The City of
SAN DIEGO
Public Utilities Department
Environmental Monitoring & Technical Services

February 29, 2016

Mr. David W. Gibson, Executive Officer
California Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attention: Pretreatment Coordinator

Dear Mr. Gibson:

Subject: Board Order No. R9-2013-0006 NPDES Permit No. CA0109045
CY2015 Pretreatment Annual Report for the South Bay Water Reclamation Plant

The City of San Diego South Bay Water Reclamation Plant Pretreatment Program Annual Report for calendar year 2015, due March 1, 2016, is hereby submitted in accordance with the requirements of NPDES Permit No.CA0109045, adopted February 13, 2013. The Pretreatment Program operated by the City of San Diego administers the program for the entire Metropolitan Sewerage System tributary area, under a single budget and implementation strategy. Therefore, this report incorporates sections of the EW Blom Point Loma Pretreatment Program Annual Report relating to program budget, structure, and implementation strategy by reference. The City is committed to protecting public health and the environment through a program of environmental management, which includes source control, wastewater treatment, water reclamation, and extensive monitoring. One key element of the program is an aggressive pretreatment and pollution prevention program to minimize toxic discharges to the sewerage system. This report includes a summary of Pretreatment Program activities and accomplishments throughout jurisdictions tributary to the South Bay Water Reclamation Plant.

Should you have any questions concerning the information provided herein, or wish to meet with City staff to discuss the report in detail, please contact Barbara Sharatz, of my staff, at (858) 654-4106.

Sincerely,

Peter S. Vroom, Ph.D.
Public Utilities Deputy Director

BLS/rad

cc: Amelia Whitson, Pretreatment Coordinator, EPA Region IX, via email only
Regulatory Unit, Water Quality Div., State Water Resources Control Board, via email only
Halla Razak, Director of Public Utilities, City of San Diego
Barbara Sharatz, Pretreatment Program Manager, City of San Diego
File

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POTW PRETREATMENT ANNUAL REPORT

COVER SHEET

NPDES Permit Holder or Sewer Authority Name: City of San Diego

Report Date: March 1, 2016

Period Covered by This Report: January 1, 2015 to December 31, 2015

Period Covered by Previous Report: January 1, 2014 to December 31, 2014

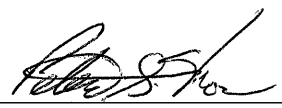
Name of Wastewater Treatment Plant(s)	**NPDES Permit Number**
South Bay Water Reclamation Plant	CA 0109045

Person to contact concerning information contained in this report:

Name: Barbara Sharatz
Title: Industrial Wastewater Control Program Manager
Mailing Address: 9192 Topaz Way, MS 901D
San Diego, CA 92123-1119
Telephone No.: (858) 654-4106

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

2-25-2016
Date



Peter S. Vroom, Ph.D.
Deputy Director,
Environmental Monitoring and Technical Services

PRETREATMENT ANNUAL REPORT

PCS Data Entry Form

PPS1

POTW NAME: City of San Diego South Bay Water Reclamation Plant and Ocean Outfall
Flows from this plant can be diverted to the City of San Diego EW Blom Point Loma Plant, NPDES Permit No. CA0107409; therefore, this information is also included in the PCS for that POTW.

NPDES Permit #: CA0109045

Period Covered By This Report: 01/01/15 **(PSSD)** Start Date — 12/31/15 **(PSED)** End Date

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Number of Significant Industrial Users in SNC with Pretreatment Compliance Schedule: 0 **(SSNC)**

Number of Notices of Violation and Administrative Orders Issued Against Significant Industrial Users: 11 **(FENF)**

Number of Civil & Criminal Judicial Actions against Significant Industrial Users: 0 **(JUDI)**

Number of Significant Industrial Users with Significant Violations Published: 0 **(SVPU)**

Number of Industrial Users from Which Penalties Have Been Collected: 0 **(IUPN)**

SOUTH BAY WATER RECLAMATION PLANT
& OCEAN OUTFALL
ANNUAL PRETREATMENT REPORT

NPDES PERMIT No. CA 0109045
SDRWQCB ORDER No. R9-2013-0006

JANUARY 1 – DECEMBER 31, 2015

Environmental Monitoring and Technical Services
Public Utilities Department
2392 Kincaid Road Mail Station 45A
San Diego, CA 92101
Tel (619) 758-2310 • Fax (619) 758-2309

CERTIFIED
ISO 14001

CY2015 ANNUAL PRETREATMENT REPORT
FOR
SOUTH BAY WATER RECLAMATION PLANT

I. Description of the South Bay Water Reclamation Plant and Its Service Area

The South Bay Water Reclamation Plant (SBWRP) is located on a 22.3 acre site near Dairy Mart Road and Monument Road in the eastern portion of the Tijuana River Valley. The site is approximately 300 feet north of the international boundary between Mexico and the United States and approximately 2000 feet west of the International Wastewater treatment Plant. The SBWRP treats raw wastewater collected from the southern portion of the City of San Diego, the City of Imperial Beach, the City of Chula Vista, and the unincorporated portions of south and east San Diego County, a total of approximately 44 square miles, and serves a population of nearly 107,000 people.

The plant is designed to treat up to 15 MGD of raw wastewater to secondary and/or tertiary reclaimed water standards. All SBWRP tertiary treated wastewater in excess of reclaimed water demands is discharged to the Pacific Ocean through the South Bay Ocean Outfall (SBOO). The SBOO was constructed for shared use by the International Wastewater Treatment Plant (IWTP), operated by the International Boundary and Water Commission (IBWC), and the City of San Diego's SBWRP. The SBOO extends westward approximately 23,600 feet from the mouth of the Tijuana River and terminates in a "wye" with two 1980 foot long diffusers. The IWTP currently discharges a maximum of 25 MGD of secondary treated wastewater from the City of Tijuana. This discharge is regulated by Regional Board Order No. R9-2014-0009 (NPDES Permit No. CA0108928). The total average design capacity of the outfall is 174 MGD with a peak hydraulic capacity of 233 MGD. The effluent from the SBWRP is combined with the effluent from the IWTP within the SBOO prior to discharge to the Pacific Ocean.

The SBWRP's primary and secondary processes consist of influent screening using mechanically cleaned bar screens, grit removal using aerated grit chambers, primary sedimentation clarifiers with chain and flight sludge collectors and tilting trough scum collectors, primary effluent flow equalization storage tanks, air activated sludge biological treatment with anoxic selector, and secondary clarifiers with chain and flight sludge collectors. The tertiary treatment process consists of filter feed pumping, coagulation with chemical addition, and direct filtration with conventional deep bed mono-media filters, backwash facilities, and disinfection using ultraviolet light. Sludge processing is handled at the Point Loma Wastewater Treatment Plant (PLWWTP) and the Metropolitan Biosolids Center. Solids from the SBWRP are pumped to the PLWWTP through the South Metro Interceptor.

The City is in the process of moving two electrodialysis reversal (EDR) units from the North City Water Reclamation Plant to the SBWRP in order to provide for TDS and Chloride removal. The two units were originally expected to be operational by August 2015, however there were unanticipated delays; the relocation of the two EDR units, including installation and operation, is now expected to be completed by April 2016. A continuous pH monitor is also expected to be installed and operational on the South Bay influent sewer line by April 2016.

The SBWRP began operations in CY2002, accepting an average of 3.5 MGD influent through the Grove Avenue Pump Station (GAPS). In October 2003 the Otay River Pump Station (ORPS) came on-line. The ORPS is divided into two pumping streams, with one sending high TDS flows from the Imperial Beach Sewer directly to the South Metro Interceptor influent to the PLWTWTP, and the other sending flows from the Otay Trunk Sewer and Salt Creek Trunk Sewer to the GAPS. Since start-up, the ORPS facility has been directing nearly 5 MGD to the GAPS, which combines with the more than 3 MGD GAPS flow for a total of nearly 8 MGD influent to the SBWRP. In that some wastewater from areas tributary to the GAP and ORPS is able to be diverted to the PLWWTP via the South Metro Interceptor, facilities tributary to the GAP and ORPS are included in Annual Pretreatment Reports for both plants.

II. Program Structure

A. Pollution Prevention Plan Requirements

No IUs have been required to prepare or implement a pollution prevention plan as the result of non-compliance.

B. Programs San Diego has implemented to reduce pollutants from industrial users not classified as SIUs

The Metropolitan Wastewater Department of San Diego controls pollutants discharged by non-SIUs and by non-industrial sources through a combination of Class 2 and 3 permits, Best Management Practice Certification programs, and Hazardous Waste Collection events and facilities throughout the Metropolitan Sewerage System service area in cooperation with contributing agencies. For details, see Chapters Two and Three of the CY2015 Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409.

C. Pretreatment Program Changes

During CY2015, the Environmental Monitoring and Technical Services Division was re-structured. See Chapter Two, Section 2.4 of the CY2015 Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409 for details.

There were no other significant changes in operating the pretreatment program in the areas of administrative structure, local limits, monitoring program, legal authority, enforcement policy, or funding or staffing levels.

D. Annual Pretreatment Program Budget

The pretreatment program budget is administered as a single budget for the three treatment plants in the Metropolitan Sewerage System service area. See Chapter 2, Section 2.3 of the CY2015 Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409, for details.

III. Permit Inventory as of December 31, 2015

A. List of Deletions, Additions, and Name Changes of Significant Industrial Users during CY2015

SIU FACILITIES THAT BECAME SIUs IN 2015					Note: UT; = Extracted Groundwater Permit
Facility	Name	Class	Permit	Date	Comments
13-0048	Hyspan Precision Products	1	03-A	18-May-15	Metal finishing, conducting passivation and associated processes
SIU FACILITIES THAT REPORTED A NAME CHANGE IN 2015					
IU #	TO	Class	Permit	Date	FROM
12-0285	US General Services Administration - SYLPOE	3	01-B	06-Mar-15	General Services Administration - SYLPOE
FORMER SIU FACILITIES THAT BECAME NON-SIUs IN 2015					
Facility	Name	Class	Permit	Date	Comments
13-0048	Hyspan Precision Products	1	03-A	14-Jun-15	Industry discontinued metal finishing core operation (passivation)
SIU FACILITIES INACTIVATED IN 2015					
Facility	Name	Class	Permit	Date	Comments
NONE					

A.1 Permit Inventory by Class and Flow

Area	Class 1	IW (GPD)	Class 2	IW (GPD)	Class 3	IW (GPD)	BMP	Total Permits	Total GPD	Class 4C	Class 4
12	3	242	5	10,590	9	344,796	18	35	355,663	4	78
13	1	913	8	8,325	2	6,711	13	24	15,973	0	49
36	1	43,032	0	0	1	2,187	0	2	45,221	0	2
Total	5	44,187	13	18,915	12	353,694	31	61	416,857	4	129

B. Baseline Monitoring Reports Requested or Received in CY2015

Facility Name	Facility #	BMR Requested	BMR Received
NONE			

B.1 Facilities Operating under a Baseline Monitoring Report CY2015

Facility Name	Facility #	BMR Received
AP Precision Metals	12-0144	17-Apr-2001
Doncasters GCE Industries	13-0115	16-May-2002
Emerald Textiles LLC	12-0065	21-Apr-1999
Harcon Precision Metals Inc	12-0244	17-Jun-2010
Heinz Frozen Foods	12-0154	30-Aug-2002
Otay Mesa Energy Center LLC	36-0001	20-Jun-2007
Spec-Built Systems Inc	12-0202	28-Jun-2005

C. SIU Facilities Federal Category, Process, and Pretreatment Technology by Connection
Treatment Plant 6

Report run on: Wednesday, January 6, 2016 6:44 pm

Facility Permit	Name	IW Discharged (gpd)	Conn	Principle Process	Federal/ Local	CFR Part	CFR Section	Order	Pre Treat Code
12-0038 05-A	RJ Donovan Correctional Facility	55,595	100	Prison Sewer Main	Local	133		1	GREASE
								2	GRIND
								3	SCREEN
12-0065 04-A	Emerald Textiles LLC	66,242	110	Commercial Laundry	Local	133		1	LINT
								2	SETTLE
								3	HAUL
								4	RECYL
12-0144 04-A	AP Precision Metals	75	110	Metal Coating (Iron Phosphating)	Federal	433	.17	1	SETTLE
12-0154 04-A	Heinz Frozen Foods	63,749	110	Food Manufacturing	Local	137		1	EQUAL
								2	SCREEN
								3	DAF+C
								4	GREASE
								5	HAUL
12-0202 03-A	Spec-Built Systems Inc	30	110	Iron Phosphating	Federal	433	.17	1	SETTLE
								2	RECYL
								3	PH
12-0220 04-A	Southwest Products LLC dba Circle Foods	99,222	110	Food manufacturing	Local	137		1	EQUAL
								2	SCREEN
								3	DAF+C
								4	SD-FP
12-0244 02-A	Harcon Precision Metals Inc	137	110	Chemical conversion coating & water Jet	Federal	433	.17	1	PH
								2	MIXER
								3	SETTLE
								4	HAUL
								5	EVAP
12-0275 02-A	Jensen Meat Company Inc	18,436	110	Meat processing, cleaning/sanitizing	Local	137		1	SCREEN
								2	ELBOW
								3	SETTLE
								4	HAUL
								5	DIVRTA
12-0283 02-A	Spectex Inc dba Specialty Textile Services	29,000	110	Commerical Laundry	Local	133		1	SETTLE
								2	LINT
								3	UF
								4	HAUL
12-0285 02-A	US General Services Administration - SYLPOE	556	110	Waste activated sludge	Local			1	SCREEN
								2	EQUAL
								3	BIO-AS
			120	Untreated wastewater	Local			1	SCREEN
			130	Treated wastewater	Local			1	SCREEN
								2	EQUAL
								3	BIO-AS

