delegation of Authority .**The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under Water Code section 13223 or this Order explicitly states otherwise
- S. Notification of Interested Parties.** The San Diego Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- T. Consideration of Public Comment.** The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

- A.** The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in California Water Code Section 13050, is prohibited.
- B.** The discharge of waste from the facility not in compliance with the effluent limitations specified in Section IV. of this Order or in manner or to a location which has not been specifically authorized by this Order and for which valid waste discharge requirements are not in force is prohibited.
- C.** Compliance with applicable Discharge Prohibitions contained in the Basin Plan is a requirement of this Order.
- D.** Compliance with Discharge Prohibitions contained in the California Ocean Plan is a requirement of this Order.
- E.** The discharge of brine wastewater in excess of 0.10 MGD is prohibited unless the discharger obtains revised waste discharge requirements for the proposed increase in flow.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point No. 001

1. Final Effluent Limitations – Discharge Point No. 001

- a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP:

Table 7. Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Average Weekly	Instantaneous Minimum	Instantaneous Maximum
Oil and Grease	mg/L	25	40	--	75
	lbs/day ¹	20.9	33.4	--	62.6
Total Suspended Solids (TSS)	mg/L	60	--	--	--
	lbs/day ¹	50.0	--	--	--
Settleable Solids	ml/L	1.0	1.5	--	3.0
Turbidity	NTU	75	100	--	225
pH	standard units	--	--	6.0	9.0

1. Calculated based on a flow of 0.10 MGD

- b. Constituents that do not have a reasonable potential to cause or contribute to an exceedance of water quality objectives, or for which reasonable potential to cause or contribute to an exceedance of water quality objectives cannot be determined, are referred to as performance goal constituents and are assigned the performance goals listed in the following table. Performance goal constituents shall be monitored at EFF-001, but the results will be used for informational purposes only, not compliance determination.

Table 8. Performance Goals

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE					
Arsenic	µg/l	1.19E+03	6.91E+03	1.83E+04	
	lbs/day	9.95E-01	5.76E+00	1.53E+01	
Cadmium	µg/l	2.38E+02	9.52E+02	2.38E+03	
	lbs/day	1.98E-01	7.94E-01	1.98E+00	
Chromium VI, Total Recoverable ²	µg/l	4.76E+02	1.90E+03	4.76E+03	
	lbs/day	3.97E-01	1.59E+00	3.97E+00	
Copper, Total Recoverable	µg/l	2.40E+02	2.38E+03	6.67E+03	
	lbs/day	2.00E-01	1.99E+00	5.56E+00	
Lead, Total Recoverable	µg/l	4.76E+02	1.90E+03	4.76E+03	
Lead, Total Recoverable	lbs/day	3.97E-01	1.59E+00	3.97E+00	
Mercury, Total Recoverable	µg/l	9.40E+00	3.80E+01	9.51E+01	
	lbs/day	7.84E-03	3.17E-02	7.93E-02	
Nickel, Total Recoverable	µg/l	1.19E+03	4.76E+03	1.19E+04	

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
	lbs/day	9.92E-01	3.97E+00	9.92E+00	
Selenium, Total Recoverable	µg/l	3.57E+03	1.43E+04	3.57E+04	
	lbs/day	2.98E+00	1.19E+01	2.98E+01	
Silver, Total Recoverable	µg/l	1.29E+02	6.28E+02	1.63E+03	
	lbs/day	1.07E-01	5.24E-01	1.36E+00	
Zinc, Total Recoverable	µg/l	2.86E+03	1.71E+04	4.57E+04	
	lbs/day	2.39E+00	1.43E+01	3.81E+01	
Cyanide, Total (as CN) ³	µg/l	2.38E+02	9.52E+02	2.38E+03	
	lbs/day	1.98E-01	7.94E-01	1.98E+00	
Total Residual Chlorine ⁴	µg/l	4.76E+02	1.90E+03	1.43E+04	
	lbs/day	3.97E-01	1.59E+00	1.19E+01	
Ammonia (expressed as nitrogen)	µg/l	1.43E+05	5.71E+05	1.43E+06	
	lbs/day	1.19E+02	4.76E+02	1.19E+03	
Chronic Toxicity ⁵	TU _c		2.38E+02		
Phenolic compounds ⁶ (non-chlorinated)	µg/l	7.14E+03	2.86E+04	7.14E+04	
	lbs/day	5.95E+00	2.38E+01	5.95E+01	
Chlorinated phenolics ⁷	µg/l	2.38E+02	9.52E+02	2.38E+03	
	lbs/day	1.98E-01	7.94E-01	1.98E+00	
Endosulfan ⁸	µg/l	2.14E+00	4.28E+00	6.43E+00	
	lbs/day	1.79E-03	3.57E-03	5.36E-03	
Endrin	µg/l	4.76E-01	9.52E-01	1.43E+00	
	lbs/day	3.97E-04	7.94E-04	1.19E-03	
HCH ⁹	µg/l	9.52E-01	1.90E+00	2.86E+00	
	lbs/day	7.94E-04	1.59E-03	2.38E-03	
Radioactivity	Pci/l	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations, Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH - NONCARCINOGENS					
Acrolein	µg/l				5.24E+04
	lbs/day				4.37E+01
Antimony	µg/l				2.86E+05
	lbs/day				2.38E+02
Bis(2-chloroethoxy)methane	µg/l				1.05E+03
	lbs/day				8.73E-01
Bis(2-chloroisopropyl)ether	µg/l				2.86E+05
	lbs/day				2.38E+02
Chlorobenzene	µg/l				1.36E+05
Chlorobenzene	lbs/day				1.13E+02
Chromium III	µg/l				4.52E+07
	lbs/day				3.77E+04
di-n-butyl phthalate	µg/l				8.33E+05
	lbs/day				6.95E+02

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
Dichlorobenzenes ¹⁰	µg/l				1.21E+06
	lbs/day				1.01E+03
Diethyl phthalate	µg/l				7.85E+06
	lbs/day				6.55E+03
Dimethyl phthalate	µg/l				1.95E+08
	lbs/day				1.63E+05
4,6-Dinitro-2-methylphenol	µg/l				5.24E+04
	lbs/day				4.37E+01
2,4-Dinitrophenol	µg/l				9.52E+02
	lbs/day				7.94E-01
Ethylbenzene	µg/l				9.76E+05
	lbs/day				8.14E+02
Fluoranthene	µg/l				3.57E+03
	lbs/day				2.98E+00
Hexachlorocyclopentadiene	µg/l				1.38E+04
	lbs/day				1.15E+01
Nitrobenzene	µg/l				1.17E+03
	lbs/day				9.73E-01
Thallium	µg/l				4.76E+02
	lbs/day				3.97E-01
Toluene	µg/l				2.02E+07
	lbs/day				1.69E+04
Tributyltin	µg/l				3.33E-01
	lbs/day				2.78E-04
1,1,1-Trichloroethane	µg/l				1.29E+08
	lbs/day				1.07E+05
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS					
Acrylonitrile	µg/l				2.38E+01
	lbs/day				1.98E-02
Aldrin	µg/l				5.24E-03
	lbs/day				4.37E-06
Benzene	µg/l				1.40E+03
	lbs/day				1.17E+00
Benzidine	µg/l				1.64E-02
	lbs/day				1.37E-05
Beryllium	µg/l				7.85E+00
	lbs/day				6.55E-03
Bis(2-chloroethyl)ether	µg/l				1.07E+01
	lbs/day				8.93E-03
Bis(2-ethylhexyl)phthalate	µg/l				8.33E+02
	lbs/day				6.95E-01
Carbon tetrachloride	µg/l				2.14E+02
	lbs/day				1.79E-01

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
Chlordane ¹¹	µg/l				5.47E-03
	lbs/day				4.57E-06
Chlorodibromomethane	µg/l				2.05E+03
	lbs/day				1.71E+00
Chloroform	µg/l				3.09E+04
	lbs/day				2.58E+01
DDT ¹²	µg/l				4.05E-02
	lbs/day				3.37E-05
1,4-Dichlorobenzene	µg/l				4.28E+03
	lbs/day				3.57E+00
3-3'-Dichlorobenzidine	µg/l				1.93E+00
	lbs/day				1.61E-03
1,2-Dichloroethane	µg/l				6.66E+03
	lbs/day				5.56E+00
1,1-Dichloroethylene	µg/l				2.14E+02
	lbs/day				1.79E-01
Dichlorobromomethane	µg/l				1.48E+03
	lbs/day				1.23E+00
Dichloromethane	µg/l				1.07E+05
	lbs/day				8.93E+01
1,3-Dichloropropene	µg/l				2.12E+03
	lbs/day				1.77E+00
Dieldrin	µg/l				9.52E-03
	lbs/day				7.94E-06
2,4-Dinitrotoluene	µg/l				6.19E+02
	lbs/day				5.16E-01
1,2-Diphenylhydrazine	µg/l				3.81E+01
	lbs/day				3.18E-02
Halomethanes ¹³	µg/l				3.09E+04
	lbs/day				2.58E+01
Heptachlor	µg/l				1.19E-02
	lbs/day				9.92E-06
Heptachlor epoxide	µg/l				4.76E-03
	lbs/day				3.97E-06
Hexachlorobenzene	µg/l				5.00E-02
	lbs/day				4.17E-05
Hexachlorobutadine	µg/l				3.33E+03
	lbs/day				2.78E+00
Hexachloroethane	µg/l				5.95E+02
	lbs/day				4.96E-01
Isophorone	µg/l				1.74E+05
	lbs/day				1.45E+02
N-Nitrosodimethylamine	µg/l				1.74E+03

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
	lbs/day				1.45E+00
N-Nitrosodi-n-propylamine	µg/l				9.04E+01
	lbs/day				7.54E-02
N-Nitrosodiphenylamine	µg/l				5.95E+02
	lbs/day				4.96E-01
PAH ¹⁴	µg/l				2.09E+00
	lbs/day				1.75E-03
PCB ¹⁵	µg/l				4.52E-03
	lbs/day				3.77E-06
TCDD Equivalents ¹⁶	µg/l				9.28E-07
	lbs/day				7.74E-10
1,1,2,2-Tetrachloroethane	µg/l				5.47E+02
	lbs/day				4.57E-01
Tetrachloroethylene	µg/l				4.76E+02
	lbs/day				3.97E-01
Toxaphene	µg/l				5.00E-02
	lbs/day				4.17E-05
Trichloroethylene	µg/l				6.43E+03
	lbs/day				5.36E+00
1,1,2-Trichloroethane	µg/l				2.24E+03
	lbs/day				1.87E+00
2,4,6-Trichlorophenol	µg/l				6.90E+01
	lbs/day				5.76E-02
Vinyl Chloride	µg/l				8.57E+03
	lbs/day				7.15E+00

¹ Scientific “E” notation is used to express certain values. In scientific “E” notation, the number following the “E” indicates that position of the decimal point in the value. Negative numbers after the “E” indicate that the value is less than 1, and positive numbers after the “E” indicate that the value is greater than 1. In this notation a value of 6.1E-02 represents 6.1 x 10⁻² or 0.061, 6.1E+02 represent 6.1 x 10² or 610, and 6.1E+00 represent 6.1 x 10⁰ or 6.1.

² The Discharger may, at their option, apply this performance goal as a total chromium performance goal.

³ If the Discharger can demonstrate to the satisfaction of the San Diego Water Board (subject to USEPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, performance goals may be evaluated with the combined measurement of free cyanide, simple alkali metals cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR Part 136, as revised May 14, 1999.

⁴ The water quality objectives for total chlorine residual applicable to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation: $\log y = 0.43 (\log x) + 1.8$, where y = the water quality objective (in µg/l) to apply when chlorine is being discharged; x = the duration of uninterrupted chlorine discharge in minutes. Actual effluent limitations for total chlorine, when discharging intermittently, shall then be determined according to Implementation Procedures for Table B from the Ocean Plan, using a minimum probable initial dilution factor of 237 and a flow rate of 0.10 MGD.

⁵ This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response. Chronic toxicity expressed as Chronic Toxicity Units (TUc) = 100/NOEL, where NOEL (No Observed Effect Level) is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism.