C. (cont.) SIU Facilities Federal Category, Process, and Pretreatment Technology by Connection
Treatment Plant 6

Facility	Permit	Name	IW Discharged (gpd)	Conn	Principle Process	Federal/ Local	CFR Part	CFR Section	Order	Pre Treat Code
12-0285	02-A	US General Services Administration - SYLPOE	556	130					4	UF
									5	UV
									6	HAUL
									7	OZONE
13-0115	05-A	Doncasters GCE Industries	913	200	Bldg 2 Lateral, 1887 Nirvana Av	Local			1	ZERO
									2	HAUL
				300	Bldg 3 Lateral, 757 Main St	Local	130		1	ERU+1
							433	.17	2	HAUL
				330	Dye Pen / Vibra Clean	Federal	433	.17	1	SETTLE
									2	IX
									3	FILT-O
				410	Dye Pen / Water Jet Cutting	Federal	433	.17	1	SETTLE
									2	IX
									3	FILT-O
									4	O/W
									5	HAUL
36-0001	02-A	Otay Mesa Energy Center LLC	43,032	110	WetSac blowdown + OWS	Federal	423	.17	1	SETTLE
									2	PH
				120	PCB zero discharge	Federal	423	.17	1	ZERO
				140	Turbine washing	Federal	423	.17	1	SETTLE

SIUs: 12

D. SIU Facilities: Regulated Parameters by Connection Treatment Plant

Facility	Pmt	Name	Address	Conn	Total IW (gpd)	Parmcode	City freq	Self freq	Cat	Period	Lower Limit	Upper Limit	Units
12-0038	05-A	RJ Donovan Correctional Facility	480 Alta Rd, San Diego	100	55,595	OIL/GREASE	Q	Q	L	DM		500	mg/L
						PH	M	Q	L	DM	5	12.5	pH
12-0065	04-A	Emerald Textiles LLC	1725 Dornoch Ct, San Diego	110	66,217	OIL/GREASE	Q	Q	L	DM		500	mg/L
						PH	Q	Q	L	DM	5	12.5	pH
						PH HIGHEST	Q		L	DM		12.5	pH
						SULFIDE DISSOLVD	N		L	DM		1	mg/L
12-0144	04-A	AP Precision Metals	1215 30th St, San Diego	110	75	CADMIUM	Q	Q	F	DM		.11	mg/L
										MO		.07	mg/L
						CHROMIUM	Q	Q	F	DM		2.77	mg/L
										MO		1.71	mg/L
						COPPER	Q	Q	F	DM		3.38	mg/L
										MO		2.07	mg/L
						CYANIDE(T)	Q	Q	F	DM		1.2	mg/L
										MO		.65	mg/L
						LEAD	Q	Q	F	DM		.69	mg/L
										MO		.43	mg/L
						NICKEL	Q	Q	F	DM		3.98	mg/L
										MO		2.38	mg/L
						PH	Q	Q	L	DM	5	12.5	pH
						SILVER	Q	Q	F	DM		.43	mg/L
										MO		.24	mg/L
						TTO(413+433)-P	A	Q	F	DM		2130	ug/L
						ZINC	Q	Q	F	DM		2.61	mg/L
										MO		1.48	mg/L
12-0154	04-A	Heinz Frozen Foods	7878 Airway Rd, San Diego	110	63,749	CHROMIUM	Q	Q	L	DM		5	mg/L
						OIL/G SCREEN	N		A	DM		500	mg/L
						OIL/GREASE	H	M	L	DM		500	mg/L
						PH	H	M	L	DM	5	12.5	pH
						PH HIGHEST	N		L	DM		12.5	pH
						SULFIDE DISSOLVD	N		L	DM		1	mg/L
						TEMP	H	M	F	DM		65.5	DegC
12-0202	03-A	Spec-Built Systems Inc	2150 Michael Faraday Dr, San Diego	110	30	CADMIUM	S	Q	F	DM		.11	mg/L
										MO		.07	mg/L
						CHROMIUM	S	Q	F	DM		2.77	mg/L
										MO		1.71	mg/L
						COPPER	S	Q	F	DM		3.38	mg/L
										MO		2.07	mg/L
						CYANIDE(T)	S	Q	F	DM		1.2	mg/L
										MO		.65	mg/L
						LEAD	S	Q	F	DM		.69	mg/L
										MO		.43	mg/L
						NICKEL	S	Q	F	DM		3.98	mg/L

D. (cont.) SIU Facilities: Regulated Parameters by Connection Treatment Plant

Facility	Pmt	Name	Address	Conn	Total IW (gpd)	Parmcode	City freq	Self freq	Cat	Period	Lower Limit	Upper Limit	Units
12-0202	03-A	Spec-Built Systems Inc	2150 Michael Faraday Dr, San Diego	110	30	NICKEL	S	Q	F	MO		2.38	mg/L
						PH	S	Q	L	DM	5	12.5	pH
						SILVER	S	Q	F	DM		.43	mg/L
										MO		.24	mg/L
						TTO(413+433)-P	A	Q	F	DM		2130	ug/L
						ZINC	S	Q	F	DM		2.61	mg/L
										MO		1.48	mg/L
12-0220	04-A	Southwest Products LLC dba Circle Foods	8411 Siempre Viva Rd, San Diego	110	99,222	OIL/G SCREEN	N		A	DM		500	mg/L
						OIL/GREASE	H	M	L	DM		500	mg/L
						PH	H	M	L	DM	5	12.5	pH
						PH HIGHEST	N		L	DM		12.5	pH
						SULFIDE DISSOLVD	N		L	DM		1	mg/L
						TEMP	H	M	L	DM		65.5	DegC
12-0244	02-A	Harcon Precision Metals Inc	1790 Dornoch Ct, San Diego	110	137	CADMIUM	S	S	F	DM		.11	mg/L
										MO		.07	mg/L
						CHROMIUM	S	S	F	DM		2.77	mg/L
										MO		1.71	mg/L
						COPPER	S	S	F	DM		3.38	mg/L
										MO		2.07	mg/L
						CYANIDE(T)	S	S	F	DM		1.2	mg/L
										MO		.65	mg/L
						LEAD	S	S	F	DM		.69	mg/L
										MO		.43	mg/L
						NICKEL	S	S	F	DM		3.98	mg/L
										MO		2.38	mg/L
						PH	S	S	L	DM	5	12.5	pH
						SILVER	S	S	F	DM		.43	mg/L
										MO		.24	mg/L
						TTO(413+433)-P	A	S	F	DM		2130	ug/L
						ZINC	S	S	F	DM		2.61	mg/L
										MO		1.48	mg/L
12-0275	02-A	Jensen Meat Company Inc	2550 Britannia Bl Suite 101, San Diego	110	18,436	OIL/GREASE	Q	Q	L	DM		500	mg/L
						PH	Q	Q	L	DM	5	12.5	pH
						PH HIGHEST	Q		L	DM		12.5	pH
						SULFIDE DISSOLVD	N		L	DM		1	mg/L
12-0283	02-A	Spectex Inc dba Specialty Textile Services	1333 30th St Suite A, San Diego	110	29,000	OIL/GREASE	Q	Q	L	DM		500	mg/L
						PH	Q	Q	L	DM	5	12.5	pH
						PH HIGHEST	Q		L	DM		12.5	pH
						SULFIDE DISSOLVD	N		L	DM		1	mg/L
12-0285	02-A	US General Services Administration - SYLPOE	720 E San Ysidro Bl, San Diego	110	106	SULFIDE DISSOLVD	Q	Q	L	DM		1	mg/L
						TSS	Q	M	L	DM		10000	mg/L
13-0115	05-A	Doncasters GCE Industries	757 Main St, Chula Vista	330	572	CADMIUM	Q	Q	F	DM		.11	mg/L

D. (cont.) SIU Facilities: Regulated Parameters by Connection Treatment Plant

Facility	Pmt	Name	Address	Conn	Total IW (gpd)	Parmcode	City freq	Self freq	Cat	Period	Lower Limit	Upper Limit	Units
13-0115	05-A	Doncasters GCE Industries	757 Main St, Chula Vista	330	572	CADMIUM	Q	Q	F	MO		.07	mg/L
						CHROMIUM	Q	Q	F	DM		2.77	mg/L
										MO		1.71	mg/L
						COPPER	Q	Q	F	DM		3.38	mg/L
										MO		2.07	mg/L
						CYANIDE(T)	Q	Q	F	DM		1.2	mg/L
										MO		.65	mg/L
						LEAD	Q	Q	F	DM		.69	mg/L
										MO		.43	mg/L
						NICKEL	Q	Q	F	DM		3.98	mg/L
										MO		2.38	mg/L
						PH	Q	Q	L	DM	5	12.5	pH
						PH HIGHEST	S		L	DM		12.5	pH
						SILVER	Q	Q	F	DM		.43	mg/L
										MO		.24	mg/L
						TTO(413+433)-P	A	Q	F	DM		2130	ug/L
						ZINC	Q	Q	F	DM		2.61	mg/L
										MO		1.48	mg/L
				410	340	CADMIUM	Q	Q	F	DM		.11	mg/L
										MO		.07	mg/L
						CHROMIUM	Q	Q	F	DM		2.77	mg/L
										MO		1.71	mg/L
						COPPER	Q	Q	F	DM		3.38	mg/L
										MO		2.07	mg/L
						CYANIDE(T)	Q	Q	F	DM		1.2	mg/L
										MO		.65	mg/L
						LEAD	Q	Q	F	DM		.69	mg/L
										MO		.43	mg/L
						NICKEL	Q	Q	F	DM		3.98	mg/L
										MO		2.38	mg/L
						PH	Q	Q	L	DM	5	12.5	pH
						PH HIGHEST	S		L	DM		12.5	pH
						SILVER	Q	Q	F	DM		.43	mg/L
										MO		.24	mg/L
						TTO(413+433)-P	A	Q	F	DM		2130	ug/L
						ZINC	Q	Q	F	DM		2.61	mg/L
										MO		1.48	mg/L
36-0001	02-A	Otay Mesa Energy Center LLC	606 De La Fuente Ct, San Diego	110	43,000	CHROMIUM	Q	Q	F	DM		.2	mg/L
						OIL/GREASE	Q	Q	L	DM		500	mg/L
						PH	Q	Q	L	DM	5	12.5	pH
						PH HIGHEST	N		L	DM		12.5	pH
						TDS	S	Q	L	DM		2000	mg/L

D. (cont.) SIU Facilities: Regulated Parameters by Connection Treatment Plant

Facility	Pmt	Name	Address	Conn	Total IW (gpd)	Parmcode	City freq	Self freq	Cat	Period	Lower Limit	Upper Limit	Units
36-0001	02-A	Otay Mesa Energy Center LLC	606 De La Fuente Ct, San Diego	110	43,000	ZINC	Q	Q	F	DM	1		mg/L
				140	22	COPPER	S	S	F	DM	1		mg/L

E. Active Non-SIU Permits, Treatment Plant 6

Report run on: Wednesday, January 6, 2016 6:06 pm

Class 2

Facility	*Permit*	*Name*	*Address*
12-0140	01-A	Kaiser Foundation Health Plan	4652 Palm Av, San Diego
12-0143	03-A	ADESA California LLC dba ADESA San Diego	2175 Cactus Rd, San Diego
12-0145	04-A	Larkspur Energy	9355 Otay Mesa Rd, San Diego
12-0177	02-A	Truck Net LLC	8490 Avenida De La Fuente, San Diego
12-0254	01-A	Northwest Circuits Corp	8660 Avenida Costa Blanca, San Diego
13-0048	04-A	Hyspan Precision Products	1685 Brandywine Av, Chula Vista
13-0159	04-A	SOS Metals San Diego	635 Anita St, Chula Vista
13-0278	04-A	Republic Services dba Allied Waste Services	881 Energy Wy, Chula Vista
13-0316	02-A	Fuller Ford	560 Auto Park Dr, Chula Vista
13-0327	03-A	Dresser-Rand	1675 Brandywine Av Suite E&F, Chula Vista
13-0399	02-A	Veolia Transportation	3650A Main St, Chula Vista
13-0533	01-A	Fleetwash Inc	649 Anita St Suite 1A, Chula Vista
13-0534	01-A	Super Welding of Southern California	609 Anita St, Chula Vista
		13	

Class 3

Facility	*Permit*	*Name*	*Address*
12-0024	03-A	US Border Patrol	3752 Beyer Bl, San Diego
12-0028	01-A	Palm Ave LLC	1835 Palm Av, San Diego
13-0298	03-A	Chula Vista Energy Center LLC	3497 Main St, Chula Vista
13-0439	01-A	Toyota Chula Vista	650 Main St, Chula Vista
36-0010	01-A	Kiewit Power Constructors	610 Alta Rd, San Diego
		5	

Grand total: 18

F. Active Groundwater Permits, Treatment Plant 6

Report run on: Wednesday, January 6, 2016 6:09 pm Page 1

Grand total: 0

G. Dry Cleaners subject to BMPs, Treatment Plant 6

Report run on: Wednesday, January 6, 2016 6:10 pm Page 1

Class **4D**

Facility	*Permit*	*Name*	*Address*
12-0106	02-A	Saturn Cleaners	655 Saturn Bl Suite E, San Diego
12-0108	03-A	Rainbow Cleaners	2004 Dairy Mart Rd Suite 121, San Diego
		2	