- ⁶ Non-chlorinated phenolic compounds represent the sum of 2,4-dimethylphenol, 4,6-Dinitro-2-methylphenol, 2,4-dinitrophenol, 2-methylphenol, 4-methylphenol, 2-Nitrophenol, 4-nitrophenol, and phenol.
- ⁷ Chlorinated phenolic compounds represent the sum of 4-chloro-3-methylphenol, 2-chlorophenol, pentachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol.
- ⁸ Endosulfan represents the sum of alpha-endosulfan, beta-endosulfan, and endosulfan sulfate.
- ⁹ HCH (hexachlorocyclohexane) represents the sum of the alpha, beta, gamma (Lindane), and delta isomers of hexachlorocyclohexane.
- ¹⁰ Dichlorobenzenes represent the sum of 1,2- and 1,3-dichlorobenzene.
- ¹¹ Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.
- ¹² DDT represents the sum of 4,4'DDT; 2,4'DDT; 4,4'DDE; 2,4'DDE; 4,4'DDD; and 2,4'DDD.
- ¹³ Halomethanes represent the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).
- ¹⁴ PAHs (polynuclear aromatic hydrocarbons) represent the sum of acenaphthalene; anthracene; 1,2-benzanthracene; 3,4-benzofluoranthene; benzo[k]fluoranthene; 1,12-benzoperylene; benzo[a]pyrene; chrysene; dibenzo[a,h]anthracene; fluorene; indeno[1,2,3-cd]pyrene; phenanthrene; and pyrene.
- ¹⁵ PCBs (polychlorinated biphenyls) represent the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- ¹⁶ TCDD equivalents represent the sum of concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown by the table below. USEPA Method 8280 may be used to analyze TCDD equivalents.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8 – tetra CDD	1.0
2,3,7,8 – penta CDD	0.5
2,3,7,8 – hexa CDD	0.1
2,3,7,8 – hepta CDD	0.01
octa CDD	0.001
2,3,7,8 – tetra CDF	0.1
1,2,3,7,8 – penta CDF	0.05
2,3,4,7,8 – penta CDF	0.5
2,3,7,8 – hexa CDFs	0.1
2,3,7,8 – hepta CDFs	0.01
Octa CDF	0.001

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

The receiving water limitations set forth below for ocean waters are based on water quality objectives contained in the Basin Plan and Ocean Plan and are a required part of this Order. The discharge of waste shall not cause violation of these limitations in the Pacific Ocean. Compliance with these limitations shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Bacterial Characteristics

- a.** Within a zone bounded by the shoreline and a distance of three nautical miles from the shoreline, including all kelp beds, the following bacterial objectives shall be maintained throughout the water column. The initial dilution zone for wastewater outfalls is excluded.
 - i.** 30-day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each site:
 - (a)** Total coliform density shall not exceed 1,000 per 100 mL;
 - (b)** Fecal coliform density shall not exceed 200 per 100 mL; and
 - (c)** Enterococcus density shall not exceed 35 per 100 mL.
 - ii.** Single Sample Maximum:
 - (a)** Total coliform density shall not exceed 10,000 per 100 mL;
 - (b)** Fecal coliform density shall not exceed 400 per 100 mL;
 - (c)** Enterococcus density shall not exceed 104 per 100 mL; and
 - (d)** Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
- b.** The Initial Dilution Zone for any wastewater outfall shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.
- c.** At all areas where shellfish may be harvested for human consumption, as determined by the San Diego Water Board, the median total coliform density shall not exceed 70 per 100 mL throughout the water column, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

2. Physical Characteristics

- a.** Floating particulates and grease and oils shall not be visible.
- b.** The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
- c.** Natural light shall not be significantly reduced at any point outside the initial dilution zone as a result of the discharge of waste.

- d. The rate of deposition of inert solids and the characteristics of inert solids in the ocean sediments shall not be changed such that benthic communities are degraded.

3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in Chapter II, Table B of the Ocean Plan, shall not be increased in marine sediments to levels that would degrade indigenous biota.
- e. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
- f. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
- g. Numerical water quality objectives established in Chapter II, Table B of the California Ocean Plan shall not be exceeded outside of the zone of initial dilution as a result of discharges from the Facility.

4. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- b. The natural taste, odor, color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- c. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

5. Radioactivity

- a. Discharge of radioactive waste shall not degrade marine life.

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **San Diego Water Board Standard Provisions.** The Discharger shall comply with the following provisions:

- a.** Compliance with Ocean Plan Discharge Prohibitions, summarized in Attachment G, is required as a condition of this Order.
- b.** Compliance with the Discharge Prohibitions contained in Chapter 4 of the Basin Plan is required as a condition of this Order.
- c.** The Discharger shall comply with all requirements and conditions of this Order. Any permit non-compliance constitutes a violation of the CWA and/or the CWC and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of an application for permit renewal, modification, or reissuance.
- d.** The Discharger shall comply with all applicable federal, State, and local laws and regulations that pertain to sewage sludge handling, treatment, use and disposal, including CWA section 405 and USEPA regulations at 40 CFR Part 257.
- e.** All proposed new treatment facilities and expansions of existing treatment facilities shall be completely constructed and operable prior to initiation of the discharge from the new or expanded facilities. The Discharger shall submit a certification report for each new treatment facility, expansion of an existing treatment facility, and re-ratings, the certification report shall be prepared by the design engineer. For re-ratings, the certification report shall be prepared by the engineer who evaluated the treatment facility capacity. The certification report shall:
 - i.** Identify the design capacity of the treatment facility, including the daily and 30-day design capacity,
 - ii.** Certify the adequacy of each component of the treatment facility, and
 - iii.** Contain a requirement-by-requirement analysis, based on acceptable engineering practices, of the process and physical design of the facility to ensure compliance with this Order.

The signature and engineering license number of the engineer preparing the certification report shall be affixed to the report. If reasonable, the certification report shall be submitted prior to beginning construction. The Discharger shall not initiate a discharge from an existing treatment facility at a daily flow rate in excess of its previously approved design capacity until:

- i.** The certification report is prepared and submitted to San Diego Water Board,
 - ii.** The San Diego Water Board has received written notification of completion of construction (new treatment facilities and expansions only),
 - iii.** An inspection of the facility has been made by the San Diego Water Board or its designated representatives (new treatment facilities and expansions only), and
 - iv.** The San Diego Water Board has provided the Discharger with written authorization to discharge at a daily flow rate in excess of its previously approved design capacity.
- f.** All waste treatment, containment, and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.
 - g.** All waste treatment, containment, and disposal facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24- hour storm event.
 - h.** This Order expires on March 31, 2017, after which, the terms and conditions of this permit are automatically continued pending issuance of a new permit, provided that all requirements of USEPA's NPDES regulations at 40 CFR 122.6 and the State's regulations at CCR Title 23,

section 2235.4 regarding the continuation of expired permits and waste discharge requirements are met.

- i. A copy of this Order shall be posted at a prominent location at or near the treatment and disposal facilities and shall be available to operating personnel at all times.
- j. The Discharger shall comply with any interim limitations established by addendum, enforcement action, or revised waste discharge requirements that have been or may be adopted by the San Diego Water Board.
- k. The Discharger shall comply with effluent standards and prohibitions for toxic pollutants established pursuant to section 307(a) of the CWA within the time frame set forth by the regulations that establish those standards and prohibitions, even if this Order has not been modified to incorporate the requirements. If an applicable effluent standard or prohibition, including any schedule of compliance, is promulgated pursuant to section 307(d) of the CWA for a toxic pollutant, and that standard or prohibition is more stringent than a limitation contained in this Order, the Executive Officer may institute proceedings to modify or revoke and reissue the Order to conform to the effluent standard or prohibition.
- l. Prior to requesting an increase in flow, the Discharger shall receive authorization from the City of Escondido. A copy of the revised agreement (documenting the increase in flow) between the Discharger and the City of Escondido shall be submitted to the San Diego Water Board with the modification request.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

- a. This Order may be reopened for modification to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above an Ocean Plan Table B water quality objective.
- b. This Order may be reopened for modification of the receiving waters monitoring requirements, as the Executive Officer determines. The modification(s) can include, but is(are) not limited to, recommendations from Southern California Coastal Water Research Project (SCCWRP) or creation of a Regional Monitoring Program.
- c. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this Order.
 - ii. Obtaining this Order by misrepresentation or failure to disclose fully all relevant fact.
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
 - iv. The filing of a request by the Discharger for modifications, revocation and reissuance, or termination of this Order does not stay any condition of this Order. Notification by the Discharger of planned operational or facility changes, or anticipated noncompliance with this Order does not stay any condition of this Order.

- d. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307 (a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the San Diego Water Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.
- e. This Order may be re-opened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.
- f. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new Minimum Levels (MLs).
- g. This Order may be re-opened and modified to revise effluent limitations as a result of future Basin Plan Amendments, or the adoption of a total maximum daily load (TMDL) for the receiving water.
- h. This Order may be re-opened upon submission by the Discharger of adequate information, as determined by this San Diego Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- i. This Order may be re-opened and modified to revise the toxicity language once that language becomes standardized.
- j. This Order may also be re-opened and modified, revoked and, reissued or terminated in accordance with the provisions of 40 CFR 122.44, 122.62 to 122.64, 125.62, and 125.62. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

If the performance goal for chronic toxicity is exceeded then the Discharger shall:

- i. Take all reasonable measures necessary to immediately minimize toxicity; and
- ii. Increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.

The additional toxicity test results shall be incorporated into the semiannual discharge monitoring report and submitted to the San Diego Water Board pursuant to the MRP.

If the additional tests indicate that the chronic toxicity performance goal is being consistently violated (at least three exceedances out of six tests), the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE). Once the source of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the chronic toxicity performance goal identified in section IV.A.1.b of this Order.

Within 30 days of completion of the TRE/TIE, the Discharger shall submit the results of the TRE/TIE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with the toxicity performance goal of this Order and prevent recurrence of exceedances of the performance goal, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the San Diego Water Board.

b. Toxicity Reduction Evaluation (TRE)

The Discharger shall develop a TRE workplan in accordance with TRE procedures established by the USEPA in the following guidance manuals.

- i. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070).
- ii. Toxicity Identification Evaluation, Phase I (EPA/600/6-91/005F).
- iii. Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R92/ 080).
- iv. Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R92/08,1).

The Discharger shall submit the TRE workplan to the San Diego Water Board within 180 days of the adoption of this Order. The TRE workplan shall be subject to the approval of the San Diego Water Board and shall be modified as directed by the San Diego Water Board.

3. Best Management Practices and Pollution Prevention – Not Applicable

4. Construction, Operation and Maintenance Specifications – Not Applicable

5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV. of this Order shall be determined as specified below:

A. Compliance with Average Monthly Effluent Limitation (AMEL)

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for the month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

B. Compliance with Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week (Sunday through Saturday) exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of noncompliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

C. Compliance with Maximum Daily Effluent Limitation (MDEL)

The MDEL shall apply to flow weighted 24-hour composite samples. If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day.

D. Compliance with Instantaneous Minimum Effluent Limitation

The instantaneous minimum effluent concentration limitation shall apply to grab sample determinations. If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of noncompliance with the instantaneous minimum effluent limitation.)

E. Compliance with Instantaneous Maximum Effluent Limitation

The instantaneous maximum effluent concentration limitation shall apply to grab sample determinations. If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of noncompliance with the instantaneous maximum effluent limitation).

F. Compliance with 6-Month Median Effluent Limitation

If the median of daily discharges over any 180-day period exceeds the 6-month median effluent limitation for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the 6-month median, the Discharger will be considered out of compliance for the 180-day period. For any 180-day period during which no sample is taken, no compliance determination can be made for the 6-month median limitation.

G. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be "Not Detected" (ND) or "Detectable but not quantifiable" (DNQ), the corresponding mass emission rate (MER) determined from that sample concentration shall also be reported as "ND" or "DNQ".

H. California Ocean Plan Provisions for Table B Constituents

1. Sampling Reporting Protocols

- a.** The Discharger must report with each sample result the reported Minimum Level (ML) and the laboratory's current Method Detection Limit (MDL).
- b.** The Discharger must also report results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- i. Sample results greater than or equal to the reported ML must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample).
- ii. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shorted to Est. Conc.).
- iii. Sample results less than the laboratory's MDL must be reported as "Not Detected", or ND.

2. Compliance Determination

Sufficient sampling and analysis shall be required to determine compliance with the effluent limitation.

a. Compliance with Single-constituent Effluent Limitations

The Discharger shall be deemed out of compliance with an effluent limitation or discharge specification if the concentration of the constituent in the monitoring sample is greater than the effluent limitation or discharge specification and greater than or equal to the ML.

b. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents

The Discharger is out of compliance with an effluent limitation that applies to the sum of a group of chemicals (e.g., PCBs) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

c. Multiple Sample Data Reduction.

The concentration of the pollutant in the effluent may be estimated from the result of a single sample analysis or by a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses when all sample results are quantifiable (i.e., greater than or equal to the reported ML). When one or more sample results are reported as ND or DNQ, the central tendency concentration of the pollutant shall be the median (middle) value of the multiple samples. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

d. Mass Emission Rate

The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

$$\text{Mass Emission Rate (lb/day)} = 8.34 \times Q \times C$$

In which Q and C are the flow rate in million gallons per day and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor (lb/gallon of water). If a composite sample is taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

e. Bacterial Standards and Analysis

- i. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

Where n is the number of days samples were collected during the period and C is the concentration of bacteria (CFU/100 mL) found on each day of sampling.

- ii. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 CFU (colony-forming units). The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those listed in 40 CFR Part 136 or any improved method determined by the San Diego Water Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure*, listed under 40 CFR Part 136, and any other method approved by the San Diego Water Board.

f. Single Operational Upset

A single operational upset (SOU) that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

- i. A SOU is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.
- ii. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Standard Provision – Permit Compliance, Section I.H of Attachment D.
- iii. For purposes outside of CWC section 13385(h) and (i), determination of compliance and civil liability (including any more specific definition of SOU), the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations, shall be in accordance with the USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).
- iv. For purposes of CWC section 13385(h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations shall be in accordance with CWC section 13385(f)(2).