Grand total: 2

H. Film Processors subject to BMPs, Treatment Plant 6

Report run on: Wednesday, January 6, 2016 6:13 pm Page 1

Class **2F**

Facility	*Permit*	*Name*	*Address*
12-0081	00-A	San Ysidro Health Center	4004 Beyer Bl, San Diego
12-0100	01-A	County; George Bailey Detention	446 Alta Rd, San Diego
12-0112	01-A	NAC	1330 30th St Suite E, San Diego
12-0113	01-A	So San Diego Veterinary Hosp	2910 Coronado Av, San Diego
12-0114	02-A	EZ Smiles Dental Care	1850 Coronado Av, San Diego
12-0115	01-A	Lewis J Dorria DDS	2930 Coronado Av, San Diego
12-0117	01-A	Montgomery High School	3250 Palm Av, San Diego
12-0119	01-A	Jeffrey W Brown DDS	1761 Palm Av, San Diego
12-0121	01-A	Jerome A Bannister DDS	4370 Palm Av Suite C, San Diego
12-0122	02-A	Carlos Garcia DDS	1270 Picador Bl Suite L-M, San Diego
12-0123	02-A	Southland Plaza Dental	655 Saturn Bl Suite G, San Diego
12-0124	01-A	I-5 Palm Ave Medical Clinic	655 Saturn Bl, San Diego
12-0125	02-A	San Ysidro Dental Care	2004 Dairy Mart Rd, San Diego
12-0186	01-A	Rancho Vista Medical & Therapy Center Inc	342 W San Ysidro Bl Suite F, San Diego
12-0222	01-A	Jose L Lopez DDS Inc	3490 Palm Av Unit 1, San Diego
12-0231	01-A	Juvenile Detention Facility	446 Alta Rd, San Diego
13-0117	02-A	Bay Port Press	645 Marsat St Suite D, Chula Vista
13-0235	01-A	Photo Max	1367 3rd Av, Chula Vista
13-0249	01-A	The Pet Clinic	3326 Main St, Chula Vista
13-0255	01-A	Hilltop Dentistry	11 Naples St, Chula Vista
13-0256	01-A	Langford Chiropractor	4360 Main St Suite 209, Chula Vista
13-0257	01-A	Robert N Woodall DDS Inc	330 Oxford St, Chula Vista
13-0261	02-A	Palomar Dental Group	648 Palomar St, Chula Vista
13-0333	01-A	Costco Wholesale Photo Lab # 781	1130 Broadway, Chula Vista
13-0379	01-A	Amazon Animal Hospital	1172 3rd Av Suite D8, Chula Vista
13-0387	01-A	Perpecta Dental Group	314 Palomar St, Chula Vista
13-0388	01-A	Palomar Dental Group	664 Palomar St Suite 1103, Chula Vista
13-0442	01-A	Wal-Mart # 3516	1360 Eastlake Py, Chula Vista
13-0456	01-A	East Lake Plaza Dental	2060 Otay Lakes Rd Suite 230, Chula Vista
		29	

Grand total: 29

IV. SIU Compliance and Enforcement

A. Annual Compliance Summary

During CY2015 the program administered 12 SIU permits, covering 13 outfalls and monitored at 14 sample points. No facilities or outfalls were in SNC during the year. These facilities are included in the calculation of the Metro System annual Significant Non-Compliance Rate reported in the CY2015 Pretreatment Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409

B. Characterization of the Compliance Status of Each SIU

The Annual SIU Compliance Status Report for CY2015, which follows this page, lists the industry name, address, permit number, permit class; industrial flow by connection; violation dates and descriptions, if applicable; discharge standard and period, and actual value resulting in the violation; whether the violation exceeded the TRC; and whether the industry has been in Significant Non-Compliance (SNC) at any time during the year.

C. SIU Enforcement Actions Initiated, Continued, or Finalized in CY2015

None

D. Public Information and Involvement

Each year, a combined list of all facilities in the Metropolitan Sewerage System service area that were in SNC at any time during the year is published in the Union Tribune; this list is included in Chapter 4 of the CY2015 Annual Report for the Point Loma POTW NPDES Permit No. CA 0107409

In CY2015, the following SIUs discharging tributary to the SBWRP were in Significant Non-Compliance:

Name	Address	Pollutant in Violation
None		

Annual SIU Compliance Status Report

01-Jan-2015 through 31-Dec-2015

SIU Name	IU#	Class	IW Disch	SNC?	[If Yes, Why]	Conn	Violation Date	Description/Parameter	Value	Limit	Period	Cat	TRC
AP Precision Metals	12-0144	1	75	No		110	29-Jan-15	SMR Late - written notice					
1215 30th St, San Diego						110	18-Feb-15	SMR Incomplete					
						110	11-May-15	SMR Incomplete					
Doncasters GCE Industries	13-0115	1	913	No		NA							
757 Main St, Chula Vista													
Emerald Textiles LLC	12-0065	3	66242	No		NA							
1725 Dornoch Ct, San Diego													
Harcon Precision Metals Inc	12-0244	1	137	No		NA							
1790 Dornoch Ct, San Diego													
Heinz Frozen Foods	12-0154	3	63749	No		110	23-Feb-15	Oil and grease, Total-Instantaneous	1890	500	DM	L	**Y**
7878 Airway Rd, San Diego													
Hyspan Precision Products	13-0048	2	199	No		NA							
1685 Brandywine Av, Chula Vista													
Jensen Meat Company Inc	12-0275	3	18436	No		110	27-Apr-15	SMR Incomplete					
2550 Britannia Bl Suite 101, San Diego													
Otay Mesa Energy Center LLC	36-0001	1	43032	No		NA							
606 De La Fuente Ct, San Diego													
RJ Donovan Correctional Facility	12-0038	3	55595	No		100	27-Jul-15	SMR Incomplete					
480 Alta Rd, San Diego													

Annual SIU Compliance Status Report

01-Jan-2015 through 31-Dec-2015

SIU Name	IU#	Class	IW Disch	SNC?	[If Yes, Why]	Conn	Violation Date	Description/Parameter	Value	Limit	Period	Cat	TRC
Southwest Products LLC dba Circle Foods 8411 Siempre Viva Rd, San Diego	12-0220	3	99222	No		110	20-Feb-15	Oil and grease screen	501	500	DM	L	N
						110	25-Feb-15	Oil and grease screen	501	500	DM	L	N
						110	07-May-15	Oil and grease, Total-Instantaneous	943	500	DM	L	**Y**
						110	27-May-15	Oil and grease, Total-Instantaneous	620	500	DM	L	N
						110	22-Jun-15	SMR Incomplete - failed notify in 24 hrs					
Spec-Built Systems Inc 2150 Michael Faraday Dr, San Diego	12-0202	1	30	No		110	27-Jul-15	SMR Incomplete					
Spectex Inc dba Specialty Textile Services 1333 30th St Suite A, San Diego	12-0283	3	29000	No		110	02-Dec-15	Oil and grease, Total-Instantaneous	673	500	DM	L	N
US General Services Administration - SYLPOE 720 E San Ysidro Bl, San Diego	12-0285	3	556	No		110	27-Jul-15	SMR Incomplete					
						110	25-Nov-15	SMR Incomplete					
						120	25-Nov-15	SMR Incomplete					
						130	25-Nov-15	SMR Incomplete					

B. NOVs Issued in 2015 for SIUs Discharging to Treatment Plant 6

Report run on: Friday, February 26, 2016 3:30 pm

Name	*Facility*	*Conn*	*NOV*	*Identified*	*Action*	*Viol Date*	*Fee*	*Level*
AP Precision Metals	12-0144	110	77275	29-Jan-2015	29-Jan-2015		100	Initial notice
			77443	18-Feb-2015	18-Feb-2015		50	Notice only
			78268	11-May-2015	12-May-2015		100	Initial notice
Heinz Frozen Foods	12-0154	110	78283	11-May-2015	11-May-2015	24-Feb-2015	100	Initial notice
Jensen Meat Company Inc	12-0275	110	78108	27-Apr-2015	04-May-2015	05-Mar-2015	50	Notice only
RJ Donovan Correctional Facility	12-0038	100	79061	27-Jul-2015	28-Jul-2015	30-Jun-2015	100	Initial notice
Southwest Products LLC dba Circle Foods	12-0220	110	78248	08-May-2015	08-May-2015	20-Feb-2015	100	Initial notice
			78249	08-May-2015	08-May-2015	25-Feb-2015	100	Initial notice
			78824	22-Jun-2015	22-Jun-2015	27-May-2015	100	Initial notice
			79222	10-Aug-2015	11-Aug-2015	07-May-2015	300	Prelim Conf
Spec-Built Systems Inc	12-0202	110	79062	27-Jul-2015	28-Jul-2015	03-Jun-2015	50	Notice only
US General Services Administration - SYLPOE	12-0285	110	79063	27-Jul-2015	28-Jul-2015	05-Jun-2015	50	Notice only
		Total fees:					$1,200	
NOV count:			12					

Sampling in 2015 at SIUs discharging to Treatment Plant 6

Report run on: Thursday, February 25, 2016 4:30 pm

Facility Pmt	Name	Conn	Principle Process	Pmt Include	Parmcode	City Samples	Self Samples
12-0038 05-A	RJ Donovan Correctional Facility	100	Prison Sewer Main	L	BIOHAZARD CERT		
					COD	5	3
					OIL/GREASE	3	3
					PH	5	3
					SOLVENT CERT		
					TSS	5	3
12-0065 04-A	Emerald Textiles LLC	110	Commercial Laundry	L	CHLORIDE	1	2
					COD	1	4
					FLOW		12
					FLOW MAX		12
					OIL/GREASE	1	4
					PH	1	4
					PH HIGHEST		
					PH LOWEST		
					SULFIDE DISSOLVD		
					TDS	1	2
					TSS	1	4
12-0144 04-A	AP Precision Metals	110	Metal Coating (Iron Phosphating)	F	CADMIUM	2	5
					CHROMIUM	2	5
					COPPER	2	5
					CYANIDE(T)	2	5
					FLOW		4
					FLOW MAX		4
					LEAD	2	5
					NICKEL	2	5
					PH	2	5
					SILVER	2	5
					TTO CERT		4
					TTO(413+433)-P	1	
					ZINC	2	5
12-0154 04-A	Heinz Frozen Foods	110	Food Manufacturing	L	CHROMIUM	4	3
					COD	11	10
					FLOW		12
					FLOW MAX		12
					FLOW TOTIMPORTED		12
					FLOWMETER READ 1	9	12
					FLOWMETER READ 2	9	12
					OIL/G SCREEN		
					OIL/GREASE	12	10
					PH	12	10
					PH HIGHEST	4	
					PH LOWEST	4	
					SULFIDE DISSOLVD		

Sampling in 2015 at SIUs discharging to Treatment Plant 6

Facility Pmt	Name	Conn	Principle Process	Pmt Include	Parmcode	City Samples	Self Samples
12-0154 04-A	Heinz Frozen Foods	110			TEMP	9	10
					TSS	5	10
12-0202 03-A	Spec-Built Systems Inc	110	Iron Phosphating	F	CADMIUM	2	2
					CHROMIUM	2	2
					COPPER	2	2
					CYANIDE(T)	2	2
					FLOW		4
					FLOW MAX		4
					LEAD	2	2
					NICKEL	2	2
					PH	2	1
					SILVER	2	2
					TTO CERT		4
					TTO(413+433)-P	1	
					ZINC	2	2
12-0220 04-A	Southwest Products LLC dba Circle Foods	110	Food manufacturing	L	OIL/G SCREEN	9	
					OIL/GREASE	12	20
					PH	14	11
					PH HIGHEST	7	
					PH LOWEST	7	
					SULFIDE DISSOLVD		
					TEMP	14	11
12-0244 02-A	Harcon Precision Metals Inc	110	Chemical conversion coating & water Jet	F	CADMIUM	2	2
					CHROMIUM	2	2
					COD	2	2
					COPPER	2	2
					CYANIDE(T)	2	2
					FLOW		2
					FLOW MAX		2
					LEAD	2	2
					NICKEL	2	2
					PH	2	2
					SILVER	2	2
					TSS	2	2
					TTO CERT		2
					TTO(413+433)-P	1	
					ZINC	2	2
12-0275 02-A	Jensen Meat Company Inc	110	Meat processing, cleaning/sanitizing	L	CHLORIDE	6	4
					CLARIFIER RPT		3
					COD	6	4
					FLOW		12
					FLOW MAX		12
					OIL/GREASE	14	8

Sampling in 2015 at SIUs discharging to Treatment Plant 6

Facility Pmt	Name	Conn	Principle Process	Pmt Include	Parmcode	City Samples	Self Samples
12-0275 02-A	Jensen Meat Company Inc	110			PH	11	3
					PH HIGHEST		
					PH LOWEST		
					RAIN DIVERT CERT		1
					SULFIDE DISSOLVD	4	
					TDS	6	4
					TFDS	5	4
					TSS	6	4
12-0283 02-A	Spectex Inc dba Specialty Textile Services	110	Commerical Laundry	L	COD	4	4
					FLOW		12
					FLOW MAX		12
					OIL/GREASE	4	4
					PH	4	4
					PH HIGHEST		
					PH LOWEST		
					SULFIDE DISSOLVD		
					TSS	4	4
12-0285 02-A	US General Services Administration - SYLPOE	110	Waste activated sludge	L	COD	3	12
					SULFIDE DISSOLVD	2	3
					TDS	1	
					TSS	3	12
		120	Untreated wastewater	L			
		130	Treated wastewater	L			
13-0115 05-A	Doncasters GCE Industries	200	Bldg 2 Lateral, 1887 Nirvana Av	L	ZERODISCHRG CERT		4
		300	Bldg 3 Lateral, 757 Main St	L			
		330	Dye Pen / Vibra Clean	F	CADMIUM	2	4
					CHROMIUM	2	4
					COPPER	2	4
					CYANIDE(T)	2	4
					FLOW		4
					FLOW MAX		4
					LEAD	2	4
					NICKEL	2	4
					PH	2	4
					PH HIGHEST	1	
					PH LOWEST	1	
					SILVER	2	4
					TTO CERT		4
					TTO(413+433)-P	1	
					ZINC	2	4
		410	Dye Pen / Water Jet Cutting	F	CADMIUM	2	4
					CHROMIUM	2	4
					COPPER	2	4

Sampling in 2015 at SIUs discharging to Treatment Plant 6

Facility Pmt	Name	Conn	Principle Process	Pmt Include	Parmcode	City Samples	Self Samples
13-0115 05-A	Doncasters GCE Industries	410			CYANIDE(T)	2	4
					FLOW		4
					FLOW MAX		4
					LEAD	2	4
					NICKEL	2	4
					PH	2	4
					PH HIGHEST	1	
					PH LOWEST	1	
					SILVER	2	4
					TTO CERT		4
					TTO(413+433)-P	1	
					ZINC	2	4
36-0001 02-A	Otay Mesa Energy Center LLC	110	WetSac blowdown + OWS	F	CHROMIUM	4	4
					FLOW		4
					FLOW MAX		4
					OIL/GREASE	4	4
					PH	4	4
					PH HIGHEST		
					PH LOWEST		
					TDS	2	4
					ZINC	4	4
		120	PCB zero discharge	F	ZERODISCHRG CERT		4
		140	Turbine washing	F	COPPER	2	
					FLOW		2
					FLOW MAX		2

SIUs: 12

TTO Sampling in 2015 at SIUs discharging to Treatment Plant 6

Report run on: Thursday, February 25, 2016 4:35 pm

FacilityPmt	Name	Conn	Principle Process	Batch	City TTO Samples	Self TTO Samples	Self Cert
12-0144 04-A	AP Precision Metals	110	Metal Coating (Iron Phosphating)	N	1		4
12-0202 03-A	Spec-Built Systems Inc	110	Iron Phosphating	Y	1		4
12-0244 02-A	Harcon Precision Metals Inc	110	Chemical conversion coating & water Jet	N	1		2
13-0048 03-A	Hyspan Precision Products	110	Dye pen & hydrotest	N			
		120	Dye Penetrant	N			
13-0115 05-A	Doncasters GCE Industries	330	Dye Pen / Vibra Clean	N	1		4
		410	Dye Pen / Water Jet Cutting	N	1		4

E. SBWRP SIU Enforcement Actions Initiated, Continued, or Finalized in CY2015

None

V. Pretreatment Program Effectiveness

A. Summary of analytical results from representative flow-proportioned, 24-hour composite sampling of the SBWRP influent and effluent for those pollutants that the USEPA has identified under Section 307(a) of the CWA, and which are known or suspected to be discharged by industrial users. The summary must include a full priority pollutant scan.

Tables V. A-1 and V. A-2, below, summarize influent and effluent heavy metal loadings by month.

Pages 22 through 45 provide results for all influent and effluent during CY2015 for all priority pollutants and other pollutants of concern. These reports were extracted from the South Bay Treatment Plant and Ocean Outfall Annual Report. The summary includes a full priority pollutant scan.

TABLE V.A-1
SOUTH BAY WATER RECLAMATION PLANT INFLUENT HEAVY METALS
Average Concentration and Loadings for 2015

Zero = ND Month	Flow MGD	Cd ug/L	Cr ug/L	Cu ug/L	Pb ug/L	Ni ug/L	Ag ug/L	Zn ug/L
MDL(ug/L)		0.26	0.54	2.16	1.68	0.53	0.73	4.19
Jan	7.71	0.33	3.2	89	4	5.08	0	176
Feb	7.84	0.37	2.8	74	2	4.29	0	159
Mar	7.93	0.43	3.8	94	2	4.10	0	174
Apr	7.84	0.38	2.7	82	2	4.48	0	153
May	7.64	0	1.6	0	0	4.02	0	114
Jun	7.62	0	4.5	84	3	4.73	0	173
Jul	7.55	0	3.9	89	3	5.00	0.8	181
Aug	7.67	0	4.3	98	0	13.8	0	171
Sep	7.58	0.30	2.5	57	2	7.80	0	95
Oct	7.53	0.30	7.6	93	4	9.10	0	183
Nov	7.43	0.60	4.7	103	2	5.80	0	189
Dec	5.29	0	4.3	72	0	5.40	0.90	131
Average Flow MGD	7.47							
Average ug/L		0.23	3.83	77.92	2.00	6.13	0.14	158.25
LBS/day		0.01	0.24	4.85	0.12	0.38	0.01	9.86
Total lb HM	15.48							
Total lb (-)Ag	15.47							

TABLE V.A-2
SOUTH BAY WATER RECLAMATION PLANT EFFLUENT HEAVY METALS
Average Concentration and Loadings for 2015

Zero = ND Month	Flow MGD	Cd ug/L	Cr ug/L	Cu ug/L	Pb ug/L	Ni ug/L	Ag ug/L	Zn ug/L
MDL(ug/L)		0.26	0.54	2.16	1.68	0.53	0.73	4.19
Jan	5.17	0	0.7	12	0	3.17	0	30
Feb	4.36	0	0.6	7	0	2.67	0	18.1
Mar	4.32	0	1.8	12	0	2.3	0	26.4
Apr	2.68	0	1.1	12	0	3.54	0	24.4
May	4.09	0	0.7	18	0	3.12	0	33.8
Jun	1.97	0	1.8	12	0	2.54	0	30.6
Jul	2.75	0	1.3	12	0	3.0	0	33
Aug	2.08	0	0	21	0	10.8	0	17.5
Sep	3.03	0	1.2	11	0	6.85	0	26
Oct	3.17	0	0.9	9	0	7.6	0	32
Nov	4.73	0.3	2	12	2	4.0	0	52
Dec	3.56	0	1.6	9	0	4.2	0	52
Average Flow MGD	3.49							
Average ug/L		0.04	1.14	12.25	0.17	4.48	0.00	31.32
LBS/day		0.00	0.03	0.36	0.00	0.13	0.00	0.91
Total lb HM	1.44							
Total lb (-)Ag	1.44							

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE INFLUENT and EFFLUENT

Annual 2015

Biochemical Oxygen Demand Concentration
(24-hour composite)

Source:	Influent Flow	Daily Influent Value	Daily Influent Value	Effluent Flow	Daily Effluent Value	Daily Effluent Value	Percent Removal BOD
Month/ Units:	(MGD)	(mg/L)	(lbs/Day)	(MGD)	(mg/L)	(lbs/Day)	(%)
JANUARY -2015	7.71	329	21155	5.17	18	776	94.5
FEBRUARY -2015	7.84	327	21381	4.36	18	655	94.5
MARCH -2015	7.93	322	21296	4.32	23	829	92.9
APRIL -2015	7.84	355	23212	2.68	18	402	94.9
MAY -2015	7.64	369	23512	4.09	16	546	95.7
JUNE -2015	7.62	382	24276	1.97	12	197	96.9
JULY -2015	7.55	334	21031	2.75	13	298	96.1
AUGUST -2015	7.67	346	22133	2.08	23	399	93.4
SEPTEMBER-2015	7.58	319	20166	3.03	18	455	94.4
OCTOBER -2015	7.53	345	21666	3.17	9	238	97.4
NOVEMBER -2015	7.43	374	23175	4.73	10	394	97.3
DECEMBER -2015	5.29	375	16544	3.56	11	327	97.1
Average	7.47	348	21629	3.49	16	460	95.4

Annual Mass Emissions are calculated from monthly averages of flow for BOD, whereas
Monthly Report average mass emissions are calculated from average daily mass emissions.

ND=not detected

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE INFLUENT and EFFLUENT

Annual 2015

Total Suspended Solids Concentration
(24-hour composite)

Source:	Influent Flow	Influent Daily TSS	Influent Daily VSS	Percent VSS	Influent Daily Mass Emission
Month/ Units:	(MGD)	(mg/L)	(mg/L)	(%)	(lbs/Day)
JANUARY -2015	7.71	281	261	92.9	18069
FEBRUARY -2015	7.84	267	240	89.9	17458
MARCH -2015	7.93	271	249	91.9	17923
APRIL -2015	7.84	271	251	92.6	17719
MAY -2015	7.64	271	249	91.9	17267
JUNE -2015	7.62	289	264	91.3	18366
JULY -2015	7.55	261	239	91.6	16434
AUGUST -2015	7.67	252	232	92.1	16120
SEPTEMBER-2015	7.58	273	249	91.2	17258
OCTOBER -2015	7.53	274	250	91.2	17207
NOVEMBER -2015	7.43	286	265	92.7	17722
DECEMBER -2015	5.29	267	246	92.1	11780
Average	7.47	272	250		16944

Total Suspended Solids Concentration
(24-hour composite)

Source:	Effluent Flow	Daily Effluent TSS	Daily Effluent VSS	Percent VSS	Daily Effluent Mass Emission	Percent Removal TSS	Percent Removal VSS
Month/ Units:	(MGD)	(mg/L)	(mg/L)	(%)	(lbs/Day)	(%)	(%)
JANUARY -2015	5.17	8.4	7.4	88.1	362	97.0	97.2
FEBRUARY -2015	4.36	6.2	5.4	87.1	225	97.7	97.8
MARCH -2015	4.32	6.5	5.8	89.2	234	97.6	97.7
APRIL -2015	2.68	6.7	6.1	91.0	150	97.5	97.6
MAY -2015	4.09	6.9	6.1	88.4	235	97.5	97.6
JUNE -2015	1.97	8.3	7.4	89.2	136	97.1	97.2
JULY -2015	2.75	7.2	6.5	90.3	165	97.2	97.3
AUGUST -2015	2.08	7.0	6.2	88.6	121	97.2	97.3
SEPTEMBER-2015	3.03	11.4	10.3	90.4	288	95.8	95.9
OCTOBER -2015	3.17	9.3	8.4	90.3	246	96.6	96.6
NOVEMBER -2015	4.73	7.8	7.1	91.0	308	97.3	97.3
DECEMBER -2015	3.56	9.7	8.8	90.7	288	96.4	96.4
Average	3.49	8.0	7.1		230	97.1	97.2

Annual Mass Emissions are calculated from monthly averages of flow and TSS, whereas
Monthly Report average mass emissions are calculated from average daily mass emissions.

VSS= Volatile Suspended Solids
TSS= Total Suspended Solids

SOUTH BAY WATER RECLAMATION PLANT

Annual 2015

Effluent to Ocean Outfall
(SB_OUTFALL_01)

Analyte:	Flow	pH	Settleable Solids	Biochemical Oxygen Demand	Total Suspended Solids	Volatile Suspended Solids	Total Dissolved Solids
Units:	(mgd)	(pH)	(ml/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
JANUARY -2015	5.17	7.27	ND	18	8.4	7.4	1060
FEBRUARY -2015	4.36	7.31	ND	18	6.2	5.4	1070
MARCH -2015	4.32	7.31	ND	23	6.5	5.8	1080
APRIL -2015	2.68	7.25	ND	18	6.7	6.1	1100
MAY -2015	4.09	7.27	ND	16	6.9	6.1	1020
JUNE -2015	1.97	7.27	<0.1	12	8.3	7.4	1050
JULY -2015	2.75	7.29	ND	13	7.2	6.5	1030
AUGUST -2015	2.08	7.45	ND	23	7.0	6.2	1070
SEPTEMBER-2015	3.03	7.35	0.1	18	11.4	10.3	1080
OCTOBER -2015	3.17	7.30	ND	9	9.3	8.4	1080
NOVEMBER -2015	4.73	7.34	ND	10	7.8	7.1	1070
DECEMBER -2015	3.56	7.26	ND	11	9.7	8.8	979
Average	3.49	7.31	<0.1	16	8.0	7.1	1057

Analyte:	Oil & Grease	Outfall Temperature	Residual Chlorine	Turbidity	Dissolved Oxygen
Units:	(mg/L)	(°C)	(mg/L)	(NTU)	(mg/L)
JANUARY -2015	2.1	23.7	0.05	3.77	2.04
FEBRUARY -2015	2.3	23.7	0.03	3.24	1.91
MARCH -2015	2.1	24.5	0.04	3.03	2.79
APRIL -2015	2.4	25.4	0.05	3.06	2.17
MAY -2015	ND	25.3	0.03	3.01	2.09
JUNE -2015	1.6	26.4	0.04	3.47	2.25
JULY -2015	1.4	27.9	0.04	3.17	2.24
AUGUST -2015	1.5	28.4	0.03	2.84	3.16
SEPTEMBER-2015	1.2	28.9	0.11	5.89	2.56
OCTOBER -2015	4.7	28.1	0.05	4.00	1.79
NOVEMBER -2015	3.1	25.7	0.05	3.24	2.15
DECEMBER -2015	5.2	23.3	0.05	3.71	2.88
Average	2.3	25.9	0.05	3.54	2.34

ND=not detected
NR=not required

SOUTH BAY WATER RECLAMATION PLANT

Annual 2015

Influent to Plant
(SB_INF_02)