I. Chronic Toxicity

Chronic toxicity is used to measure the acceptability of waters for supporting a healthy marine biota until approved methods are developed to evaluate biological response. Compliance with the chronic toxicity performance goal established in section IV.A.1.b of this Order for Discharge Point No. 001 shall be determined using critical life stage toxicity tests in accordance with procedures prescribed by the Ocean Plan and restated in the MRP (Attachment E). Chronic toxicity shall be expressed as Toxic Units Chronic (TU_c), where:

$$TU_c = 100 / NOEL$$

where NOEL is the No Observed Effect Level and is expressed as the maximum percent of effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test.

ATTACHMENT A – DEFINITIONS

Acute Toxicity

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log(100 - S)}{1.7}$$

where:

S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

Areas of Special Biological Significance (ASBS)

Those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Chlordane

Shall mean the sum of chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity

This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix II.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

DDT

Shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

Degrade

Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)

Sample results that are less than the reported Minimum Level, but greater than or equal to the laboratory's MDL.

Dichlorobenzenes

Shall mean the sum of 1,2- and 1,3-dichlorobenzene.

Downstream Ocean Waters

Waters downstream with respect to ocean currents.

Dredged Material

Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

Enclosed Bays

Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estuaries and Coastal Lagoons are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

Initial Dilution

The process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Kelp Beds

For purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

Mariculture

The culture of plants and animals in marine waters independent of any pollution source.

Material

(a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant.

Method Detection Limit (MDL)

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B.

Minimum Level (ML)

The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Natural Light

Reduction of natural light may be determined by the San Diego Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the San Diego Water Board.

Not Detected (ND)

Those sample results less than the laboratory's MDL.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

PAHs (polynuclear aromatic hydrocarbons)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

PCBs (polychlorinated biphenyls)

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of Ocean Plan Table B pollutants through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The San Diego Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Reported Minimum Level

The ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the San Diego Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

Satellite Collection System

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Shellfish

Organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

Significant Difference

Defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

Six-Month Median Effluent Limitation

The highest allowable moving median of all daily discharges for any 180-day period.

State Water Quality Protection Areas (SWQPAs)

Non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

TCDD Equivalents

The sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
	1.0
2,3,7,8-tetra CDD	
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

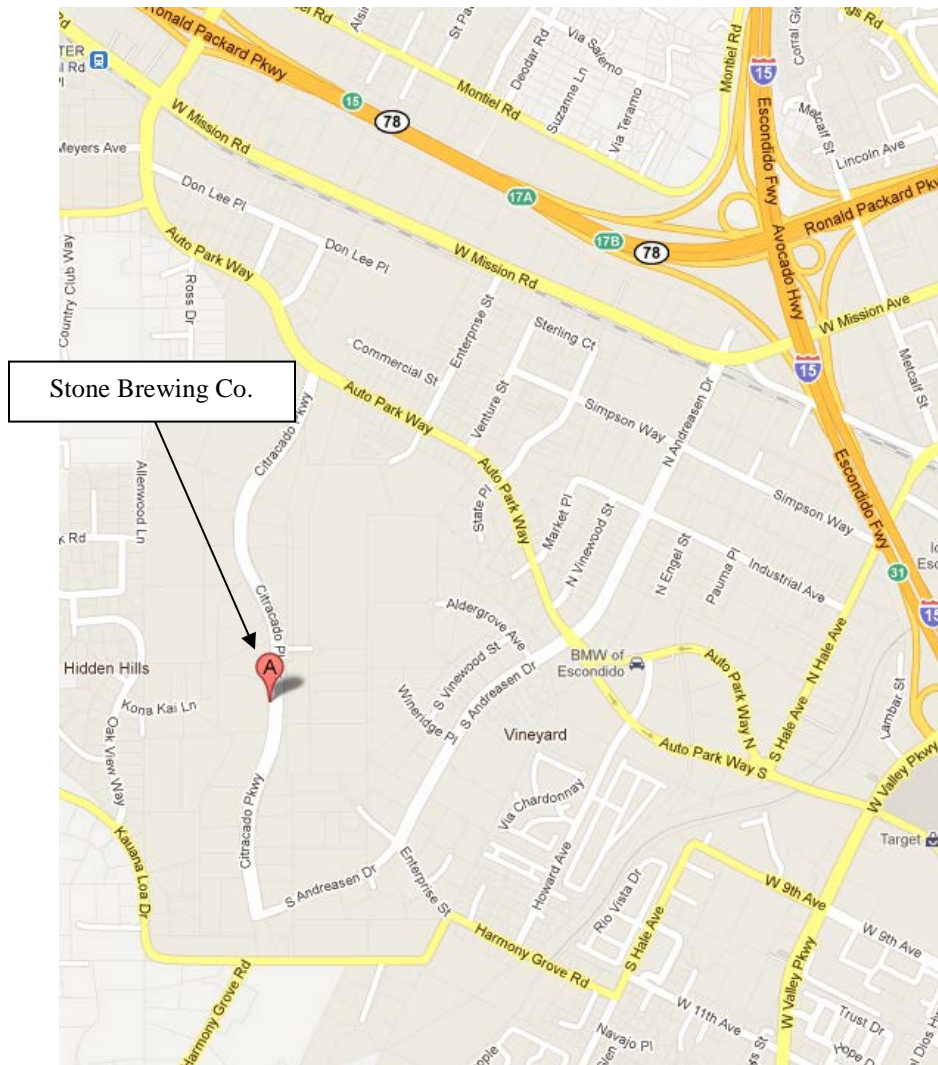
Toxicity Reduction Evaluation (TRE)

A study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

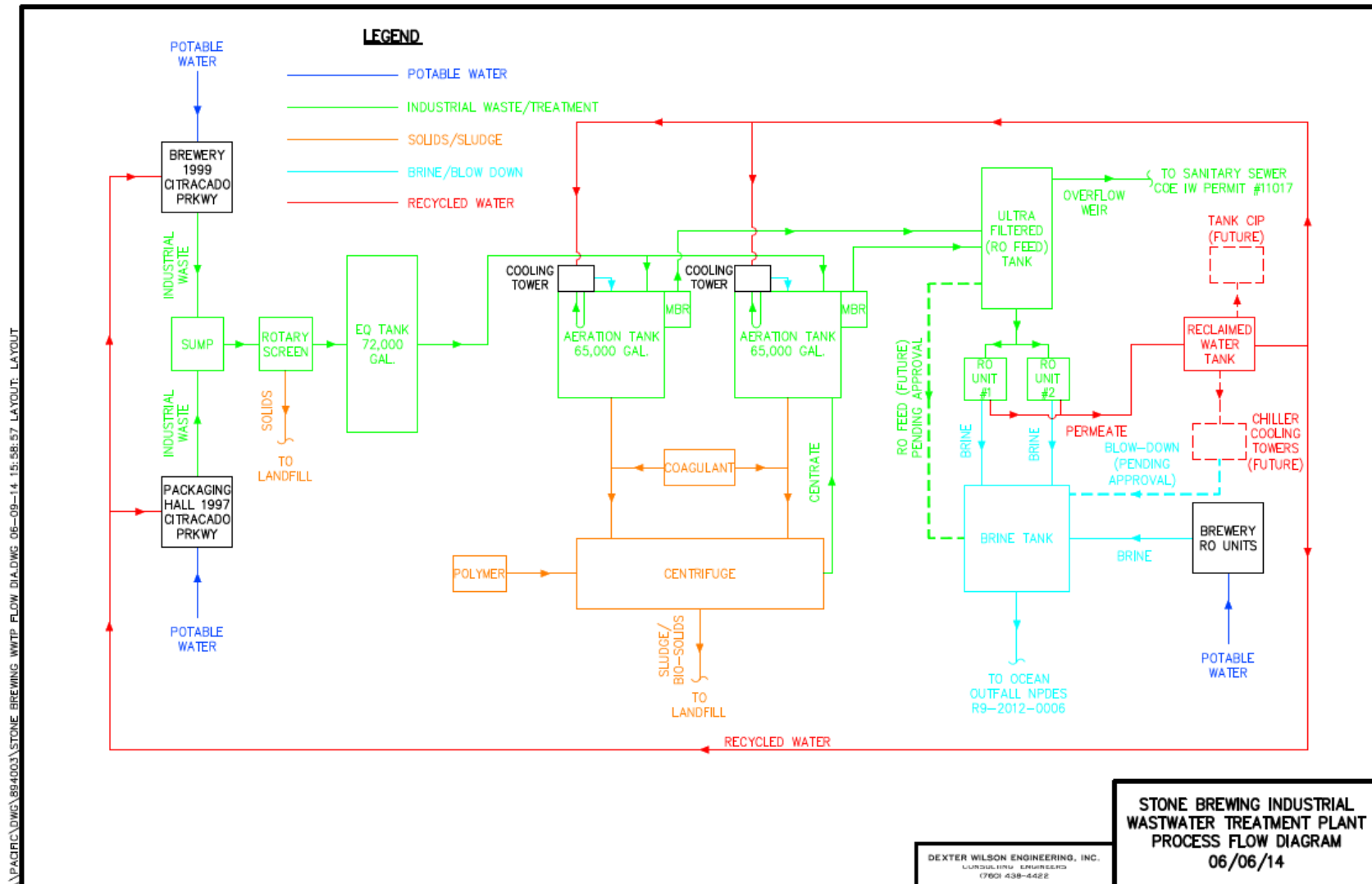
Waste

As used in the Ocean Plan, waste includes a Discharger’s total discharge, of whatever origin, i.e., gross, not net, discharge.

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the San Diego Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
- b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the San Diego Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
- c. The Discharger submitted notice to the San Diego Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

4. The San Diego Water Board may approve an anticipated bypass, after considering its adverse effects, if the San Diego Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
- b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the San Diego Water Board, State Water Board, or USEPA within a reasonable time, any information which the San Diego Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order

or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the San Diego Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

- 1.** All applications, reports, or information submitted to the San Diego Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
- 2.** For a corporation: All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)
- 3.** For a partnership or sole proprietorship: All permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)
- 4.** All reports required by this Order and other information requested by the San Diego Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a.** The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b.** The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - c.** The written authorization is submitted to the San Diego Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
- 5.** If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the San Diego Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
- 6.** Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the San Diego Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the San Diego Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The San Diego Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the San Diego Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the San Diego Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the San Diego Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The San Diego Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the San Diego Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):
 - a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

- b.** 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));
 - c.** Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or
 - d.** The level established by the San Diego Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)
- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(2)):
 - a.** 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));
 - b.** 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));
 - c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
 - d.** The level established by the San Diego Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Table of Contents

I. General Monitoring Provisions..... E-2
II. Monitoring Locations..... E-2
III. Influent Monitoring Requirements – Not Applicable E-3
IV. Effluent Monitoring Requirements E-3
 A. Monitoring Location – EFF-001 E-3
V. Whole Effluent Toxicity Testing Requirements E-6
VI. Land Discharge Monitoring Requirements – Not Applicable E-7
VII. Reclamation Monitoring Requirements – Not Applicable E-7
VIII. Receiving Water Monitoring Requirements – Surface Water E-7
IX. Other Monitoring Requirements – Not Applicable E-8
X. Reporting Requirements E-8
 A. General Monitoring and Reporting Requirements E-8
 B. Self-Monitoring Reports (SMRs)..... E-8
 C. Discharge Monitoring Reports (DMRs)..... E-10
 D. Other Reports E-10

List of Tables

Table 1. Monitoring Station Locations..... E-3
Table 2. Effluent Monitoring E-3
Table 3. Whole Effluent Toxicity Testing..... E-6
Table 4. Approved Test for Chronic Toxicity..... E-7
Table 5. Monitoring Periods and Reporting Schedule E-8

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Federal Regulations at 40 CFR 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitoring discharge. All samples shall be taken at the monitoring points specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the San Diego Water Board. Samples shall be collected at times representative of “worst case” conditions with respect to compliance with the requirements of this Order.
- B.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurement is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 5 percent from true discharge rates throughout the range of expected discharge volumes.
- C.** Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved at 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act as amended, or unless other test procedures are specified in this Order and/or in this MRP and/or by the San Diego Water Board.
- D.** Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.
- E.** Records of monitoring information shall include information required under Standard Provision, Attachment D, section IV.
- F.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.
- G.** The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of 10 percent of the samples or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by USEPA or the San Diego Water Board, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger should have a success rate equal or greater than 80 percent.
- H.** Analysis for toxic pollutants, including chronic toxicity, with performance goals based on water quality objectives of the California Ocean Plan shall be conducted in accordance with procedures described in the California Ocean Plan and restated in this MRP.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table 1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A location downstream of any in-plant return flows and prior to commingling with any other wastewaters, where a representative sample can be obtained