Analyte:	Flow	pH	Total Dissolved Solids	Biochemical Oxygen Demand	Total Suspended Solids	Volatile Suspended Solids	Turbidity
Units:	(mgd)	(pH)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(NTU)
JANUARY -2015	7.71	NR	1110	329	281	261	NR
FEBRUARY -2015	7.84	7.65	1090	327	267	240	180
MARCH -2015	7.93	NR	1090	322	271	249	NR
APRIL -2015	7.84	NR	1090	355	271	251	NR
MAY -2015	7.64	7.54	1050	369	271	249	197
JUNE -2015	7.62	NR	1020	382	289	264	NR
JULY -2015	7.55	NR	1050	334	261	239	NR
AUGUST -2015	7.67	7.36	1070	346	252	232	191
SEPTEMBER-2015	7.58	NR	1070	319	273	249	NR
OCTOBER -2015	7.53	7.53	1080	345	274	250	198
NOVEMBER -2015	7.43	NR	1110	374	286	265	NR
DECEMBER -2015	5.29	NR	1050	375	267	246	NR
Average	7.47	7.52	1073	348	272	250	192

ND=not detected
NR=not required

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE

Trace Metals

Annual 2015

Analyte:	Aluminum	Aluminum	Antimony	Antimony	Arsenic	Arsenic
MDL Units:	23.8 UG/L	23.8 UG/L	2.44 UG/L	2.44 UG/L	.06 UG/L	.06 UG/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						2800
JANUARY -2015	711	46	2.5	ND	0.4	0.7
FEBRUARY -2015	557	ND	ND	<2.4	1.1	0.6
MARCH -2015	718	<24	4.0	<2.4	0.9	0.7
APRIL -2015	540	31	4.5	<2.4	0.6	0.5
MAY -2015	322	55	ND	4.1	0.2	0.7
JUNE -2015	697	166	ND	ND	0.8	0.9
JULY -2015	622	212	ND	ND	0.8	0.8
AUGUST -2015	704	ND	ND	ND	1.2	1.0
SEPTEMBER-2015	222	ND	ND	<2.4	1.0	1.1
OCTOBER -2015	662	31	<2.4	3.0	1.3	0.9
NOVEMBER -2015	916	52	4.0	4.0	1.3	1.0
DECEMBER -2015	555	48	5.0	3.0	0.9	0.8
AVERAGE	602	53	1.7	1.2	0.9	0.8

Analyte:	Barium	Barium	Beryllium	Beryllium	Boron	Boron
MDL Units:	.7 UG/L	.7 UG/L	.05 UG/L	.05 UG/L	1.4 UG/L	1.4 UG/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						
JANUARY -2015	135	93.3	ND	0.18	308	304
FEBRUARY -2015	127	92.6	ND	ND	300	309
MARCH -2015	131	89.9	ND	ND	305	314
APRIL -2015	135	102	ND	ND	322	325
MAY -2015	106	94.5	ND	ND	321	322
JUNE -2015	128	81.5	ND	ND	357	357
JULY -2015	104	70.5	ND	ND	336	369
AUGUST -2015	124	80.2	ND	ND	347	331
SEPTEMBER-2015	106	85.2	ND	ND	301	317
OCTOBER -2015	130	90.6	<0.05	ND	360	346
NOVEMBER -2015	120	87.1	ND	ND	323	317
DECEMBER -2015	86.6	58.6	ND	ND	361	350
AVERAGE	119.383	85.500	<0.05	0.015	328	330

Analyte:	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt
MDL Units:	.26 UG/L	.26 UG/L	.54 UG/L	.54 UG/L	.24 UG/L	.24 UG/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		48		760		
JANUARY -2015	0.33	<0.26	3.2	0.7	0.95	0.58
FEBRUARY -2015	0.37	ND	2.8	0.6	0.76	0.46
MARCH -2015	0.43	<0.26	3.8	1.8	0.84	0.52
APRIL -2015	0.38	ND	2.7	1.1	NR	0.40
MAY -2015	ND	<0.26	1.6	0.7	0.94	0.38
JUNE -2015	ND	ND	4.5	1.8	NR	0.51
JULY -2015	ND	ND	3.9	1.3	NR	0.61
AUGUST -2015	ND	ND	4.3	ND	0.48	ND
SEPTEMBER-2015	0.30	<0.26	2.5	1.2	NR	0.55
OCTOBER -2015	0.30	ND	7.6	0.9	7.95	0.40
NOVEMBER -2015	0.60	0.30	4.7	2.0	NR	0.50
DECEMBER -2015	ND	ND	4.3	1.6	NR	0.60
AVERAGE	0.23	0.03	3.8	1.1	1.99	0.46

ND= not detected
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE

Trace Metals

Annual 2015

Analyte:	Copper	Copper	Iron	Iron	Lead	Lead
MDL Units:	2.16 UG/L	2.16 UG/L	15.6 UG/L	15.6 UG/L	1.68 UG/L	1.68 UG/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		960				760
JANUARY -2015	89	12	798	64	4.0	ND
FEBRUARY -2015	74	7	802	42	2.0	ND
MARCH -2015	94	12	795	192	1.8	ND
APRIL -2015	82	12	694	67	1.9	ND
MAY -2015	<2	18	289	55	ND	ND
JUNE -2015	84	12	703	45	3.1	ND
JULY -2015	89	12	805	70	2.9	ND
AUGUST -2015	98	21	820	108	ND	ND
SEPTEMBER-2015	57	11	342	100	2.0	ND
OCTOBER -2015	93	9	953	59	4.0	ND
NOVEMBER -2015	103	12	954	62	2.0	2.0
DECEMBER -2015	72	9	553	64	ND	ND
AVERAGE	78	12	709	77	2.0	0.2

Analyte:	Manganese	Manganese	Mercury	Mercury	Molybdenum	Molybdenum
MDL Units:	.78 UG/L	.78 UG/L	0.013 UG/L	.005 UG/L	.32 UG/L	.32 UG/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:				15.00		
JANUARY -2015	86.3	51.8	0.217	ND	10.3	4.29
FEBRUARY -2015	90.0	60.2	0.125	ND	6.91	3.61
MARCH -2015	114	45.5	0.489	0.005	6.87	3.73
APRIL -2015	89.6	51.1	0.085	ND	NR	3.53
MAY -2015	78.1	29.3	0.130	ND	0.70	3.93
JUNE -2015	90.4	23.5	0.090	ND	NR	2.42
JULY -2015	79.3	40.0	0.096	ND	NR	3.42
AUGUST -2015	88.5	55.5	0.083	0.005	7.43	3.15
SEPTEMBER-2015	64.4	41.8	0.077	0.005	NR	4.50
OCTOBER -2015	70.0	22.0	0.065	ND	8.45	4.00
NOVEMBER -2015	81.5	28.5	0.097	ND	7.9	4.70
DECEMBER -2015	72.3	26.2	0.055	ND	NR	3.90
AVERAGE	83.7	39.6	0.134	<0.005	6.94	3.77

ND= not detected
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE

Trace Metals

Annual 2015

Analyte:	Nickel	Nickel	Selenium	Selenium	Silver	Silver
MDL Units:	.53 UG/L	.53 UG/L	.08 UG/L	.08 UG/L	.73 UG/L	.73 UG/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		1900		5700		250
JANUARY -2015	5.08	3.17	1.35	0.84	ND	ND
FEBRUARY -2015	4.29	2.67	2.19	1.05	ND	ND
MARCH -2015	4.10	2.30	1.95	0.94	ND	ND
APRIL -2015	4.48	3.54	1.87	0.97	ND	ND
MAY -2015	4.02	3.12	1.18	1.03	ND	ND
JUNE -2015	4.73	2.54	1.65	0.73	ND	ND
JULY -2015	5.00	3.00	1.36	0.69	0.75	ND
AUGUST -2015	13.8	10.8	1.78	0.62	ND	ND
SEPTEMBER-2015	7.80	6.85	1.30	0.62	ND	ND
OCTOBER -2015	9.10	7.60	2.04	0.69	<0.73	ND
NOVEMBER -2015	5.80	4.00	1.58	0.72	ND	ND
DECEMBER -2015	5.40	4.20	1.13	0.37	0.90	ND
AVERAGE	6.13	4.48	1.62	0.77	0.14	ND

Analyte:	Thallium	Thallium	Vanadium	Vanadium	Zinc	Zinc
MDL Units:	3.12 UG/L	3.12 UG/L	.45 UG/L	.45 UG/L	4.19 UG/L	4.19 UG/L
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						6900
JANUARY -2015	ND	ND	2.10	0.96	176	30.0
FEBRUARY -2015	ND	ND	1.81	0.63	159	18.1
MARCH -2015	ND	ND	NR	0.68	174	26.4
APRIL -2015	ND	ND	NR	0.84	153	24.4
MAY -2015	ND	ND	1.47	0.88	114	33.8
JUNE -2015	ND	ND	NR	0.66	173	30.6
JULY -2015	ND	ND	NR	1.03	181	33.0
AUGUST -2015	ND	ND	0.50	ND	171	17.5
SEPTEMBER-2015	ND	ND	1.20	0.95	95.0	26.0
OCTOBER -2015	ND	ND	2.15	1.10	183	32.0
NOVEMBER -2015	ND	ND	3.20	1.20	189	52.0
DECEMBER -2015	ND	ND	NR	1.40	131	52.0
AVERAGE	ND	ND	1.78	0.86	158	31.3

ND= not detected
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE

Ammonia-Nitrogen and Total Cyanides

Annual 2015

Analyte:	Ammonia-N	Ammonia-N	Total Cyanides	Total Cyanides
MDL/Units:	.3 MG/L	.3 MG/L	.002 MG/L	.002 MG/L
Source:	SB_INF_02	SB_OUTFALL_01	SB_INF_02	SB_OUTFALL_01
JANUARY -2015	31.9	2.3	ND	ND
FEBRUARY -2015	39.1	9.2	ND	ND
MARCH -2015	32.6	1.0	ND	ND
APRIL -2015	36.1	6.7	ND	0.002
MAY -2015	40.7	ND	ND	ND
JUNE -2015	31.8	ND	ND	0.003
JULY -2015	28.1	ND	ND	0.003
AUGUST -2015	34.5	10.4	ND	ND
SEPTEMBER-2015	34.4	0.8	ND	ND
OCTOBER -2015	34.5	ND	ND	ND
NOVEMBER -2015	37.1	ND	ND	ND
DECEMBER -2015	32.4	ND	ND	ND
Average:	34.4	2.5	ND	0.001

ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
Radioactivity
Effluent to the Ocean (SB_OUTFALL_01)

Analyzed by: TestAmerica Laboratories Richland

Annual 2015

Month	Gross Alpha Radiation	Gross Beta Radiation
JANUARY -2015	2.0 ± 4.5	19.4 ± 4.3
FEBRUARY -2015	3.5 ± 6.8	23.3 ± 11.0
MARCH -2015	2.2 ± 4.0	20.4 ± 4.0
APRIL -2015	0.8 ± 4.3	24.5 ± 4.6
MAY -2015	2.9 ± 4.2	20.7 ± 4.3
JUNE -2015	-2.7 ± 4.3	21.2 ± 4.4
JULY -2015	1.1 ± 4.4	21.5 ± 4.2
AUGUST -2015	1.5 ± 6.0	17.9 ± 5.0
SEPTEMBER-2015	1.1 ± 4.6	19.0 ± 5.0
OCTOBER -2015	1.7 ± 3.7	23.1 ± 4.7
NOVEMBER -2015	2.8 ± 3.1	20.7 ± 4.9
DECEMBER -2015	3.1 ± 4.2	19.7 ± 4.6
AVERAGE	1.7 ± 4.5	21.0 ± 5.1

Units in picocuries/liter (pCi/L)

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL - Chlorinated Pesticide Analysis

Annual 2015

Source:			EFFLUENT												
Date:			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Analyte	MDL	Units													Avg
Aldrin	4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	4.3	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Alpha isomer	.2	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Beta isomer	2	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Gamma isomer	.34	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BHC, Delta isomer	2	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDD	4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDE	1.4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p-DDT	3	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDD	4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDE	2	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o,p-DDT	2.4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	.6	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	9.4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	1.4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	1.3	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Chlordene	0	NG/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma Chlordene	0	NG/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oxychlordane	2	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans Nonachlor	1.1	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis Nonachlor	4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Endosulfan	1.5	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta Endosulfan	3.1	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	7	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	6	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	5.4	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mirex	2.3	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	20	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	250	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1016	250	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	2000	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	750	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	250	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1248	250	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1254	500	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1260	500	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1262	500	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin + Dieldrin	4.3	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexachlorocyclohexanes	2	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0
DDT and derivatives	4	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0
Chlordane + related cmpds.	2	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0
Polychlorinated biphenyls	2000	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0
Endosulfans	7	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0
Heptachlors	9.4	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0
Chlorinated Hydrocarbons	2000	NG/L	0	0	0	0	0	0	0	0	0	0	0	0	0

ND=not detected
NA=not analyzed

Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL - Chlorinated Pesticide Analysis

Annual 2015

Source:			INFLUENT				
Date:			FEB	MAY	AUG	OCT	
Analyte	MDL	Units					Avg
Aldrin	4	NG/L	ND	ND	ND	ND	ND
Dieldrin	4.3	NG/L	ND	ND	ND	ND	ND
BHC, Alpha isomer	.2	NG/L	ND	ND	ND	ND	ND
BHC, Beta isomer	2	NG/L	ND	ND	ND	ND	ND
BHC, Gamma isomer	.34	NG/L	ND	ND	ND	ND	ND
BHC, Delta isomer	2	NG/L	ND	ND	ND	ND	ND
p,p-DDD	4	NG/L	ND	ND	ND	ND	ND
p,p-DDE	1.4	NG/L	ND	ND	ND	ND	ND
p,p-DDT	3	NG/L	ND	ND	ND	ND	ND
o,p-DDD	4	NG/L	ND	ND	ND	ND	ND
o,p-DDE	2	NG/L	ND	ND	ND	ND	ND
o,p-DDT	2.4	NG/L	ND	ND	ND	ND	ND
Heptachlor	.6	NG/L	ND	ND	ND	ND	ND
Heptachlor epoxide	9.4	NG/L	ND	ND	ND	ND	ND
Alpha (cis) Chlordane	1.4	NG/L	ND	ND	ND	ND	ND
Gamma (trans) Chlordane	1.3	NG/L	ND	ND	ND	ND	ND
Alpha Chlordene	0	NG/L	NA	NA	NA	NA	NA
Gamma Chlordene	0	NG/L	NA	NA	NA	NA	NA
Oxychlordane	2	NG/L	ND	ND	ND	ND	ND
Trans Nonachlor	1.1	NG/L	ND	ND	ND	ND	ND
Cis Nonachlor	4	NG/L	ND	ND	ND	ND	ND
Alpha Endosulfan	1.5	NG/L	ND	ND	ND	ND	ND
Beta Endosulfan	3.1	NG/L	ND	ND	ND	ND	ND
Endosulfan Sulfate	7	NG/L	ND	ND	ND	ND	ND
Endrin	6	NG/L	ND	ND	ND	ND	ND
Endrin aldehyde	5.4	NG/L	ND	ND	ND	ND	ND
Mirex	2.3	NG/L	ND	ND	ND	ND	ND
Methoxychlor	20	NG/L	ND	ND	ND	ND	ND
Toxaphene	250	NG/L	ND	ND	ND	ND	ND
PCB 1016	250	NG/L	ND	ND	ND	ND	ND
PCB 1221	2000	NG/L	ND	ND	ND	ND	ND
PCB 1232	750	NG/L	ND	ND	ND	ND	ND
PCB 1242	250	NG/L	ND	ND	ND	ND	ND
PCB 1248	250	NG/L	ND	ND	ND	ND	ND
PCB 1254	500	NG/L	ND	ND	ND	ND	ND
PCB 1260	500	NG/L	ND	ND	ND	ND	ND
PCB 1262	500	NG/L	ND	ND	ND	ND	ND
Aldrin + Dieldrin	4.3	NG/L	0	0	0	0	0
Hexachlorocyclohexanes	2	NG/L	0	0	0	0	0
DDT and derivatives	4	NG/L	0	0	0	0	0
Chlordane + related cmpds.	2	NG/L	0	0	0	0	0
Polychlorinated biphenyls	2000	NG/L	0	0	0	0	0
Endosulfans	7	NG/L	0	0	0	0	0
Heptachlors	9.4	NG/L	0	0	0	0	0
Chlorinated Hydrocarbons	2000	NG/L	0	0	0	0	0

ND=not detected
NA=not analyzed

Standards for alpha and gamma chlordene are no longer available in the U.S. for the analysis of these compounds.

SOUTH BAY WATER RECLAMATION PLANT
Organophosphorus PesticidesEPA Method 614/622 (with additions)

INFLUENT(SB_INF_02) & EFFLUENT(SB_OUTFALL_01)

Annual 2015

Source:			Effluent	Effluent	Influent	Influent
Date:			05-MAY-2015	06-OCT-2015	07-MAY-2015	06-OCT-2015
Analyte	MDL	Units	P778749	P807375	P783699	P807370
Demeton O	.15	UG/L	ND	ND	ND	ND
Demeton S	.08	UG/L	ND	ND	ND	ND
Diazinon	.03	UG/L	ND	ND	ND	ND
Guthion	.15	UG/L	ND	ND	ND	ND
Malathion	.03	UG/L	ND	ND	ND	ND
Parathion	.03	UG/L	ND	ND	ND	ND
Dichlorvos	.05	UG/L	ND	ND	ND	0.28
Disulfoton	.02	UG/L	ND	ND	ND	ND
Dimethoate	.04	UG/L	ND	ND	ND	ND
Stirophos	.03	UG/L	ND	ND	ND	ND
Coumaphos	.15	UG/L	ND	ND	ND	ND
Chlorpyrifos	.03	UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.15	UG/L	0.0	0.0	0.0	0.0
Demeton -O, -S	.15	UG/L	0.0	0.0	0.0	0.0
Total Organophosphorus Pesticides	.15	UG/L	0.0	0.0	0.0	0.28

ND=not detected

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE - Tributyl Tin Analysis

Annual 2015

Source:			EFFLUENT				
Date:			FEB	MAY	AUG	OCT	
Analyte	MDL	Units					Average
Dibutyltin	7	UG/L	ND	ND	ND	ND	ND
Monobutyltin	16	UG/L	ND	ND	ND	ND	ND
Tributyltin	2	UG/L	ND	ND	ND	ND	ND

Source:			INFLUENT				
Date:			FEB	MAY	AUG	OCT	
Analyte	MDL	Units					Average
Dibutyltin	7	UG/L	ND	ND	ND	ND	ND
Monobutyltin	16	UG/L	ND	ND	ND	ND	ND
Tributyltin	2	UG/L	ND	ND	ND	ND	ND

ND=not detected

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL - Acid Extractables

Annual 2015

Source:			EFFLUENT												
Date:			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Analyte	MDL	Units													AVG
2-Chlorophenol	1.32	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.01	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	1.65	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.12	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	1.76	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	1.55	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	2.01	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	2.16	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	1.14	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chlorinated Phenols	1.67	UG/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Chlorinated Phenols	2.16	UG/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Phenols	2.16	UG/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional analytes determined															
2-Methylphenol	2.15	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Source:			INFLUENT				
Date:			FEB	MAY	AUG	OCT	
Analyte	MDL	Units					AVG
2-Chlorophenol	1.32	UG/L	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.01	UG/L	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	1.67	UG/L	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	1.65	UG/L	ND	ND	ND	ND	ND
Pentachlorophenol	1.12	UG/L	ND	ND	ND	ND	ND
Phenol	1.76	UG/L	49.9	54.8	48.7	50.0	50.9
2-Nitrophenol	1.55	UG/L	ND	ND	ND	ND	ND
2,4-Dimethylphenol	2.01	UG/L	ND	ND	ND	ND	ND
2,4-Dinitrophenol	2.16	UG/L	ND	ND	ND	ND	ND
4-Nitrophenol	1.14	UG/L	ND	ND	ND	ND	ND
2-Methyl-4,6-dinitrophenol	1.52	UG/L	ND	ND	ND	ND	ND
Total Chlorinated Phenols	1.67	UG/L	0.0	0.0	0.0	0.0	0.0
Total Non-Chlorinated Phenols	2.16	UG/L	49.9	54.8	48.7	50.0	50.9
Total Phenols	2.16	UG/L	49.9	54.8	48.7	50.0	50.9
Additional analytes determined							
2-Methylphenol	2.15	UG/L	ND	ND	ND	ND	ND
3-Methylphenol(4-MP is unresolved)		UG/L	NA	NA	NA	NA	NA
4-Methylphenol(3-MP is unresolved)	2.11	UG/L	139	130	117	144	133
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND	ND

ND=not detected
NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Base/Neutrals

Annual 2015

Source:			EFFLUENT				
Date:			FEB	MAY	AUG	OCT	
Analyte	MDL	Units					AVG
Bis-(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND	ND	ND
Bis-(2-chloroethoxy) methane	1.01	UG/L	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND	ND	ND
Dimethyl phthalate	1.44	UG/L	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1.53	UG/L	ND	ND	ND	ND	ND
Acenaphthene	1.8	UG/L	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	1.36	UG/L	ND	ND	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND	ND	ND
Diethyl phthalate	3.05	UG/L	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	ND	ND	ND	ND	ND
Chrysene	1.16	UG/L	ND	ND	ND	ND	ND
Benzo[a]anthracene	1.1	UG/L	ND	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	ND	ND	15.8	ND	4.0
Di-n-octyl phthalate	1	UG/L	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	1.49	UG/L	ND	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	1.35	UG/L	ND	ND	ND	ND	ND
Benzo[a]pyrene	1.25	UG/L	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	1.01	UG/L	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	1.09	UG/L	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	1.37	UG/L	ND	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	0.0	0.0	15.8	0.0	4.0
Additional analytes determined							
1-Methylnaphthalene	2.18	UG/L	ND	ND	ND	ND	ND
2-Methylnaphthalene	2.14	UG/L	ND	ND	ND	ND	ND
2,6-Dimethylnaphthalene	2.16	UG/L	ND	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	2.18	UG/L	ND	ND	ND	ND	ND
1-Methylphenanthrene	1.46	UG/L	ND	ND	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND	ND	ND

ND=not detected

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Base/Neutrals

Annual 2015

Source:			INFLUENT				
Date:			FEB	MAY	AUG	OCT	
Analyte	MDL	Units					AVG
Bis-(2-chloroethyl) ether	1.38	UG/L	ND	ND	ND	ND	ND
Bis-(2-chloroisopropyl) ether	1.16	UG/L	ND	ND	ND	ND	ND
N-nitrosodi-n-propylamine	1.16	UG/L	ND	ND	ND	ND	ND
Nitrobenzene	1.6	UG/L	ND	ND	ND	ND	ND
Hexachloroethane	1.32	UG/L	ND	ND	ND	ND	ND
Isophorone	1.53	UG/L	ND	ND	ND	ND	ND
Bis-(2-chloroethoxy) methane	1.01	UG/L	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND	ND
Naphthalene	1.65	UG/L	ND	ND	ND	ND	ND
Hexachlorobutadiene	1.64	UG/L	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	1.25	UG/L	ND	ND	ND	ND	ND
Acenaphthylene	1.77	UG/L	ND	ND	ND	ND	ND
Dimethyl phthalate	1.44	UG/L	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1.53	UG/L	ND	ND	ND	ND	ND
Acenaphthene	1.8	UG/L	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	1.36	UG/L	ND	ND	ND	ND	ND
Fluorene	1.61	UG/L	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	1.57	UG/L	ND	ND	ND	ND	ND
Diethyl phthalate	3.05	UG/L	4.7	8.5	4.5	5.3	5.8
N-nitrosodiphenylamine	3.48	UG/L	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	1.4	UG/L	ND	ND	ND	ND	ND
Hexachlorobenzene	1.48	UG/L	ND	ND	ND	ND	ND
Phenanthrene	1.34	UG/L	ND	ND	ND	ND	ND
Anthracene	1.29	UG/L	ND	ND	ND	ND	ND
Di-n-butyl phthalate	3.96	UG/L	ND	ND	ND	ND	ND
N-nitrosodimethylamine	1.27	UG/L	ND	ND	ND	ND	ND
Fluoranthene	1.33	UG/L	ND	ND	ND	ND	ND
Pyrene	1.43	UG/L	ND	ND	ND	ND	ND
Benzidine	1.52	UG/L	ND	ND	ND	ND	ND
Butyl benzyl phthalate	2.84	UG/L	3.0	ND	DNQ3.0	ND	0.8
Chrysene	1.16	UG/L	ND	ND	ND	ND	ND
Benzo[a]anthracene	1.1	UG/L	ND	ND	ND	ND	ND
Bis-(2-ethylhexyl) phthalate	8.96	UG/L	13.2	28.2	34.0	33.6	27.3
Di-n-octyl phthalate	1	UG/L	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	2.44	UG/L	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	1.49	UG/L	ND	ND	ND	ND	ND
3,4-Benzo(b)fluoranthene	1.35	UG/L	ND	ND	ND	ND	ND
Benzo[a]pyrene	1.25	UG/L	ND	ND	ND	ND	ND
Indeno(1,2,3-CD)pyrene	1.14	UG/L	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	1.01	UG/L	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	1.09	UG/L	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	1.37	UG/L	ND	ND	ND	ND	ND
Polynuc. Aromatic Hydrocarbons	1.77	UG/L	0.0	0.0	0.0	0.0	0.0
Base/Neutral Compounds	8.96	UG/L	20.9	36.7	38.5	38.9	33.9
Additional analytes determined							
1-Methylnaphthalene	2.18	UG/L	ND	ND	ND	ND	ND
2-Methylnaphthalene	2.14	UG/L	ND	ND	ND	ND	ND
2,6-Dimethylnaphthalene	2.16	UG/L	ND	ND	ND	ND	ND
2,3,5-Trimethylnaphthalene	2.18	UG/L	ND	ND	ND	ND	ND
1-Methylphenanthrene	1.46	UG/L	ND	ND	ND	ND	ND
Benzo[e]pyrene	1.44	UG/L	ND	ND	ND	ND	ND
Perylene	1.41	UG/L	ND	ND	ND	ND	ND
Biphenyl	2.29	UG/L	ND	ND	ND	ND	ND

ND=not detected
DNQ= (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Purgeables