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location – EFF-001

1. The Discharger shall monitor the effluent at EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table 2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Recorder/Totalizer	Continuous	--
Temperature	°F	Grab	Semiannual	1
Total Dissolved Solids (TDS)	mg/l	24-hr Composite	Semiannual	1
Ocean Plan Table A Parameters				
Oil & Grease	µg/l	Grab	Semiannual ^{2,3}	1
Total Suspended Solids	µg/l	24-hr composite	Semiannual ^{2,3}	1
Settleable Solids	µg/l	Grab	Semiannual ^{2,3}	1
Turbidity	µg/l	24-hr Composite	Semiannual ^{2,3}	1
pH	µg/l	Grab	Semiannual ^{2,3}	1
Ocean Plan Table B Parameters for Protection of Marine Aquatic Life				
Arsenic	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Chromium VI, Total Recoverable ⁴	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Copper, Total Recoverable	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Lead, Total Recoverable	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Mercury, Total Recoverable	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Nickel, Total Recoverable	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Selenium, Total Recoverable	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Silver, Total Recoverable	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Zinc, Total Recoverable	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Cyanide, Total (as CN)	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1,5
Total Residual Chlorine	µg/l	Grab	Once in 5 years ^{2,6}	1
Ammonia (expressed as nitrogen)	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Phenolic compounds ⁷ (non-chlorinated)	µg/l	Grab	Once in 5 years ^{2,3}	1
Chlorinated phenolics ⁸	µg/l	Grab	Once in 5 years ^{2,3}	1
Endosulfan ⁹	µg/l	Grab	Once in 5 years ^{2,3}	1
Endrin	µg/l	Grab	Once in 5 years ^{2,3}	1
HCH ¹⁰	µg/l	Grab	Once in 5 years ^{2,3}	1
Radioactivity	pCi/l	Grab	Once in 5 years ^{2,3}	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ocean Plan Table B Parameters for Protection of Human Health - Noncarcinogens				
Acrolein	µg/l	Grab	Once in 5 years ^{2,3}	1
Antimony	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Bis(2-chloroethoxy)methane	µg/l	Grab	Once in 5 years ^{2,3}	1
Bis(2-chloroisopropyl)ether	µg/l	Grab	Once in 5 years ^{2,3}	1
Chlorobenzene	µg/l	Grab	Once in 5 years ^{2,3}	1
Chromium III	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
di-n-butyl phthalate	µg/l	Grab	Once in 5 years ^{2,3}	1
Dichlorobenzenes ¹¹	µg/l	Grab	Once in 5 years ^{2,3}	1
Diethyl phthalate	µg/l	Grab	Once in 5 years ^{2,3}	1
Dimethyl phthalate	µg/l	Grab	Once in 5 years ^{2,3}	1
4,6-Dinitro-2-methylphenol	µg/l	Grab	Once in 5 years ^{2,3}	1
2,4-Dinitrophenol	µg/l	Grab	Once in 5 years ^{2,3}	1
Ethylbenzene	µg/l	Grab	Once in 5 years ^{2,3}	1
Fluoranthene	µg/l	Grab	Once in 5 years ^{2,3}	1
Hexachlorocyclopentadiene	µg/l	Grab	Once in 5 years ^{2,3}	1
Nitrobenzene	µg/l	Grab	Once in 5 years ^{2,3}	1
Thallium	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Toluene	µg/l	Grab	Once in 5 years ^{2,3}	1
Tributyltin	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
1,1,1-Trichloroethane	µg/l	Grab	Once in 5 years ^{2,3}	1
Ocean Plan Table B Parameters for Protection of Human Health - Carcinogens				
Acrylonitrile	µg/l	Grab	Once in 5 years ^{2,3}	1
Aldrin	µg/l	Grab	Once in 5 years ^{2,3}	1
Benzene	µg/l	Grab	Once in 5 years ^{2,3}	1
Benzidine	µg/l	Grab	Once in 5 years ^{2,3}	1
Beryllium	µg/l	24-hr Composite	Once in 5 years ^{2,3}	1
Bis(2-chloroethyl)ether	µg/l	Grab	Once in 5 years ^{2,3}	1
Bis(2-ethylhexyl)phthalate	µg/l	Grab	Once in 5 years ^{2,3}	1
Carbon tetrachloride	µg/l	Grab	Once in 5 years ^{2,3}	1
Chlordane ¹²	µg/l	Grab	Once in 5 years ^{2,3}	1
Chlorodibromomethane	µg/l	Grab	Once in 5 years ^{2,3}	1
Chloroform	µg/l	Grab	Once in 5 years ^{2,3}	1
DDT ¹³	µg/l	Grab	Once in 5 years ^{2,3}	1
1,4-Dichlorobenzene	µg/l	Grab	Once in 5 years ^{2,3}	1
3-3'-Dichlorobenzidine	µg/l	Grab	Once in 5 years ^{2,3}	1
1,2-Dichloroethane	µg/l	Grab	Once in 5 years ^{2,3}	1
1,1-Dichloroethylene	µg/l	Grab	Once in 5 years ^{2,3}	1
Dichlorobromomethane	µg/l	Grab	Once in 5 years ^{2,3}	1
Dichloromethane	µg/l	Grab	Once in 5 years ^{2,3}	1
1,3-Dichloropropene	µg/l	Grab	Once in 5 years ^{2,3}	1
Dieldrin	µg/l	Grab	Once in 5 years ^{2,3}	1
2,4-Dinitrotoluene	µg/l	Grab	Once in 5 years ^{2,3}	1
1,2-Diphenylhydrazine	µg/l	Grab	Once in 5 years ^{2,3}	1
Halomethanes ¹⁴	µg/l	Grab	Once in 5 years ^{2,3}	1
Heptachlor	µg/l	Grab	Once in 5 years ^{2,3}	1
Heptachlor epoxide	µg/l	Grab	Once in 5 years ^{2,3}	1
Hexachlorobenzene	µg/l	Grab	Once in 5 years ^{2,3}	1
Hexachlorobutadine	µg/l	Grab	Once in 5 years ^{2,3}	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Hexachloroethane	µg/l	Grab	Once in 5 years ^{2,3}	1
Isophorone	µg/l	Grab	Once in 5 years ^{2,3}	1
N-Nitrosodimethylamine	µg/l	Grab	Once in 5 years ^{2,3}	1
N-Nitrosodi-n-propylamine	µg/l	Grab	Once in 5 years ^{2,3}	1
N-Nitrosodiphenylamine	µg/l	Grab	Once in 5 years ^{2,3}	1
PAH ¹⁵	µg/l	Grab	Once in 5 years ^{2,3}	1
PCB ¹⁶	µg/l	Grab	Once in 5 years ^{2,3}	1
TCDD Equivalent ¹⁷	µg/l	Grab	Once in 5 years ^{2,3}	1
1,1,2,2-Tetrachloroethane	µg/l	Grab	Once in 5 years ^{2,3}	1
Tetrachloroethylene	µg/l	Grab	Once in 5 years ^{2,3}	1
Toxaphene	µg/l	Grab	Once in 5 years ^{2,3}	1
Trichloroethylene	µg/l	Grab	Once in 5 years ^{2,3}	1
1,1,2-Trichloroethane	µg/l	Grab	Once in 5 years ^{2,3}	1
2,4,6-Trichlorophenol	µg/l	Grab	Once in 5 years ^{2,3}	1
Vinyl Chloride	µg/l	Grab	Once in 5 years ^{2,3}	1

- 1 As required under 40 CFR Part 136.
- 2 The Discharger shall calculate and report the mass emission rate (MER) of the constituent for each sample taken. The MER shall be calculated in accordance with section VII.I.2.d of this Order.
- 3 The minimum frequency of monitoring for this constituent is automatically increased to twice the minimum frequency specified, if any analysis for this constituent yields a result higher than the applicable effluent limitation or performance goal specified in this Order. The increased minimum frequency of monitoring shall remain in effect until the results of a minimum of four consecutive analyses for this constituent are below all applicable effluent limitations or performance goals specified in this Order.
- 4 Dischargers may, at their option, apply this performance goal as a total chromium performance goal.
- 5 If a Discharger can demonstrate to the satisfaction of the San Diego Water Board (subject to USEPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, performance goals may be evaluated with the combined measurement of free cyanide, simple alkali metals cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR Part 136, as revised May 14, 1999.
- 6 Monitoring of total chlorine residual is not required on days when none of the treatment units that are subject to this Order use chlorine for disinfection. If only one sample is collected for total chlorine residual analysis on a particular day, that sample must be collected at the time when the concentration of total chlorine residual in the discharge would be expected to be greatest. The times of chlorine discharges on the days that samples are collected, and the time at which samples are collected, shall be reported.
- 7 Non-chlorinated phenolic compounds represent the sum of 2,4-dimethylphenol, 4,6-Dinitro-2-methylphenol, 2,4-dinitrophenol, 2-methylphenol, 4-methylphenol, 2-Nitrophenol, 4-nitrophenol, and phenol.
- 8 Chlorinated phenolic compounds represent the sum of 4-chloro-3-methylphenol, 2-chlorophenol, pentachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol.
- 9 Endosulfan represents the sum of alpha-endosulfan, beta-endosulfan, and endosulfan sulfate.
- 10 HCH (hexachlorocyclohexane) represents the sum of the alpha, beta, gamma (Lindane), and delta isomers of hexachlorocyclohexane.
- 11 Dichlorobenzenes represent the sum of 1,2- and 1,3-dichlorobenzene.
- 12 Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.
- 13 DDT represents the sum of 4,4' DDT; 2,4' DDT; 4,4' DDE; 2,4' DDE; 4,4' DDD; and 2,4' DDD.
- 14 Halomethanes represent the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).
- 15 PAHs (polynuclear aromatic hydrocarbons) represent the sum of acenaphthalene; anthracene; 1,2-benzanthracene; 3,4-benzofluoranthene; benzo[k]fluoranthene; 1,12-benzoperylene; benzo[a]pyrene; chrysene; dibenzo[a,h]anthracene; fluorene; indeno[1,2,3-cd]pyrene; phenanthrene; and pyrene.

- 16 PCBs (polychlorinated biphenyls) represent the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- 17 TCDD equivalents represent the sum of concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown by the table below. USEPA Method 8280 may be used to analyze TCDD equivalents.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8 – tetra CDD	1.0
2,3,7,8 – penta CDD	0.5
2,3,7,8 – hexa CDD	0.1
2,3,7,8 – hepta CDD	0.01
octa CDD	0.001
2,3,7,8 – tetra CDF	0.1
1,2,3,7,8 – penta CDF	0.05
2,3,4,7,8 – penta CDF	0.5
2,3,7,8 – hexa CDFs	0.1
2,3,7,8 – hepta CDFs	0.01
Octa CDF	0.001

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

The Discharger shall conduct chronic toxicity testing on effluent samples collected at Monitoring Location EFF-001 in accordance with the following schedule and requirements:

Table 3. Whole Effluent Toxicity Testing

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chronic Toxicity	TU _c	24-hr Composite	Annual

Critical life stage toxicity tests shall be performed to measure chronic toxicity. Testing shall be performed using methods outlined in Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine Estuarine Organisms (Chapman, G.A., D.L. Denton, and J.M. Lazorchak, 1995) or Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project (State Water Board, 1996).

A screening period for chronic toxicity shall be conducted once during the permit cycle, using a minimum of three test species with approved test protocols outlined in Table E-4. The screening period shall consist of three (3) consecutive months of WET tests. The test species shall include a fish, an invertebrate, and an aquatic plant. Control and dilution water should be receiving water or lab water as appropriate. If the dilution water is different from the culture water, then culture water should be used in a second control. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with test results. After the screening period, the most sensitive species shall be used for the annual testing.

If the performance goal for chronic toxicity is exceeded, the Discharger shall increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations. If the additional tests indicate that the chronic toxicity performance goal is consistently being violated (at least three exceedances out of six tests), the Discharger shall conduct a TRE/TIE. Once the source of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the chronic toxicity performance goal identified in section IV.A.1.b of this Order.

Within 30 days of completion of the TRE/TIE, the Discharger shall submit the results of the

TRE/TIE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity performance goals of this Order and prevent recurrence of exceedances of those performance goals, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the San Diego Water Board.

If no toxicity is detected in any of these additional six tests, then the Discharger may return to the testing frequency specified in the MRP.

Table 4. Approved Test for Chronic Toxicity

Species	Test	Tier ¹	Reference ²
giant kelp, <i>Macrocystis pyrifera</i>	percent germination; germ tube length	1	a,c
red abalone, <i>Haliotis rufescens</i>	abnormal shell development	1	a,c
oyster, <i>Crassostrea gigas</i> ; mussels, <i>Mytilus spp.</i>	abnormal shell development; percent survival	1	a,c
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent normal development	1	a,c
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent fertilization	1	a,c
shrimp, <i>Homesimysis costata</i>	percent survival; growth	1	a,c
shrimp, <i>Mysidopsis bahia</i>	percent survival; fecundity	1	b,d
topsmelt, <i>Atherinops affinis</i>	larval growth rate; percent survival	1	a,c
Silversides, <i>Menidia beryllina</i>	larval growth rate; percent survival	1	b,d

¹ First tier methods are preferred for compliance monitoring. If first tier organisms are not available, the Discharger can use a second tier test method following approval by the San Diego Water Board.

² Protocol References:

- a. Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. USEPA Report No. EPA/600/R-95/136.
- b. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Peltier, and M.A. Heber. 1994. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms. USEPA Report No. EPA-600-4-91-003.
- c. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ.
- d. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Nieheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1998. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

This Order does not contain receiving water monitoring requirements. The City of Escondido and San Elijo Joint Powers Authority currently conduct receiving water monitoring for their individual wastewater discharges through the San Elijo Ocean Outfall pursuant to NPDES No.'s CA0107981 and CA0107999. Receiving water monitoring data obtained from the City of Escondido and San Elijo Joint Powers Authority shall be used to determine compliance with water quality objectives and criteria specified in the Basin Plan, Ocean Plan, and other state plans and policies applicable to the discharge from the facility.

IX. OTHER MONITORING REQUIREMENTS – NOT APPLICABLE

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. The Discharger shall report all instances of noncompliance not reported under Attachment D, Sections V.E, V.G, and V.H, of this Order at the time monitoring reports are submitted.
3. By March 1 of each year, the Discharger shall submit an annual report to the San Diego Water Board and USEPA Region 9 that contains tabular and graphical summaries of the monitoring data obtained during the previous year. The Discharger shall discuss the compliance record and corrective actions taken, or which may be taken, or which may be needed to bring the discharge into full compliance with the requirements of this Order and this MRP.

B. Self-Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or San Diego Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit an electronic copy of the SMR on a CD to the San Diego Water Board Office. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections IV through X. The Discharger shall submit semiannual and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table 5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	First day of the calendar month following the permit effective date or on permit effective date if that date is the first day of the month.	All	Submit with semiannual SMR
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	August 1 February 1
Annually	January 1 following (or on) permit effective date	January 1 through December 31	March 1
Once in 5 Years	January 1, 2015	January 1 through December 31 2015	A minimum of 180 days prior to this Orders expiration data with the RWD

- 4. Reporting Protocols.** The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 5. Compliance Determination.** Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).
- 6. Multiple Sample Data.** When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
- 7.** The Discharger shall submit SMRs in accordance with the following requirements:

- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- c. SMRs must be submitted to the San Diego Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

2375 Northside Drive, Suite 100
 San Diego, CA 92108

C. Discharge Monitoring Reports (DMRs)

- 1. As described in Section X.B.1 above, at any time during the term of this permit, the State or San Diego Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
- 2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 th Floor Sacramento, CA 95814

- 3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

D. Other Reports

- 1. The Discharger shall report the results of any chronic toxicity testing and/or TRE/TIE, required by Special Provisions – VI.C.2 of this Order. The Discharger shall submit reports with the first semiannual SMR scheduled to be submitted on or immediately following the report due date.

ATTACHMENT F – FACT SHEET

Table of Contents

I. Permit Information..... F-3

II. Facility Description..... F-4

 A. Description of Wastewater..... F-4

 B. Discharge Points and Receiving Waters F-4

 C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data..... F-5

 D. Compliance Summary – Not Applicable F-5

 E. Planned Changes – Not Applicable F-5

III. Applicable Plans, Policies, and Regulations..... F-5

 A. Legal Authorities F-5

 B. California Environmental Quality Act (CEQA) F-5

 C. State and Federal Regulations, Policies, and Plans F-5

 D. Impaired Water Bodies on CWA 303(d) List..... F-5

 E. Other Plans, Polices and Regulations – Not Applicable..... F-6

IV. Rationale For Effluent Limitations and Discharge Specifications F-6

 A. Discharge Prohibitions..... F-6

 B. Technology-Based Effluent Limitations F-6

 1. Scope and Authority F-6

 2. Applicable Technology Based Effluent Limitations..... F-7

 C. Water Quality-Based Effluent Limitations (WQBELs)..... F-8

 1. Scope and Authority F-8

 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives..... F-8

 3. Determining the Need for WQBELs..... F-9

 4. WQBEL Calculations F-12

 5. Whole Effluent Toxicity (WET)..... F-13

 D. Final Effluent Limitations..... F-13

 1. Satisfaction of Anti-Backsliding Requirements F-14

 2. Satisfaction of Antidegradation Policy F-14

 3. Stringency of Requirements for Individual Pollutants F-14

 E. Performance Goals..... F-14

 F. Interim Effluent Limitations – Not Applicable..... F-20

 G. Reclamation Specifications – Not Applicable F-20

V. Rationale for Receiving Water Limitations..... F-20

 A. Surface Water..... F-20

 B. Groundwater Limitations– Not Applicable F-22

VI. Rationale for Monitoring and Reporting Requirements F-22

 A. Influent Monitoring – Not Applicable..... F-22

 B. Effluent Monitoring..... F-22

 C. Whole Effluent Toxicity Testing Requirements..... F-22

 D. Receiving Water Monitoring..... F-22

 E. Other Monitoring Requirements – Not Applicable F-22

 F. Reporting Requirements..... F-22

VII. Rationale for Provisions F-23

 A. Standard Provisions..... F-23

 B. Special Provisions F-23

 1. Reopener Provisions F-23

 2. Special Studies and Additional Monitoring Requirements..... F-23

VIII. Public Participation F-24

 A. Notification of Interested Parties..... F-24

 B. Written Comments F-24

 C. Public Hearing F-24

 D. Waste Discharge Requirements Petitions..... F-25

 E. Information and Copying..... F-25

F. Register of Interested Persons F-25

List of Tables

Table 1. Facility Information F-3
Table 2. Summary of Technology-based Effluent Limitations F-7
Table 3. RPA Results Summary F-9
Table 4. Pollutants Having Background Concentrations F-12
Table 5. Final Effluent Limitations F-13
Table 6. Performance Goals F-15

ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	9 000002380
Discharger	Liquid Stone Holdings, LLC
Name of Facility	KoochenVagner’s Brewing Company d/b/a Stone Brewing Co.
Facility Address	1999 Citracado Parkway
	Escondido, CA 92029
	San Diego County
Facility Contact, Title and Phone	Timothy A. Suydam P.E., Water Operations Manager (760) 294-7899
Authorized Person(s) to Sign and Submit Reports	Steve Wagner, President Gregory Koch, CEO Timothy A. Suydam P.E., Water Operations Manager
Mailing Address	Same as Facility Address
Billing Address	Same as Facility Address
Type of Facility	Industrial (SIC Code 2082)
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	B
Pretreatment Program	No
Facility Permitted Flow	0.10 MGD
Facility Design Flow	0.10 MGD
Watershed	
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean waters

- A.** KoochenVagner’s Brewing Company is the operator of Stone Brewing Co., a brewery in Escondido, CA. Liquid Stone Holdings, LLC owns the property at 1999 Citracado Parkway on which the Facility is located. Together KoochenVagner’s Brewing Company and Liquid Stone Holdings, LLC are hereinafter referred to as Discharger.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

- B.** The Discharger filed a report of waste discharge and submitted an application for new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on October 24, 2011. The application was deemed complete on November 18, 2011. A site visit was conducted on December 13, 2011, to observe operations and collect additional data to develop permit limitations and conditions. On April 29, 2014, the Discharger requested the San Diego Water Board

amend this Order to include the discharge of blow down water from evaporative cooling towers, increase the maximum discharge from 70,000 gallons per day (GPD) to 100,000 GPD, and revise the toxicity monitoring from three species annually to one species annually.

II. FACILITY DESCRIPTION

Stone Brewing Co. is a brewery production facility, restaurant, and retail merchandise shop located in Escondido, California. The facility proposes to discharge brine wastewater generated by an on-site reverse osmosis (RO) system to the City of Escondido's Industrial Brine Collection System (IBCS). The RO system provides advanced treatment to treated industrial wastewater from the facility.

A. Description of Wastewater

Wastewater generated in the brewhouse is sent through the facilities industrial waste processing system. Sources of industrial wastewater include:

- Wash down and cleaning of tanks (Clean-in-place);
- Wash water from bottling operations and kegs;
- Cooling tower and boiler flows;
- Various other processes that discharge wastewater to the floor drains within the brewery.

The industrial waste processing system is capable of treating 100,000 GPD of brewery wastewater. The treatment process contains a rotary screen, an equalization tank, and aeration basin, and membrane bioreactor tanks. Air is supplied to the equalization tank, aeration basin, and membrane tanks. Treated water is delivered to a tank for further processing through the reclamation system which includes an RO system. Brine wastewater generated by the RO system is currently discharge to the city of Escondido sewer. The Discharger proposes to divert the brine wastewater from the sewer to the IBCS. In addition, the discharge includes blowdown water from evaporative cooling towers used in the brewing processes and sometimes diversion from the feed water of the reverse osmosis feed tank. Product water is reused throughout the brewery. Water reuse within the facility is not subject to any requirements from the San Diego Water Board.

Brine wastewater generated by the RO system contains an average TDS of 2,400 mg/l. Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) range between 2 to 7 mg/l.

Other types of waste generated by the facility include solid waste from the industrial wastewater processing system and domestic wastewater. Solid wastes are hauled to a landfill for disposal and domestic wastewater is discharge to the City of Escondido sewer system.

B. Discharge Points and Receiving Waters

The Discharger proposes to discharge up to 0.10 MGD of brine wastewater from the facility to the IBCS. Brine wastewater from the IBCS flows to the Escondido Land Outfall (ELO) where it comeslingles with secondary treated wastewater from the Hale Avenue Resource Recovery Facility (HARRF, regulated by NPDES NO. CA0107981). The ELO extends approximately 14 miles in a southwesterly direction, generally following Escondido Creek, until it enters the San Elijo Ocean Outfall (SEOO). The SEOO is co-owned by the San Elijo Joint Powers Authority and the City of Escondido, which own 21 percent and 79 percent of the capacity, respectively. The SEOO begins at a point approximately 2,200 feet south of the mouth of the San Elijo Lagoon, where treated wastewater from the HARRF and brine wastes from the IBCS merge with treated wastewater from the San Elijo Joint Powers Authority, San Elijo Water Reclamation Facility (regulated by NPDES No. CA0107999). The SEOO extends into the Pacific Ocean, where the inshore end of a diffuser is located approximately 6,800 feet offshore at a depth of approximately 110 feet. The diffuser, which is collinear with the outfall, is approximately 1,200 feet in length and extends to a depth of approximately 148 feet. The terminus of the diffuser is located at Latitude 33° 00' 21" North and Longitude 117° 18' 09" West.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

This discharge has not previously been subject to WDRs or NPDES monitoring requirements. A reasonable potential analysis was conducted on water quality data submitted by the Discharger. A summary of the reasonable potential analysis results is included in Section IV.C.3 of the Fact Sheet.

D. Compliance Summary – Not Applicable

E. Planned Changes – Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

Adoption of an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the CWC, except for new sources as defined in the Federal Water Pollution Control Act. Section 306 of CWA (40 CFR 122.2) defines a new source as being commenced after promulgation of standards of performance which are applicable to such source. No performance standards have been published under Section 306 of CWA that are applicable to brine wastewater. As such, the discharger regulated by this Order is not a new source, and is exempt from CEQA requirements.

C. State and Federal Regulations, Policies, and Plans

State and Federal Regulations, Policies, and Plans applicable to the discharge are described in sections II.H, II.I, II.J, II.L, and II.M of the Order.

D. Impaired Water Bodies on CWA 303(d) List

On June 28, 2007, USEPA approved the list of impaired water bodies, prepared by the State Water Board pursuant to section 303(d) of the CWA, which are not expected to meet applicable water quality standards after implementation of technology-based effluent limitations for point sources. The 303(d) list includes 0.44 miles of the Pacific Ocean shoreline within the Escondido Creek Hydrologic Area as impaired for bacteria indicators. The listing is based on the impairment at the San Elijo Lagoon outlet. Some of the receiving water monitoring locations may be within the current 303(d) list. The San Diego Regional Board will take into account the fact when determining compliance.

E. Other Plans, Policies and Regulations – Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

1. Prohibition III. A - CWC section 13243 provides that the San Diego Water Board, in a water quality control plan, may specify certain conditions where the discharge of wastes or certain types of wastes, or certain types of wastes that could affect the quality of waters in the State is prohibited.
2. Prohibition III.B - Prohibits the discharge of wastes in a manner or to locations which have not been specifically authorized by this Order and for which valid waste discharge requirements are not in force. This was included to clearly define what types of discharges are prohibited.
3. Prohibition III.C and D –Inclusion of the Basin Plan prohibitions in this Order implements the requirements of the Basin Plan. Inclusion on the Ocean Plan prohibitions in this Order implements the requirements of the Ocean Plan.
4. Prohibition III.E – Prohibits the discharge from the facility at Discharge Point 001 in excess of a daily maximum of 0.10 MGD.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the

relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR 125.3.

Section III.B of the Ocean Plan prescribes effluent limitations that apply to industrial discharges for which effluent limitations guidelines have not been established pursuant to Sections 301, 302, 304, or 306 of the federal CWA. Specifically section III.B.3 of the Ocean Plan states that compliance with Table A effluent limitations shall be the minimum level of treatment acceptable under the Ocean Plan, and shall define reasonable treatment and waste control technology.