Annual 2015

Source: EFFLUENT

Analyte	MDL	Units	FEB	MAY	AUG	OCT	AVG
Dichlorodifluoromethane	.66	UG/L	ND	ND	ND	ND	ND
Chloromethane	.5	UG/L	ND	ND	ND	ND	ND
Vinyl chloride	.4	UG/L	ND	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	ND	ND	ND
Chloroethane	.9	UG/L	ND	ND	ND	ND	ND
Trichlorofluoromethane	.3	UG/L	ND	ND	ND	ND	ND
Acrolein	1.3	UG/L	ND	ND	ND	ND	ND
1,1-Dichloroethane	.4	UG/L	ND	ND	ND	ND	ND
Methylene chloride	.3	UG/L	ND	ND	ND	ND	ND
trans-1,2-dichloroethene	.6	UG/L	ND	ND	ND	ND	ND
1,1-Dichloroethene	.4	UG/L	ND	ND	ND	ND	ND
Acrylonitrile	.7	UG/L	ND	ND	ND	ND	ND
Chloroform	.2	UG/L	ND	1.5	DNQ0.7	DNQ1.7	0.4
1,1,1-Trichloroethane	.4	UG/L	ND	ND	ND	ND	ND
Carbon tetrachloride	.4	UG/L	ND	ND	ND	ND	ND
Benzene	.4	UG/L	ND	ND	ND	ND	ND
1,2-Dichloroethane	.5	UG/L	ND	ND	ND	ND	ND
Trichloroethene	.7	UG/L	ND	ND	ND	ND	ND
1,2-Dichloropropane	.3	UG/L	ND	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	.3	UG/L	ND	ND	ND	ND	ND
Toluene	.4	UG/L	ND	ND	ND	ND	ND
trans-1,3-dichloropropene	.5	UG/L	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	.5	UG/L	ND	ND	ND	ND	ND
Tetrachloroethene	1.1	UG/L	ND	ND	ND	ND	ND
Dibromochloromethane	.6	UG/L	ND	ND	ND	ND	ND
Chlorobenzene	.4	UG/L	ND	ND	ND	ND	ND
Ethylbenzene	.3	UG/L	ND	ND	ND	ND	ND
Bromoform	.5	UG/L	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	.5	UG/L	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	.5	UG/L	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	.7	UG/L	0.0	0.0	0.0	0.0	0.0
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0	0.0
Total Chloromethanes	.5	UG/L	0.0	1.5	0.0	0.0	0.4
Purgeable Compounds	1.3	UG/L	0.0	1.5	0.0	0.0	0.4

Additional analytes determined

Methyl Iodide	.6	UG/L	ND	ND	ND	ND	ND
Carbon disulfide	.6	UG/L	ND	ND	ND	ND	ND
Acetone	4.5	UG/L	ND	ND	ND	ND	ND
Allyl chloride	.6	UG/L	ND	ND	ND	ND	ND
Methyl tert-butyl ether	.4	UG/L	ND	ND	ND	ND	ND
Chloroprene	.4	UG/L	ND	ND	ND	ND	ND
1,2-Dibromoethane	.3	UG/L	ND	ND	ND	ND	ND
2-Butanone	6.3	UG/L	ND	ND	ND	ND	ND
Methyl methacrylate	.8	UG/L	ND	ND	ND	ND	ND
2-Nitropropane	12	UG/L	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.3	UG/L	ND	ND	ND	ND	ND
meta,para xylenes	.6	UG/L	ND	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND	ND
Isopropylbenzene	.3	UG/L	ND	ND	ND	ND	ND
Styrene	.3	UG/L	ND	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND	ND

ND= not detected
DNQ= (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY WATER RECLAMATION PLANT
SEWAGE ANNUAL Priority Pollutants Purgeables

Annual 2015

Source: INFLUENT

Analyte	MDL	Units	FEB	MAY	AUG	OCT	AVG
Dichlorodifluoromethane	.66	UG/L	ND	ND	ND	ND	ND
Chloromethane	.5	UG/L	ND	ND	ND	ND	ND
Vinyl chloride	.4	UG/L	ND	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	ND	ND	ND
Chloroethane	.9	UG/L	ND	ND	ND	ND	ND
Trichlorofluoromethane	.3	UG/L	ND	ND	ND	ND	ND
Acrolein	1.3	UG/L	ND	ND	ND	ND	ND
1,1-Dichloroethane	.4	UG/L	ND	ND	ND	ND	ND
Methylene chloride	.3	UG/L	ND	DNQ0.8	DNQ0.6	DNQ0.4*	ND
trans-1,2-dichloroethene	.6	UG/L	ND	ND	ND	ND	ND
1,1-Dichloroethene	.4	UG/L	ND	ND	ND	ND	ND
Acrylonitrile	.7	UG/L	ND	ND	ND	ND	ND
Chloroform	.2	UG/L	1.5	2.5	DNQ1.8	2.0	1.5
1,1,1-Trichloroethane	.4	UG/L	ND	ND	ND	ND	ND
Carbon tetrachloride	.4	UG/L	ND	ND	ND	ND	ND
Benzene	.4	UG/L	ND	ND	ND	ND	ND
1,2-Dichloroethane	.5	UG/L	ND	ND	ND	ND	ND
Trichloroethene	.7	UG/L	ND	ND	ND	ND	ND
1,2-Dichloropropane	.3	UG/L	ND	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	.3	UG/L	ND	ND	ND	ND	ND
Toluene	.4	UG/L	ND	ND	DNQ0.5	DNQ0.4	ND
trans-1,3-dichloropropene	.5	UG/L	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	.5	UG/L	ND	ND	ND	ND	ND
Tetrachloroethene	1.1	UG/L	ND	ND	ND	ND	ND
Dibromochloromethane	.6	UG/L	ND	ND	ND	ND	ND
Chlorobenzene	.4	UG/L	ND	ND	ND	ND	ND
Ethylbenzene	.3	UG/L	ND	ND	ND	ND	ND
Bromoform	.5	UG/L	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	.5	UG/L	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	.5	UG/L	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	.4	UG/L	ND	ND	ND	DNQ0.4	ND
1,2-Dichlorobenzene	.4	UG/L	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1.52	UG/L	ND	ND	ND	ND	ND
Halomethane Purgeable Cmpnds	.7	UG/L	0.0	0.0	0.0	0.0	0.0
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0	0.0
Total Chloromethanes	.5	UG/L	1.5	2.5	0.0	2.0	1.5
Purgeable Compounds	1.3	UG/L	1.5	2.5	0.0	2.8	1.5

Additional analytes determined

Methyl Iodide	.6	UG/L	ND	ND	ND	ND	ND
Carbon disulfide	.6	UG/L	4.9	DNQ2.5	1.6	4.2	2.7
Acetone	4.5	UG/L	203	154	108	147	153
Allyl chloride	.6	UG/L	ND	ND	ND	ND	ND
Methyl tert-butyl ether	.4	UG/L	1.0	ND	ND	ND	<0.4
Chloroprene	.4	UG/L	ND	ND	ND	ND	ND
1,2-Dibromoethane	.3	UG/L	ND	ND	ND	ND	ND
2-Butanone	6.3	UG/L	DNQ6.5	ND	ND	ND	ND
Methyl methacrylate	.8	UG/L	ND	ND	ND	ND	ND
2-Nitropropane	12	UG/L	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	1.3	UG/L	ND	ND	ND	ND	ND
meta,para xylenes	.6	UG/L	ND	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND	ND
Isopropylbenzene	.3	UG/L	ND	ND	ND	ND	ND
Styrene	.3	UG/L	ND	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND	ND

ND= not detected
DNQ= (Detected but not quantified). Estimated analyte concentration below calibration range.

*= The Response factor RSD of 59.5% is above 15% calibration criteria limit; therefore sample is not included in averages.

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

Annual 2015

Source:				INF	INF	INF	INF
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P754673	P756049	P770704	P775460
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	DNQ18.1	DNQ21.6	DNQ14.8	29.1
octa CDD	1.4	PG/L	0.001	220	230	160	220
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	DNQ1.31	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ4.03	DNQ3.38	DNQ3.02	DNQ4.36
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	DNQ14.0	8.0	DNQ7.82	DNQ13.2

Source:				INF	INF	INF	INF
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P783699	P787468	P793713	P795178
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	DNQ1.18	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	DNQ1.5	DNQ1.4
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	DNQ3.11	DNQ4.3	DNQ9.4
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	DNQ3.3	DNQ2.9
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	DNQ20.4	25.8	DNQ39.0	DNQ54.0
octa CDD	1.4	PG/L	0.001	170	230	150	140
2,3,7,8-tetra CDF	.48	PG/L	0.100	DNQ1.47	DNQ1.05	DNQ1.7	DNQ0.99
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	DNQ0.87	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	DNQ0.67	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	DNQ1.3	DNQ10.0
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	DNQ1.58	DNQ1.3	DNQ1.3
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.92	DNQ0.92
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ1.2	DNQ0.82
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ4.14	DNQ5.56	DNQ6.0	DNQ5.0
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	DNQ10.2	DNQ15.7	DNQ15.0	DNQ9.3

Source:				INF	INF	INF	INF
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P804539	P807370	P815297	P822496
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	DNQ0.77	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	DNQ0.95	DNQ2.2	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	DNQ1.6	DNQ2.6	DNQ4.3	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	DNQ0.68	DNQ2.1	DNQ3.5	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	35.0	DNQ31.0	74.0	DNQ20.3
octa CDD	1.4	PG/L	0.001	300	270	530	150
2,3,7,8-tetra CDF	.48	PG/L	0.100	DNQ1.3	DNQ1.4	DNQ1.4	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	DNQ0.61	ND	DNQ2.3	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	DNQ0.66	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	DNQ0.59	DNQ1.4	DNQ2.6	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	DNQ0.52	DNQ1.2	DNQ2.4	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	DNQ0.55	DNQ0.95	DNQ2.3	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ2.6	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ3.9	ND	DNQ6.8	DNQ5.94
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	DNQ14.0	DNQ16.0	19.0	DNQ12.9

ND= not detected
DNQ= (Detected but not quantified). Estimated analyte concentration below calibration range.
Above are permit required CDD/CDF isomers.

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

Annual 2015

Source:				EFF	EFF	EFF	EFF
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P754677	P756054	P770708	P775464
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	ND	ND	ND	ND
octa CDD	1.4	PG/L	0.001	ND	ND	DNQ7.69	DNQ6.71
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	ND	ND	ND	ND

Source:				EFF	EFF	EFF	EFF
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P778749	P787472	P793717	P795183
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	DNQ0.55	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	ND	ND	DNQ2.3	DNQ2.0
octa CDD	1.4	PG/L	0.001	DNQ7.77	ND	DNQ10.0	DNQ11.0
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	DNQ0.46	DNQ0.66
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	ND	DNQ0.44	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.41	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.25	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	ND	ND	DNQ1.2	DNQ1.0
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	ND	ND	DNQ5.1	DNQ3.7

Source:				EFF	EFF	EFF	EFF
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P804543	P807375	P815301	P822500
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	DNQ3.8	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	DNQ2.9	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	DNQ3.0	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	DNQ0.95	DNQ2.9	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	DNQ2.1	DNQ2.6	DNQ3.3	ND
octa CDD	1.4	PG/L	0.001	DNQ8.0	DNQ12.0	DNQ15.0	ND
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	DNQ0.75	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	DNQ4.400	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	DNQ0.63	DNQ0.96	DNQ2.9	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	DNQ0.86	DNQ2.9	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	DNQ1.0	DNQ2.2	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	DNQ0.84	DNQ2.8	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ0.62	ND	DNQ3.2	ND
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	DNQ1.0	DNQ1.6	ND
octa CDF	.738	PG/L	0.001	DNQ2.5	DNQ3.5	DNQ50.0	ND

ND= not detected
DNQ= (Detected but not quantified). Estimated analyte concentration below calibration range.
Above are permit required CDD/CDF isomers.

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

Annual 2015

Source:				INF TCCD	INF TCCD	INF TCCD	INF TCCD
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P754673	P756049	P770704	P775460
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	DNQ0.181	DNQ0.216	DNQ0.148	0.291
octa CDD	1.4	PG/L	0.001	0.22	0.23	0.16	0.22
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	DNQ0.131	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ0.04	DNQ0.034	DNQ0.03	DNQ0.044
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	DNQ0.014	0.008	DNQ0.008	DNQ0.013

Source:				INF TCCD	INF TCCD	INF TCCD	INF TCCD
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P783699	P787468	P793713	P795178
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	DNQ1.18	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	DNQ0.15	DNQ0.14
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	DNQ0.311	DNQ0.43	DNQ0.94
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	DNQ0.33	DNQ0.29
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	DNQ0.204	0.258	DNQ0.39	DNQ0.54
octa CDD	1.4	PG/L	0.001	0.17	0.23	0.15	0.14
2,3,7,8-tetra CDF	.48	PG/L	0.100	DNQ0.147	DNQ0.105	DNQ0.17	DNQ0.099
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	DNQ0.044	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	DNQ0.335	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	DNQ0.13	DNQ1.0
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	DNQ0.158	DNQ0.13	DNQ0.13
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.092	DNQ0.092
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.12	DNQ0.082
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ0.041	DNQ0.056	DNQ0.06	DNQ0.05
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	DNQ0.01	DNQ0.016	DNQ0.015	DNQ0.009

Source:				INF TCCD	INF TCCD	INF TCCD	INF TCCD
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P804539	P807370	P815297	P822496
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	DNQ0.77	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	DNQ0.095	DNQ0.22	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	DNQ0.16	DNQ0.26	DNQ0.43	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	DNQ0.068	DNQ0.21	DNQ0.35	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	0.35	DNQ0.31	0.74	DNQ0.203
octa CDD	1.4	PG/L	0.001	0.3	0.27	0.53	0.15
2,3,7,8-tetra CDF	.48	PG/L	0.100	DNQ0.13	DNQ0.14	DNQ0.14	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	DNQ0.02	ND	DNQ0.115	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	DNQ0.18	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	DNQ0.059	DNQ0.14	DNQ0.26	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	DNQ0.052	DNQ0.12	DNQ0.24	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	DNQ0.053	DNQ0.095	DNQ0.23	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.26	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ0.039	ND	DNQ0.068	DNQ0.059
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	DNQ0.014	DNQ0.016	0.019	DNQ0.013

ND= not detected
DNQ= (Detected but not quantified). Estimated analyte concentration below calibration range.
Above are permit required CDD/CDF isomers.

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Dioxin and Furan Analysis

Annual 2015

Effluent Limit (TCDD): 0.37 pg/L (30-day Average)

Source:				EFF TCCD	EFF TCCD	EFF TCCD	EFF TCCD
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P754677	P756054	P770708	P775464
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	ND	ND	ND	ND
octa CDD	1.4	PG/L	0.001	ND	ND	DNQ0.008	DNQ0.007
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	ND	ND	ND	ND

Source:				EFF TCCD	EFF TCCD	EFF TCCD	EFF TCCD
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P778749	P787472	P793717	P795183
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	DNQ0.055	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	ND	ND	DNQ0.023	DNQ0.02
octa CDD	1.4	PG/L	0.001	DNQ0.008	ND	DNQ0.01	DNQ0.011
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	ND	ND	DNQ0.046	DNQ0.066
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	ND	DNQ0.044	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.041	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	ND	DNQ0.025	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	ND	ND	DNQ0.012	DNQ0.01
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	ND	ND	ND
octa CDF	.738	PG/L	0.001	ND	ND	DNQ0.005	DNQ0.004

Source:				EFF TCCD	EFF TCCD	EFF TCCD	EFF TCCD
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P804543	P807375	P815301	P822500
2,3,7,8-tetra CDD	.86	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	1.1	PG/L	0.500	ND	ND	DNQ1.9	ND
1,2,3,4,7,8_hexa_CDD	.66	PG/L	0.100	ND	ND	DNQ0.29	ND
1,2,3,6,7,8-hexa CDD	.62	PG/L	0.100	ND	ND	DNQ0.3	ND
1,2,3,7,8,9-hexa CDD	.46	PG/L	0.100	ND	DNQ0.095	DNQ0.29	ND
1,2,3,4,6,7,8-hepta CDD	.49	PG/L	0.010	DNQ0.021	DNQ0.026	DNQ0.033	ND
octa CDD	1.4	PG/L	0.001	DNQ0.008	DNQ0.012	DNQ0.015	ND
2,3,7,8-tetra CDF	.48	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.61	PG/L	0.050	ND	DNQ0.038	ND	ND
2,3,4,7,8-penta CDF	.66	PG/L	0.500	ND	ND	DNQ2.2	ND
1,2,3,4,7,8-hexa CDF	.44	PG/L	0.100	DNQ0.063	DNQ0.096	DNQ0.29	ND
1,2,3,6,7,8-hexa CDF	.39	PG/L	0.100	ND	DNQ0.086	DNQ0.29	ND
1,2,3,7,8,9-hexa CDF	.36	PG/L	0.100	ND	DNQ0.1	DNQ0.22	ND
2,3,4,6,7,8-hexa CDF	.36	PG/L	0.100	ND	DNQ0.084	DNQ0.28	ND
1,2,3,4,6,7,8-hepta CDF	1.6	PG/L	0.010	DNQ0.006	ND	DNQ0.032	ND
1,2,3,4,7,8,9-hepta CDF	.83	PG/L	0.010	ND	DNQ0.01	DNQ0.016	ND
octa CDF	.738	PG/L	0.001	DNQ0.003	DNQ0.004	DNQ0.05	ND

ND= not detected; Above are permit required CDD/CDF isomers.
DNQ= (Detected but not quantified). Estimated analyte concentration below calibration range.

SOUTH BAY WATER RECLAMATION PLANT
Annual Sewage Cations

Annual 2015

Source:	Calcium		Magnesium		Lithium	
MDL/Units:	.04 mg/L		.1 mg/L		.002 mg/L	
Source:	INF	EFF	INF	EFF	INF	EFF
JANUARY -2015	86.9	87.2	33.9	32.1	0.055	0.051
FEBRUARY -2015	82.2	88.0	30.7	31.7	0.058	0.049
MARCH -2015	80.2	76.7	29.6	27.7	0.052	0.046
APRIL -2015	83.1	88.5	30.9	31.3	0.047	0.045
MAY -2015	82.9	86.6	29.1	28.3	0.052	0.050
JUNE -2015	78.5	80.4	30.9	29.0	0.049	0.045
JULY -2015	67.0	71.9	26.9	26.5	0.041	0.039
AUGUST -2015	73.5	74.6	30.4	31.7	0.054	0.046
SEPTEMBER-2015	86.8	88.2	33.3	32.9	0.042	0.042
OCTOBER -2015	79.8	85.9	30.8	31.9	0.049	0.049
NOVEMBER -2015	64.9	66.7	29.9	29.3	0.047	0.049
DECEMBER -2015	60.4	64.3	29.8	30.2	0.041	0.043
Average:	77.2	79.9	30.5	30.2	0.049	0.046

Source:	Sodium		Potassium	
MDL/Units:	1 mg/L		.3 mg/L	
Source:	INF	EFF	INF	EFF
JANUARY -2015	203	207	20.2	18.0
FEBRUARY -2015	184	199	18.2	17.3
MARCH -2015	188	186	16.7	14.8
APRIL -2015	211	207	20.1	18.3
MAY -2015	213	207	23.0	19.9
JUNE -2015	203	214	21.9	19.5
JULY -2015	180	196	20.1	19.1
AUGUST -2015	201	216	20.4	19.6
SEPTEMBER-2015	220	228	20.2	19.2
OCTOBER -2015	216	227	18.7	18.1
NOVEMBER -2015	190	181	18.8	16.9
DECEMBER -2015	186	201	18.3	17.3
Average:	200	206	19.7	18.2

ND=not detected

INF= Influent
EFF= Effluent

SOUTH BAY WATER RECLAMATION PLANT
ANNUAL SEWAGE

Anions

Annual 2015

Analyte:	Bromide	Bromide	Chloride	Chloride	Fluoride	Fluoride
MDL:	.1	.1	7	7	.05	.05
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
Source:	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT
JANUARY -2015	0.2	0.3	235	238	0.36	0.43
FEBRUARY -2015	0.2	0.3	237	243	0.43	0.60
MARCH -2015	0.3	0.3	249	246	0.42	0.56
APRIL -2015	0.3	0.3	232	237	0.34	0.58
MAY -2015	0.3	0.3	232	222	0.33	0.53
JUNE -2015	0.4	0.2	218	246	0.26	0.55
JULY -2015	0.4	0.2	243	237	0.30	0.52
AUGUST -2015	0.2	0.3	215	252	0.29	0.51
SEPTEMBER-2015	0.2	0.2	222	223	0.23	0.45
OCTOBER -2015	0.2	0.2	219	232	0.18	0.42
NOVEMBER -2015	0.4	0.3	252	237	0.26	0.50
DECEMBER -2015	0.3	0.4	235	263	0.26	0.50
AVERAGE	0.3	0.3	232	240	0.31	0.51

Analyte:	Nitrate	Nitrate	O-Phosphate	O-Phosphate	Sulfate	Sulfate
MDL:	.04	.04	.2	.2	9	9
Units:	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
Source:	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT
JANUARY -2015	0.92	38.9	10.5	0.7	219	258
FEBRUARY -2015	0.05	26.4	10.8	0.9	211	261
MARCH -2015	0.08	43.3	10.4	ND	203	246
APRIL -2015	0.16	30.5	11.2	0.6	197	253
MAY -2015	<0.04	46.7	10.3	0.9	186	240
JUNE -2015	0.19	43.7	10.6	0.9	157	229
JULY -2015	1.21	51.6	10.5	1.6	151	190
AUGUST -2015	1.09	39.7	8.8	1.9	189	208
SEPTEMBER-2015	2.29	44.6	11.0	5.4	208	254
OCTOBER -2015	1.29	61.2	10.9	6.2	212	254
NOVEMBER -2015	2.00	61.0	11.4	3.8	167	223
DECEMBER -2015	2.54	63.7	10.7	1.7	135	182
AVERAGE	0.99	45.9	10.6	2.1	186	233

ND= not detected

B. Upset, Interference, and Pass-through

In CY2015, there were no reported incidents of interference with pump station or treatment plant operations by rags, suggesting the sewer grinder and solids removal system installed by the RJ Donovan Correctional Center continues to function reliably and effectively. However, the plant and the collection system did experience the following problems:

1. Continued elevated animal and vegetable grease and oil in the influent. In July, August, and September of 2013, significant amounts of grease were observed in the influent to the Otay River Pump Station (ORPS). The grease clogged the air intakes to the chopper pumps in the pump station resulting in 3 pumps failing. To lessen any potential impact on the treatment process from this change in the influent wastewater quality an additional aeration basin and two tertiary filters were placed in service on July 17, 2013. The program has aggressively inspected and monitored several large food manufacturing facilities for grease and oil, and corrected the compliance period for the 500 mg/L grease and oil limit from daily maximum to instantaneous in all permits for these dischargers. At one facility, we are currently confirming the accuracy of the design parameters for the dissolved air flotation (DAF) pretreatment system, which was upgraded in February 2014, and the operation and maintenance of the DAF unit order to evaluate whether high flows or loads during nightly cleaning in place (CIP) are overwhelming the system

2. In August and September 2015, the plant experienced a situation in which the biological population in the secondary basin decreased substantially. Initial review of monitoring data showed an extremely high peak (>500 ppm) of hydrogen sulfide (H2S) at the Grove Avenue Pump Station (GAPS) just before this occurred. There was an associated increase in the turbidity of the product water above specifications, so that the production of reclaimed water was suspended for several days. Further investigation indicated an increase in the ammonia levels in the mixer liquor at the plant. The program conducted an investigation of industrial users in the contributory area. No accidental spills, non-routine discharges, or other slug discharges to the sewerage system in the contributory area were reported to the program or to other regulatory agencies during this period. The increase of the H2S levels could also be attributed to the 2015 drought conditions, extremely high environmental temperatures and decrease in water consumption and wastewater flow, which potentially resulted in less frequent pumping from GAPS, with the warmer flows remaining stagnant longer than previously, and then releasing high levels of H2S in the turbulence caused when the pumps came on. Prior to this situation, the plant experienced exceedances of the reclaimed water monthly average limit of 250 mg/L for sulfate in January, February, March, April and May 2015. The exceedance of the monthly average limit for sulfate was also observed in September, October and November 2015. The cause of the increase in sulfate concentrations is still under investigation.

3. The recycled water monthly average limit of 260 mg/L for chloride was exceeded in October, November and December 2015 and the daily maximum limit of 1,200 mg/L for total dissolved solids (TDS) was exceeded in two instances in October 2015. The elevated levels of TDS and Chloride have been attributed to a combination of infiltration and an increase in the number of SIUs tributary to the plant discharging high TDS waste-streams from food

processing, self-regenerating water softeners, laundering, and power generation cooling systems. The program has established action levels for Chloride and TDS; if the action level is exceeded, the facility must capture and haul waste concentrated brine regenerant used to regenerate spent water softeners and continue to look for opportunities to reduce chloride and TDS in their discharge. The program also continues to conduct monthly monitoring for TDS and Chloride at locations tributary to the SBWRP to quickly identify new infiltration. Some facilities have opted to transport the brine generated at their facilities to Pump Station 1 (PS1), the Metro System designated dumpsite (see CY2015 Pretreatment Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409). In addition to source control efforts to manage loadings, the City is also installing new instrumentation at the SBWRP, including pH and conductivity meters to increase the monitoring of the influent to the treatment plant and two EDR units to effectively reduce dissolved ions that contribute to the TDS and chloride in the recycled water product. The new instruments and the two EDR units are expected to be on-line by April 2016.

4. The recycled water 7 day median limit of 2.2 MPN for coliform was exceeded in February, March and April 2015. The coliform exceedances were hypothesized to have been caused by homogenized grease entering the treatment plant from ORPS and fouling the UV disinfection system. The coliform count decreased just after the chopper mixer at ORPS was taken offline on April 3, 2015. As a result compliance was re-established.

5. Foaming: Early in the morning on November 12, 2015 the SBWRP experienced foaming in the influent that expanded out of openings in the treatment train throughout the plant. After some hours of investigation it was speculated that excess foaming solution, which is activated by hydrogen peroxide during nightly (CIP) sanitation processes at some food manufacturing facilities, may have been activated when the plant influent was dosed with hydrogen peroxide as part of the Department's H2S control and ferric chloride reuse system. Late in the day, the program notified and visited tributary food manufacturers that use foam. The foaming occurred again the next morning, however there have been no further incidents. The foaming did not impact plant operations or reclaimed product water.

C. Biosolids Disposal Methods

Biosolids from the SBWRP is conveyed to Pt Loma, and from there to the Miramar Biosolids Center for processing and disposal in combination with biosolids from throughout the Metropolitan Sewerage System service area. See Chapter 5 Section 5.5 of this year's Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409, for details on CY15 biosolids disposal locations and beneficial uses.

D. Other Concerns

There are no other concerns pertaining to the administration of the pretreatment program or control of industrial contributions to the headworks loadings at the SBWRP at this time.