2. Applicable Technology Based Effluent Limitations

Applicable ELGs for discharges of brine wastewater have not yet been developed by USEPA. Table A of the Ocean Plan (Table A) contains technology based effluent limitations that apply to industrial discharges for which ELGs have not been established. Table A contains technology-based effluent limitations for oil and grease, suspended solids, settleable solids, turbidity, and pH. Applicable technology-based effluent limitations in Table A are summarized in Table 5. *Summary of Technology-based Effluent Limitations for Discharge Point No. 001.*

Summary of Technology-based Effluent Limitations Discharge Point No. 001

Table 2. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations		
		Monthly (30-day Average)	Weekly (7-day Average)	Instantaneous Maximum
Grease and Oil	mg/l	25	40	75
	lbs/day ¹	20.9	33.4	62.6
Total Suspended Solids	mg/l	60	--	--
	lbs/day ¹	50.0	--	--
Settleable Solids	ml/l	1.0	1.5	3.0
Turbidity	NTU	75	100	225
pH	Units	Within the limits of 6.0 to 9.0 at all times		

1. Calculated based on a flow of 0.10 MGD.

The effluent limitation for TSS contained in Table A of the Ocean Plan requires dischargers, as a 30-day average, to remove 75 percent of TSS from the influent before discharging wastewater to the ocean, except that the effluent limitation to be met shall not be lower than 60 mg/L. Because the effluent from the facility will not undergo treatment for removal of TSS, a TSS 30-day average effluent limitation of 60 mg/L has been established for the facility discharge in accordance with Table A of the Ocean Plan, and percent removal requirements are not included in this permit.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the Ocean Plan.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Basin Plan and Ocean Plan designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters.

- a. Basin Plan.** The beneficial uses specified in the Basin Plan applicable to the Pacific Ocean are summarized in section II.H of the Order. The Basin Plan includes water quality objectives for pH applicable to the receiving water. The Basin Plan states, "The terms and conditions of the State Board's "Water Quality Control Plan for Ocean Waters of California" (Ocean Plan), "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California" (Thermal Plan), and any revisions thereto are incorporated into this Basin Plan by reference. The terms and conditions of the Ocean Plan and Thermal Plan apply to the ocean waters within this Region."
- b. Ocean Plan.** The beneficial uses specified in the Ocean Plan for the Pacific Ocean are summarized in section II.I of the Order. The Ocean Plan also includes water quality objectives for the ocean receiving water for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity.

Table B of the Ocean Plan includes the following water quality objectives for toxic pollutants and whole effluent toxicity:

- i.** 6-month median, daily maximum, and instantaneous maximum objectives for 21 chemicals and chemical characteristics, including total residual chlorine and chronic toxicity, for the protection of marine aquatic life.
- ii.** 30-day average objectives for 20 non-carcinogenic chemicals for the protection of human health.
- iii.** 30-day average objectives for 42 carcinogenic chemicals for the protection of human health.
- iv.** Daily maximum objectives for acute and chronic toxicity.

3. Determining the Need for WQBELs

The need for an effluent limitation based on water quality objectives in Table B of the Ocean Plan was evaluated in accordance with 40 CFR 122.44(d) and guidance for statistically determining the “reasonable potential” for a discharged pollutant to exceed an objective, as outlined in the Technical Support Document for Water Quality-based Toxics Control (TSD: EPA/505/2-90-001, 1991) and the California Ocean Plan Reasonable Potential Analysis (RPA) Amendment that was adopted by the State Water Board on April 21, 2005. The statistical approach combines knowledge of effluent variability (as estimated by a coefficient of variation), with the uncertainty due to a limited amount of effluent data, to estimate a maximum effluent value at a high level of confidence. This estimated maximum effluent value is based on a lognormal distribution of daily effluent values.

Projected receiving water values (based on the estimated maximum effluent value or the reported maximum effluent value and minimum probably initial dilution) can then be compared to the appropriate objective to determine potential for an exceedance of that objective and the need for an effluent limitation. According to the Ocean Plan amendment, the RPA can yield three endpoints:

- 1) Endpoint 1, an effluent limitation is required and monitoring is required;
- 2) Endpoint 2, an effluent limitation is not required and the San Diego Water Board may require monitoring;
- 3) Endpoint 3, the RPA is inconclusive, monitoring is required, and an existing effluent limitation may be retained or a permit reopener clause may be included to allow inclusion of an effluent limitation if future monitoring warrants the inclusion.

Endpoint 3 is typically the result when there are fewer than 16 data points and all are censored data (i.e., below quantitation or method detection levels for an analytical procedure).

The implementation provisions for Table B in section III.C of the Ocean Plan specify that the minimum initial dilution is the lowest average initial dilution within any single month of the year. Dilution estimates are to be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents, of sufficient strength to influence the initial dilution process, flow across the discharge structure. Before establishing a dilution credit for a discharge, it must first be determined if, and how much, receiving water is available to dilute the discharge. The minimum dilution factor for the San Elijo Ocean Outfall is 237 to 1.

Conventional pollutants were not considered as part of the RPA. Technology-based effluent limitations for these pollutants are included in the Order as described in section IV.B of this Fact Sheet.

Effluent data provided in the Discharger’s RWD and supplemental data provided by the Discharger on April 29, 2014 as part of a request to amend the permit was used in the RPA. A minimum probable initial dilution of 237 to 1 was considered in this evaluation. A summary of the RPA is provided below:

Table 3. RPA Results Summary

Parameter	Units	n ¹	MEC ²	Most Stringent Criteria	Background	RPA Endpoint ³
Arsenic	µg/l	1	<2	8 ⁴	3 ⁵	3
Cadmium	µg/l	1	<5	1 ⁴	0	3
Hexavalent Chromium	µg/l	1	<50	2 ⁴	0	3
Copper	µg/l	1	130 ⁹	3 ⁴	2 ⁵	3
Lead	µg/l	1	6	2 ⁴	0	3
Mercury	µg/l	1	<2	0.04 ⁴	0.0005 ⁵	3

Parameter	Units	n ¹	MEC ²	Most Stringent Criteria	Background	RPA Endpoint ³
Nickel	µg/l	1	<10	5 ⁴	0	3
Selenium	µg/l	1	<5	15 ⁴	0	3
Silver	µg/l	1	<10	0.7 ⁴	0.16 ⁵	3
Zinc	µg/l	1	700 ⁹	20 ⁴	8 ⁵	3
Cyanide	µg/l	1	<20	1 ⁴	0	3
Residual Chlorine	µg/l	1	<100	2 ⁴	0	3
Ammonia-N	µg/l	1	8820	600 ⁴	0	3
Chronic Toxicity	TU _c	1	<100	1 ⁶	0	3
Phenolic compounds (non-chlorinated)	µg/l	1	<1.0	30 ⁴	0	3
Chlorinated phenolics	µg/l	1	<5.0	1 ⁴	0	3
Endosulfan	µg/l	1	<0.09	0.009 ⁴	0	3
Endrin	µg/l	1	<0.08	0.002 ⁴	0	3
HCH	µg/l	1	<0.12	0.004 ⁴	0	3
Radioactivity	µg/l	1	--	⁷	0	3
Acrolein	µg/l	1	<5.0	220 ⁸	0	3
Antimony	µg/l	1	<0.01	1,200 ⁸	0	3
Bis(2-chloroethoxy)methane	µg/l	1	<5.0	4.4 ⁸	0	3
Bis(2-chloroisopropyl)ether	µg/l	1	<5.0	1,200 ⁸	0	3
Chlorobenzene	µg/l	1	<1.0	570 ⁸	0	3
Chromium III	µg/l	1	<0.01	190,000 ⁸	0	3
di-n-butyl phthalate	µg/l	1	<5.0	3,500 ⁸	0	3
Dichlorobenzenes	µg/l	1	<1.0	5,100 ⁸	0	3
Diethyl phthalate	µg/l	1	<5.0	33,000 ⁸	0	3
Dimethyl phthalate	µg/l	1	<5.0	820,000 ⁸	0	3
4,6-Dinitro-2-methylphenol	µg/l	1	<5.0	220 ⁸	0	3
2,4-Dinitrophenol	µg/l	1	<1.0	4.0 ⁸	0	3
Ethylbenzene	µg/l	1	<1.0	4,100 ⁸	0	3
Fluoranthene	µg/l	1	<5.0	15 ⁸	0	3
Hexachlorocyclopentadiene	µg/l	1	<5.0	58 ⁸	0	3
Nitrobenzene	µg/l	1	<5.0	4.9 ⁸	0	3
Thallium	µg/l	1	<0.006	2 ⁸	0	3
Toluene	µg/l	1	<1.0	85,000 ⁸	0	3
Tributyltin	µg/l	0	--	0.0014 ⁸	0	3
1,1,1-Trichloroethane	µg/l	1	<1.0	540,000 ⁸	0	3
Acrylonitrile	µg/l	1	<2.0	0.10 ⁸	0	3
Aldrin	µg/l	1	<0.04	0.000022 ⁸	0	3
Benzene	µg/l	1	<1.0	5.9 ⁸	0	3
Benzidine	µg/l	1	<5.0	0.000069 ⁸	0	3
Beryllium	µg/l	1	<0.01	0.033 ⁸	0	3
Bis(2-chloroethyl)ether	µg/l	1	<5.0	0.045 ⁸	0	3
Bis(2-ethylhexyl)phthalate	µg/l	1	<5.0	3.5 ⁸	0	3
Carbon tetrachloride	µg/l	1	<1.0	0.90 ⁸	0	3
Chlordane	µg/l	1	<5.0	0.000023 ⁸	0	3
Chlorodibromomethane	µg/l	1	<1.0	8.6 ⁸	0	3

Parameter	Units	n ¹	MEC ²	Most Stringent Criteria	Background	RPA Endpoint ³
Chloroform	µg/l	1	<1.0	130 ⁸	0	3
DDT	µg/l	1	<0.1	0.00017 ⁸	0	3
1,4-Dichlorobenzene	µg/l	1	<1.0	18 ⁸	0	3
3-3'-Dichlorobenzidine	µg/l	1	<5.0	0.0081 ⁸	0	3
1,2-Dichloroethane	µg/l	1	<1.0	28 ⁸	0	3
1,1-Dichloroethylene	µg/l	1	<1.0	0.9 ⁸	0	3
Dichlorobromomethane	µg/l	1	<1.0	6.2 ⁸	0	3
Dichloromethane	µg/l	1	<1.0	450 ⁸	0	3
1,3-Dichloropropene	µg/l	1	<1.0	8.9 ⁸	0	3
Dieldrin	µg/l	1	<0.05	0.00004 ⁸	0	3
2,4-Dinitrotoluene	µg/l	1	<5.0	2.6 ⁸	0	3
1,2-Diphenylhydrazine	µg/l	1	<5.0	0.16 ⁸	0	3
Halomethanes	µg/l	1	<1	130 ⁸	0	3
Heptachlor	µg/l	1	<0.03	0.00005 ⁸	0	3
Heptachlor epoxide	µg/l	1	<0.05	0.00002 ⁸	0	3
Hexachlorobenzene	µg/l	1	<5.0	0.00021 ⁸	0	3
Hexachlorobutadine	µg/l	1	<5.0	14 ⁸	0	3
Hexachloroethane	µg/l	1	<5.0	2.5 ⁸	0	3
Isophorone	µg/l	1	<5.0	730 ⁸	0	3
N-Nitrosodimethylamine	µg/l	1	<5.0	7.3 ⁸	0	3
N-Nitrosodi-n-propylamine	µg/l	1	<5.0	0.38 ⁸	0	3
N-Nitrosodiphenylamine	µg/l	0	--	2.5 ⁸	0	3
PAH	µg/l	1	<5	0.0088 ⁸	0	3
PCB	µg/l	1	<0.65	0.000019 ⁸	0	3
TCDD Equivalents	µg/l	1	--	0.0000000039 ⁸	0	3
1,1,2,2-Tetrachloroethane	µg/l	1	<1.0	2.3 ⁸	0	3
Tetrachloroethylene	µg/l	1	<1.0	2.0 ⁸	0	3
Toxaphene	µg/l	1	<10	0.00021 ⁸	0	3
Trichloroethylene	µg/l	1	<1.0	27 ⁸	0	3
1,1,2-Trichloroethane	µg/l	1	<1.0	9.4 ⁸	0	3
2,4,6-Trichlorophenol	µg/l	1	<1.0	0.29 ⁸	0	3
Vinyl Chloride	µg/l	1	<1.0	36 ⁸	0	3

1 Number of data points available for the RPA.

2 If there is a detected value, the highest reported value is summarized in the table. If there are no detected values, the lowest MDL is summarized in the table.

3 End Point 1 – RP determined, limit required, monitoring required.

End Point 2 – Discharger determined not to have RP, monitoring may be established.

End Point 3 – RPA was inconclusive, carry over previous limits if applicable, and establish monitoring.

4 Based on the 6-Month Median in the Table B of the Ocean Plan.

5 Background concentrations contained in Table C of the Ocean Plan.

6 Based on the Daily Maximum in Table B of the Ocean Plan.

7 Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Radioactivity at levels that exceed the applicable criteria are not expected in the discharge.

8 Based on 30-Day Average in Table B of the Ocean Plan.

9 Concentration values from the Discharger's April 29, 2014 request to amend the permit. These values are greater than the values from the Discharger's original RWD.

Reasonable potential to exceed water quality objectives contained within the Ocean Plan was not determined for any parameters outlined in Table 5 above. Based on the limited available data, the RPA was specifically inconclusive for all parameters. Since reasonable potential to exceed water quality objectives contained in Table B of the Ocean Plan could not be determined, this Order does not contain WQBELs for individual metals and priority pollutants listed in Table B of the Ocean Plan; instead performance goals for these constituents have been established. The monitoring and reporting program in Attachment E of this Order is designed to obtain additional information on Table B constituents.

4. WQBEL Calculations

- a. From the Table B water quality objectives of the Ocean Plan, effluent limitations and performance goals are calculated according to the following equation for all pollutants, except for acute toxicity (if applicable) and radioactivity:

$$C_e = C_o + D_m (C_o - C_s) \text{ where,}$$

- C_e = the effluent limitation (µg/L)
- C_o = the water quality objective to be met at the completion of initial dilution (µg/L)
- C_s = background seawater concentration
- D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

- b. Initial dilution (D_m) has been determined to be 237 to 1 by the San Diego Water Board through the application of USEPA’s dilution model, Visual Plumes.
- c. Table C of the Ocean Plan establishes background concentrations for some pollutants to be used when determining reasonable potential (represented as “C_s”). In accordance with Table B implementing procedures, C_s equals zero for all pollutants not established in Table C. The background concentrations provided in Table C are summarized below:

Having

Parameter	Background Seawater Concentration
Arsenic	3 µg/l
Copper	2µg/l
Mercury	0.0005 µg/l
Silver	0.16 µg/l
Zinc	8 µg/l

**Table 4.
 Pollutants
 Background
 Concentrations**

- d. As an example, performance goals for arsenic are determined as follows:

Water Quality objectives from the Ocean Plan for arsenic are:

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Arsenic	µg/l	8	32	80

Using the equation, $C_e = C_o + D_m(C_o - C_s)$, effluent limitations/performance goals are calculated as follows:

Arsenic

$$C_e = 8 + 237 (8 - 3) = 1,193 \text{ or } 1.19E+03 \text{ µg/l (6-Month Median)}$$

$$C_e = 32 + 237 (32 - 3) = 6,905 \text{ or } 6.9E+03 \text{ µg/l (Daily Maximum)}$$

$$C_e = 80 + 237 (80 - 3) = 18,329 \text{ or } 1.83E+04 \text{ µg/l (Instantaneous Maximum)}$$

Based on the implementing procedures described above, performance goals have been calculated for all Table B pollutants from the California Ocean Plan and incorporated into this Order.

- e. 40 CFR 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 CFR 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g., CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water.

Mass-based effluent limitations were calculated using the following equation:

$$\text{lbs/day} = \text{permitted flow (MGD)} \times \text{pollutant concentration (mg/L)} \times 8.34$$

- f. Based on the results of the RPA, no constituents exhibited reasonable potential to cause or contribute to an exceedance of the water quality objectives from Table B of the Ocean Plan. Therefore, no WQBELs are included in this Order.
- g. A summary of the performance goals is provided in Table F-8 of this Fact Sheet.

5. Whole Effluent Toxicity (WET)

- a. Implementing provisions at section III.C.4.c.(3) of the Ocean Plan require chronic toxicity monitoring for ocean waste discharges with minimum initial dilution factors ranging from 100:1 to 350:1. Using the chronic WET testing submitted with the RWD, a RPA was conducted which resulted in Endpoint 3, therefore the RPA was inconclusive. This Order contains a performance goal and monitoring for chronic toxicity on an annual basis. Based on the methods established by the California Ocean Plan, a maximum daily performance goal of 238 TUC is established in this Order.
- b. Implementing provisions at section III.C.4.c.(3) of the Ocean Plan states that the San Diego Water Board may require acute toxicity testing in addition to chronic toxicity monitoring for ocean waste discharges with minimum initial dilution factors ranging from 100:1 to 350:1 as necessary for the protection of beneficial uses of ocean waters. This Order does not contain effluent limitations or monitoring requirements for acute toxicity.

D. Final Effluent Limitations

Effluent limitation for oil and grease, total suspended solids (TSS), settleable solids, turbidity, and pH have been established based on the requirements of Table A of the Ocean Plan. The final effluent limitations for Discharge Point No. 001 are summarized in Table 7 below.

Table 5. Final Effluent Limitations

Parameter	Units	Monthly (30-day Average)	Weekly (7-day Average)	Instantaneous Maximum	Basis
Grease and Oil	mg/l	25	40	75	Ocean Plan Table A
Total Suspended Solids	mg/l	60			Ocean Plan Table A
Settleable Solids	ml/l	1.0	1.5	3.0	Ocean Plan Table A

Parameter	Units	Monthly (30-day Average)	Weekly (7-day Average)	Instantaneous Maximum	Basis
Turbidity	NTU	75	100	225	Ocean Plan Table A
pH	Units	Within the limits of 6.0 to 9.0 at all times			Ocean Plan Table A

1. Satisfaction of Anti-Backsliding Requirements

This discharge has not previously been subject to WDRs or NPDES permitting requirements

2. Satisfaction of Antidegradation Policy

Waste Discharge Requirements for the discharge from the facility to the IBCS must conform with federal and state antidegradation policies provided at 40 CFR 131.12 and in State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The antidegradation policies require that beneficial uses and the water quality necessary to maintain those beneficial uses in the receiving waters of the discharge shall be maintained and protected, and, if existing water quality is better than the quality required to maintain beneficial uses, the existing water quality shall be maintained and protected unless allowing a lowering of water quality is necessary to accommodate important economic and social development or consistent with maximum benefit to the people of California. When a significant lowering of water quality is allowed by the San Diego Water Board, an antidegradation analysis is required in accordance with the State Water Board’s Administrative Procedures Update (July 2, 1990), Antidegradation Policy Implementation for NPDES Permitting.

The discharge from the facility is not expected to affect the beneficial uses of the receiving water, and the discharge in compliance with this Order is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

Effluent limitations were not included in this Order for constituents for which reasonable potential to exceed the water quality objective was not indicated following a reasonable potential analysis. The procedures for conducting the reasonable potential analysis are explained in Section IV.C.3 of this Fact Sheet. For constituents for which effluent limitations were not included, non-regulatory performance goals were included which will indicate the level of discharge at which possible water quality impacts may be significant. With the inclusion of performance goals and the monitoring program for constituents without effluent limitations, the existing water quality is expected to be maintained.

3. Stringency of Requirements for Individual Pollutants

This Order contains technology-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on oils and grease, TSS, settleable solids, turbidity, and pH. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

E. Performance Goals

Constituents that do not have reasonable potential are listed as performance goals in this Order. Performance goals serve to maintain existing treatment levels and effluent quality and supports State and federal antidegradation policies. Additionally, performance goals provide all interested parties with information regarding the expected levels of pollutants in the discharge that should not be exceeded in order to maintain the water quality objectives established in the Ocean Plan. Performance goals are not limitations or standards for the regulation of the discharge. Effluent concentrations above the performance goals will not be considered as violations of the permit but serve as red flags that indicate

water quality concerns. Repeated red flags may prompt the San Diego Water Board to reopen and amend the permit to replace performance goals for constituents of concern with effluent limitations, or the San Diego Water Board may coordinate such actions with the next permit renewal.

The following table lists the performance goals established by this Order. A minimum probable initial dilution factor of 237 was used in establishing the performance goals.

Table 6. Performance Goals

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE					
Arsenic	µg/l	1.19E+03	6.91E+03	1.83E+04	
	lbs/day	9.95E-01	5.76E+00	1.53E+01	
Cadmium	µg/l	2.38E+02	9.52E+02	2.38E+03	
	lbs/day	1.98E-01	7.94E-01	1.98E+00	
Chromium VI, Total Recoverable ²	µg/l	4.76E+02	1.90E+03	4.76E+03	
	lbs/day	3.97E-01	1.59E+00	3.97E+00	
Copper, Total Recoverable	µg/l	2.40E+02	2.38E+03	6.67E+03	
	lbs/day	2.00E-01	1.99E+00	5.56E+00	
Lead, Total Recoverable	µg/l	4.76E+02	1.90E+03	4.76E+03	
Lead, Total Recoverable	lbs/day	3.97E-01	1.59E+00	3.97E+00	
Mercury, Total Recoverable	µg/l	9.40E+00	3.80E+01	9.51E+01	
	lbs/day	7.84E-03	3.17E-02	7.93E-02	
Nickel, Total Recoverable	µg/l	1.19E+03	4.76E+03	1.19E+04	
	lbs/day	9.92E-01	3.97E+00	9.92E+00	
Selenium, Total Recoverable	µg/l	3.57E+03	1.43E+04	3.57E+04	
	lbs/day	2.98E+00	1.19E+01	2.98E+01	
Silver, Total Recoverable	µg/l	1.29E+02	6.28E+02	1.63E+03	
	lbs/day	1.07E-01	5.24E-01	1.36E+00	
Zinc, Total Recoverable	µg/l	2.86E+03	1.71E+04	4.57E+04	
	lbs/day	2.39E+00	1.43E+01	3.81E+01	
Cyanide, Total (as CN) ³	µg/l	2.38E+02	9.52E+02	2.38E+03	
	lbs/day	1.98E-01	7.94E-01	1.98E+00	
Total Residual Chlorine ⁴	µg/l	4.76E+02	1.90E+03	1.43E+04	
	lbs/day	3.97E-01	1.59E+00	1.19E+01	
Ammonia (expressed as nitrogen)	µg/l	1.43E+05	5.71E+05	1.43E+06	
	lbs/day	1.19E+02	4.76E+02	1.19E+03	
Chronic Toxicity ⁵	TU _c		2.38E+02		
Phenolic compounds ⁶ (non-chlorinated)	µg/l	7.14E+03	2.86E+04	7.14E+04	
	lbs/day	5.95E+00	2.38E+01	5.95E+01	
Chlorinated phenolics ⁷	µg/l	2.38E+02	9.52E+02	2.38E+03	
	lbs/day	1.98E-01	7.94E-01	1.98E+00	
Endosulfan ⁸	µg/l	2.14E+00	4.28E+00	6.43E+00	
	lbs/day	1.79E-03	3.57E-03	5.36E-03	
Endrin	µg/l	4.76E-01	9.52E-01	1.43E+00	
	lbs/day	3.97E-04	7.94E-04	1.19E-03	

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
HCH ⁹	µg/l	9.52E-01	1.90E+00	2.86E+00	
	lbs/day	7.94E-04	1.59E-03	2.38E-03	
Radioactivity	Pci/l	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations, Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH - NONCARCINOGENS					
Acrolein	µg/l				5.24E+04
	lbs/day				4.37E+01
Antimony	µg/l				2.86E+05
	lbs/day				2.38E+02
Bis(2-chloroethoxy)methane	µg/l				1.05E+03
	lbs/day				8.73E-01
Bis(2-chloroisopropyl)ether	µg/l				2.86E+05
	lbs/day				2.38E+02
Chlorobenzene	µg/l				1.36E+05
Chlorobenzene	lbs/day				1.13E+02
Chromium III	µg/l				4.52E+07
	lbs/day				3.77E+04
di-n-butyl phthalate	µg/l				8.33E+05
	lbs/day				6.95E+02
Dichlorobenzenes ¹⁰	µg/l				1.21E+06
	lbs/day				1.01E+03
Diethyl phthalate	µg/l				7.85E+06
	lbs/day				6.55E+03
Dimethyl phthalate	µg/l				1.95E+08
	lbs/day				1.63E+05
4,6-Dinitro-2-methylphenol	µg/l				5.24E+04
	lbs/day				4.37E+01
2,4-Dinitrophenol	µg/l				9.52E+02
	lbs/day				7.94E-01
Ethylbenzene	µg/l				9.76E+05
	lbs/day				8.14E+02
Fluoranthene	µg/l				3.57E+03
	lbs/day				2.98E+00
Hexachlorocyclopentadiene	µg/l				1.38E+04
	lbs/day				1.15E+01
Nitrobenzene	µg/l				1.17E+03
	lbs/day				9.73E-01
Thallium	µg/l				4.76E+02
	lbs/day				3.97E-01
Toluene	µg/l				2.02E+07
	lbs/day				1.69E+04

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
Tributyltin	µg/l				3.33E-01
	lbs/day				2.78E-04
1,1,1-Trichloroethane	µg/l				1.29E+08
	lbs/day				1.07E+05
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS					
Acrylonitrile	µg/l				2.38E+01
	lbs/day				1.98E-02
Aldrin	µg/l				5.24E-03
	lbs/day				4.37E-06
Benzene	µg/l				1.40E+03
	lbs/day				1.17E+00
Benzidine	µg/l				1.64E-02
	lbs/day				1.37E-05
Beryllium	µg/l				7.85E+00
	lbs/day				6.55E-03
Bis(2-chloroethyl)ether	µg/l				1.07E+01
	lbs/day				8.93E-03
Bis(2-ethylhexyl)phthalate	µg/l				8.33E+02
	lbs/day				6.95E-01
Carbon tetrachloride	µg/l				2.14E+02
	lbs/day				1.79E-01
Chlordane ¹¹	µg/l				5.47E-03
	lbs/day				4.57E-06
Chlorodibromomethane	µg/l				2.05E+03
	lbs/day				1.71E+00
Chloroform	µg/l				3.09E+04
	lbs/day				2.58E+01
DDT ¹²	µg/l				4.05E-02
	lbs/day				3.37E-05
1,4-Dichlorobenzene	µg/l				4.28E+03
	lbs/day				3.57E+00
3-3'-Dichlorobenzidine	µg/l				1.93E+00
	lbs/day				1.61E-03
1,2-Dichloroethane	µg/l				6.66E+03
	lbs/day				5.56E+00
1,1-Dichloroethylene	µg/l				2.14E+02
	lbs/day				1.79E-01
Dichlorobromomethane	µg/l				1.48E+03
	lbs/day				1.23E+00
Dichloromethane	µg/l				1.07E+05
	lbs/day				8.93E+01
1,3-Dichloropropene	µg/l				2.12E+03
	lbs/day				1.77E+00

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
Dieldrin	µg/l				9.52E-03
	lbs/day				7.94E-06
2,4-Dinitrotoluene	µg/l				6.19E+02
	lbs/day				5.16E-01
1,2-Diphenylhydrazine	µg/l				3.81E+01
	lbs/day				3.18E-02
Halomethanes ¹³	µg/l				3.09E+04
	lbs/day				2.58E+01
Heptachlor	µg/l				1.19E-02
	lbs/day				9.92E-06
Heptachlor epoxide	µg/l				4.76E-03
	lbs/day				3.97E-06
Hexachlorobenzene	µg/l				5.00E-02
	lbs/day				4.17E-05
Hexachlorobutadine	µg/l				3.33E+03
	lbs/day				2.78E+00
Hexachloroethane	µg/l				5.95E+02
	lbs/day				4.96E-01
Isophorone	µg/l				1.74E+05
	lbs/day				1.45E+02
N-Nitrosodimethylamine	µg/l				1.74E+03
	lbs/day				1.45E+00
N-Nitrosodi-n-propylamine	µg/l				9.04E+01
	lbs/day				7.54E-02
N-Nitrosodiphenylamine	µg/l				5.95E+02
	lbs/day				4.96E-01
PAH ¹⁴	µg/l				2.09E+00
	lbs/day				1.75E-03
PCB ¹⁵	µg/l				4.52E-03
	lbs/day				3.77E-06
TCDD Equivalents ¹⁶	µg/l				9.28E-07
	lbs/day				7.74E-10
1,1,2,2-Tetrachloroethane	µg/l				5.47E+02
	lbs/day				4.57E-01
Tetrachloroethylene	µg/l				4.76E+02
	lbs/day				3.97E-01
Toxaphene	µg/l				5.00E-02
	lbs/day				4.17E-05
Trichloroethylene	µg/l				6.43E+03
	lbs/day				5.36E+00
1,1,2-Trichloroethane	µg/l				2.24E+03
	lbs/day				1.87E+00
2,4,6-Trichlorophenol	µg/l				6.90E+01

Parameter	Units	Performance Goals ¹			
		6-Month Median	Maximum Daily	Instantaneous Maximum	30-day Average
	lbs/day				5.76E-02
Vinyl Chloride	µg/l				8.57E+03
	lbs/day				7.15E+00

- ¹ Scientific “E” notation is used to express certain values. In scientific “E” notation, the number following the “E” indicates that position of the decimal point in the value. Negative numbers after the “E” indicate that the value is less than 1, and positive numbers after the “E” indicate that the value is greater than 1. In this notation a value of 6.1E-02 represents 6.1 x 10⁻² or 0.061, 6.1E+02 represents 6.1 x 10² or 610, and 6.1E+00 represents 6.1 x 10⁰ or 6.1.
- ² The Discharger may, at their option, apply this performance goal as a total chromium performance goal.
- ³ If the Discharger can demonstrate to the satisfaction of the San Diego Water Board (subject to USEPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, performance goals may be evaluated with the combined measurement of free cyanide, simple alkali metals cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR Part 136, as revised May 14, 1999.
- ⁴ The water quality objectives for total chlorine residual applicable to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation: $\log y = 0.43 (\log x) + 1.8$, where y =the water quality objective (in µg/l) to apply when chlorine is being discharged; x =the duration of uninterrupted chlorine discharge in minutes. Actual effluent limitations for total chlorine, when discharging intermittently, shall then be determined according to Implementation Procedures for Table B from the Ocean Plan, using a minimum probable initial dilution factor of 237 and a flow rate of 0.10 MGD.
- ⁵ This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response. Chronic toxicity expressed as Chronic Toxicity Units (TUc) = 100/NOEL, where NOEL (No Observed Effect Level) is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism.
- ⁶ Non-chlorinated phenolic compounds represent the sum of 2,4-dimethylphenol, 4,6-Dinitro-2-methylphenol, 2,4-dinitrophenol, 2-methylphenol, 4-methylphenol, 2-Nitrophenol, 4-nitrophenol, and phenol.
- ⁷ Chlorinated phenolic compounds represent the sum of 4-chloro-3-methylphenol, 2-chlorophenol, pentachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol.
- ⁸ Endosulfan represents the sum of alpha-endosulfan, beta-endosulfan, and endosulfan sulfate.
- ⁹ HCH (hexachlorocyclohexane) represents the sum of the alpha, beta, gamma (Lindane), and delta isomers of hexachlorocyclohexane.
- ¹⁰ Dichlorobenzenes represent the sum of 1,2- and 1,3-dichlorobenzene.
- ¹¹ Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.
- ¹² DDT represents the sum of 4,4’DDT; 2,4’DDT; 4,4’DDE; 2,4’DDE; 4,4’DDD; and 2,4’DDD.
- ¹³ Halomethanes represent the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).
- ¹⁴ PAHs (polynuclear aromatic hydrocarbons) represent the sum of acenaphthalene; anthracene; 1,2-benzanthracene; 3,4-benzofluoranthene; benzo[k]fluoranthene; 1,12-benzoperylene; benzo[a]pyrene; chrysene; dibenzo[a,h]anthracene; fluorene; indeno[1,2,3-cd]pyrene; phenanthrene; and pyrene.
- ¹⁵ PCBs (polychlorinated biphenyls) represent the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- ¹⁶ TCDD equivalents represent the sum of concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown by the table below. USEPA Method 8280 may be used to analyze TCDD equivalents.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8 – tetra CDD	1.0
2,3,7,8 – penta CDD	0.5
2,3,7,8 – hexa CDD	0.1

2,3,7,8 – hepta CDD	0.01
octa CDD	0.001
2,3,7,8 – tetra CDF	0.1
1,2,3,7,8 – penta CDF	0.05
2,3,4,7,8 – penta CDF	0.5
2,3,7,8 – hexa CDFs	0.1
2,3,7,8 – hepta CDFs	0.01
Octa CDF	0.001

F. Interim Effluent Limitations – Not Applicable

G. Reclamation Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

Receiving water limitations are derived from the water quality objectives for ocean waters established by the Basin Plan and the Ocean Plan. Where discharge specifications, effluent limitations, and performance goals contained in Section IV of the Order have been determined to be sufficient to ensure compliance with specific water quality objectives, receiving water limitations based on those water quality objectives have not been included.

A. Surface Water

1. Bacterial Characteristics

- a.** Within a zone bounded by the shoreline and a distance of three nautical miles from the shoreline, including all kelp beds, the following bacterial objectives shall be maintained throughout the water column. The initial dilution zone for wastewater outfalls is excluded.
 - i.** 30-day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each site:
 - (a)** Total coliform density shall not exceed 1,000 per 100 mL;
 - (b)** Fecal coliform density shall not exceed 200 per 100 mL; and
 - (c)** Enterococcus density shall not exceed 35 per 100 mL.
 - ii.** Single Sample Maximum:
 - (a)** Total coliform density shall not exceed 10,000 per 100 mL;
 - (b)** Fecal coliform density shall not exceed 400 per 100 mL;
 - (c)** Enterococcus density shall not exceed 104 per 100 mL; and
 - (d)** Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform/total coliform ratio exceeds 0.1.
- b.** The Initial Dilution Zone for any wastewater outfall shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards.

- c.** At all areas where shellfish may be harvested for human consumption, as determined by the San Diego Water Board, the median total coliform density shall not exceed 70 per 100 mL throughout the water column, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

2. Physical Characteristics

- a.** Floating particulates and grease and oils shall not be visible.
- b.** The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
- c.** Natural light shall not be significantly reduced at any point outside the initial dilution zone as a result of the discharge of waste.
- d.** The rate of deposition of inert solids and the characteristics of inert solids in the ocean sediments shall not be changed such that benthic communities are degraded.

3. Chemical Characteristics

- a.** The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
- b.** The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c.** The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d.** The concentration of substances set forth in Chapter II, Table B of the Ocean Plan, shall not be increased in marine sediments to levels that would degrade indigenous biota.
- e.** The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
- f.** Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
- g.** Numerical water quality objectives established in Chapter II, Table B of the California Ocean Plan shall not be exceeded outside of the zone of initial dilution as a result of discharges from the Facility.

4. Biological Characteristics

- a.** Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- b.** The natural taste, odor, color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- c.** The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

5. Radioactivity

- a.** Discharge of radioactive waste shall not degrade marine life.

B. Groundwater Limitations– Not Applicable

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

USEPA Regulations at 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the San Diego Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring – Not Applicable

B. Effluent Monitoring

1. Pursuant to the requirements of 40 CFR §122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations/performance goals. Effluent monitoring is necessary to assess compliance with effluent limitations/performance goals, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving water.
2. Continuous effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the IBCS.
3. TDS effluent monitoring is required to assess the toxicity due to the low salinity in the discharge compared to the receiving water.

C. Whole Effluent Toxicity Testing Requirements

As described in section IV.C.5 of this Fact Sheet, annual chronic WET testing is required by this Order to determine compliance with the performance goal for chronic toxicity.

D. Receiving Water Monitoring

1. **Surface Water Monitoring.** The Discharger shall periodically review the receiving water monitoring reports submitted by the City of Escondido and San Elijo Joint Powers Authority for their individual wastewater discharges through the San Elijo Ocean Outfall pursuant to NPDES No.'s CA0107981 and CA0107999. Receiving water monitoring data obtained from the City of Escondido and San Elijo Joint Powers Authority will be used to determine compliance with water quality objectives and criteria specified in the Basin Plan, Ocean Plan, and other state plans and policies applicable to the discharge from the facility.
2. **Groundwater Monitoring– Not Applicable**

E. Other Monitoring Requirements – Not Applicable

F. Reporting Requirements

1. Self-Monitoring Reports and California Integrated Water Quality System (CIWQS)

At any time during the term of this permit, the State or San Diego Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit an electronic copy of the SMR on a CD to the San Diego Water Board Office.

CIWQS is one of the Water Boards' primary regulatory information tracking systems. It is a web-based relational database for core regulatory data for use by staff, management, and the public, and it allows the regulated community to submit certain types of information to the Water Boards in compliance with adopted orders.

2. Discharge Monitoring Reports (DMRs)

Currently, only major Dischargers are required to submit discharge monitoring reports (DMRs), in addition to self-monitoring reports. The facility regulated by this Order has been classified by USEPA and the San Diego Water Board as a minor discharge and therefore is currently not required to submit DMRs. However, DMRs can be required from any discharger regardless of the major/minor designation. USEPA may be requiring DMRs from all Dischargers in electronic or paper form in the future.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D to the order.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This Order may be re-opened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR Parts 122, 123, 124, and 125. The San Diego Water Board may reopen the permit to modify permit conditions and requirements [including, but not limited to, increased/ modified receiving water requirements and participation in the Southern California Coastal Water Research Project (SCCWRP) model monitoring program]. Causes for modifications include the promulgation of new regulations or adoption of new regulations by the State Water Board or San Diego Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

a. Whole Effluent Toxicity (WET)

- i.** Implementing provisions at section III.C.4.c.(3) of the Ocean Plan require chronic toxicity monitoring for ocean waste discharges with minimum initial dilution factors ranging from 100:1 to 350:1. Based on methods of the California Ocean Plan, a maximum daily performance goal of 238 TUC is established in this Order and annual monitoring has been established.
- ii.** The Discharger is required to submit a TRE workplan to the San Diego Water Board within 180 days of the effective date of this Order. The workplan shall describe steps the Discharger intends to follow if the performance goal for chronic toxicity is exceeded.

- iii. If the performance goal for chronic toxicity is exceeded, the Discharger shall implement the TRE/TIE process described in section VI.C.2 of this Order and section V. of the Monitoring and Reporting Program.

3. Best Management Practices and Pollution Prevention – Not Applicable

4. Construction, Operation, and Maintenance Specifications – Not Applicable

5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6. Other Special Provisions – Not Applicable

7. Compliance Schedules – Not Applicable

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Stone Brewing Co. As a step in the WDR adoption process, the San Diego Water Board staff has developed tentative WDRs. The San Diego Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The San Diego Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was posted on the San Diego Water Board website on December 19, 2011. The tentative Order was posted on the San Diego Water Board website and emailed to the Discharger and all known interested parties on December 19, 2011.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the San Diego Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the San Diego Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on January 18, 2012.

C. Public Hearing

The San Diego Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: February 8, 2012
Time: 9:00 AM
Location: Regional Water Quality Control Board
Regional Board Meeting Room
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Interested persons are invited to attend. At the public hearing, the San Diego Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/sandiego/> where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the San Diego Water Board regarding the final WDRs. The petition must be submitted within 30 days of the San Diego Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the San Diego Water Board by calling (858) 467-2952.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the San Diego Water Board, reference this facility, and provide a name, address, and phone number.