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

February 28, 2017

VIA E-MAIL

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

Attention: Pretreatment Coordinator

Subject: Order No. R9-2013-0006 as Amended by Order No. R9-2014-0071
NPDES Permit No. CA0109045
CY2016 Pretreatment Annual Report for the South Bay Water Reclamation Plant

Dear Mr. Gibson:

The City of San Diego South Bay Water Reclamation Plant Pretreatment Program Annual Report for calendar year 2016, due March 1, 2017, 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.

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San Diego, CA 92101
PVroom@sandiego.gov

T (619) 758-2301
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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.
Deputy Director, Public Utilities Department

BLS/rd

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

POTW PRETREATMENT ANNUAL REPORT

COVER SHEET

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

Report Date: March 1, 2017

Period Covered by This Report: January 1, 2016 to December 31, 2016

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

Name of Wastewater Treatment Plant(s): South Bay Water Reclamation Plant

NPDES Permit Number: 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.

2-27-2017
Date

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

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: 01/01/16 **(PSSD)** Start Date — 12/31/16 **(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: 15 **(FENF)**

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

Number of Significant Industrial Users with Significant Violations Published: 1 **(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 AS AMENDED BY ORDER No. R9-2014-0071

JANUARY 1 – DECEMBER 31, 2016

Environmental Monitoring and Technical Services
Public Utilities Department
2392 Kincaid Road Mail Station 45A
San Diego, CA 92101
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CERTIFIED
ISO 14001

CY2016 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 has installed two electrodialysis reversal (EDR) units in order to provide for total dissolved solids (TDS) and Chloride removal. The two units were originally expected to be operational by August 2015, however there were unanticipated delays; a start up test of the two EDR units is expected to be conducted in March 2017.

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 CY2016 Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409.

C. Pretreatment Program Changes

There were no 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 CY2016 Annual Report for the Point Loma POTW, NPDES Permit No. CA 0107409, for details.

III. Permit Inventory as of December 31, 2016

A. List of Deletions, Additions, and Name Changes of Significant Industrial Users during CY2016

SIU FACILITIES THAT BECAME SIUs IN 2016					**Note: UT; = Extracted Groundwater Permit**
Facility	Name	Class	Permit	Date	Comments
13-0048	UT; Brenntag Pacific Inc	2	01-A	23-Nov-2016	Groundwater remediation site with free product
SIU FACILITIES THAT REPORTED A NAME CHANGE IN 2016 IU #					TO
Class Permit Date	FROM				
13-0115	Integrated Energy Technologies	1	05-B	26-Jul-2016	Doncasters GCE Industries
FORMER SIU FACILITIES THAT BECAME NON-SIUs IN 2016					
Facility	Name	Class	Permit	Date	Comments
NONE					
SIU FACILITIES INACTIVATED IN 2016					
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	214	5	10,590	9	344,796	18	35	355,663	5	71
13	1	273	10	8,325	1	6,685	13	25	15,973	0	51
36	1	43,032	0	0	0	0	0	2	45,221	0	2
Total	5	43,519	15	18,915	10	351,481	13	62	416,857	5	124

B. Baseline Monitoring Reports Requested or Received in CY2016

Facility Name	Facility #	BMR Requested	BMR Received
Leidos Innovations Corp*	12-0150	25-May-2016	20-Jun2016

*Facility was classified as a Class 4C (Zero discharger; no permit required)

B.1 Facilities Operating under a Baseline Monitoring Report CY2016

Facility Name	**Facility #**	**BMR Received**
AP Precision Metals	12-0144	17-Apr-2001
Integrated Energy Technologies	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: Tuesday, January 10, 2017 1:05 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-B	Harcon Precision Metals Inc	109	110	Chemical conversion coating & water Jet	Federal	433	.17	1	PH
									2	MIXER
									3	SETTLE
									4	HAUL
									5	EVAP
				120	CNC milling machining	Local	433	.17	1	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

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					3	BIO-AS
								4	UF
								5	UV
								6	HAUL
								7	OZONE
13-0115 05-B	Integrated Energy Technologies Inc	273	200	Bldg 2 Lateral, 1887 Nirvana Av	Local			1	ZERO
								2	HAUL
			300	Bldg 3 Lateral, 757 Main St	Local	130		1	ERU+1
								2	HAUL
			330	Dye Pen / Vibra Clean	Federal	433	.17	1	SETTLE
								2	IX
								3	FILT-O
			410	Dye Pen / Parts Washing	Federal	433	.17	1	SETTLE
								2	IX
								3	FILT-O
								4	O/W
								5	HAUL
13-0549 01-A	UT; Brenntag Pacific Inc	10,080	100	Groundwater Remediation	Local	101		1	O/W
								2	SETTLE
								3	CENT
								4	BIO+O2
								5	FILT-O
								6	ADS-C
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: 13

D. SIU Facilities: Regulated Parameters by Connection Treatment Plant 6 Report

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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 Suite 100, 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	M		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	M		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 6 Report

run on: Tuesday, January 10, 2017 1:08 pm

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	M		L	DM		1	mg/L
						TEMP	H	M	L	DM		65.5	DegC
12-0244	02-B	Harcon Precision Metals Inc	1790 Dornoch Ct, San Diego	110	109	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	M		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	M		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-B	Integrated Energy Technologies	757 Main St, Chula Vista	330	262	CADMIUM	Q	Q	F	DM		.11	mg/L

D. (cont) SIU Facilities: Regulated Parameters by Connection Treatment Plant 6 Report

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Facility	Pmt	Name	Address	Conn	Total IW (gpd)	Parmcode	City freq	Self freq	Cat	Period	Lower Limit	Upper Limit	Units
13-0115	05-B	Integrated Energy Technologies Inc	757 Main St, Chula Vista	330	262	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	10	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
13-0549	01-A	UT; Brenntag Pacific Inc	1888 Nirvana Av, Chula Vista	100	10,080	3CLETHE	H	H	L	DM		26	ug/L
						4CLETHE	H	H	L	DM		700	ug/L
						BNZ(W/OAGG)	H	H	L	DM		50	ug/L
						BTEX	H	H	L	DM		750	ug/L
						FLOW MAX		M	L	DM		10080	gpd

D. (cont) SIU Facilities: Regulated Parameters by Connection Treatment Plant 6 Report

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Facility	Pmt	Name	Address	Conn	Total IW (gpd)	Parmcode	City freq	Self freq	Cat	Period	Lower Limit	Upper Limit	Units
13-0549	01-A	UT; Brenntag Pacific Inc	1888 Nirvana Av, Chula Vista	100	10,080	FLOW RATE MAX		M	L	DM		20	gpm
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
						ZINC	Q	Q	F	DM		1	mg/L
				140	22	COPPER	S	S	F	DM		1	mg/L

E. Active NonSIU Permits,

Report run on: Treatment Plant 6 Tuesday, January 10, 2017 1:10 pm

Class 2

Facility	Permit	Name	Address
12-0140	02-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	05-A	Larkspur Energy LLC	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
13-0298	04-A	Chula Vista Energy Center LLC	3497 Main St, Chula Vista
13-0316	03-A	Fuller Ford Kia	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
		14	

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
13-0439	01-A	Toyota Chula Vista	650 Main St, Chula Vista
		3	

Grand total: 17

F. Active Groundwater Permits,

Report run on: Treatment Plant 6 Tuesday, January 10, 2017 1:11 pm

Class 2

Facility	Permit	Name	Address
13-0549	01-A	UT; Brenntag Pacific Inc	1888 Nirvana Av, Chula Vista
		1	

Grand total: 1

G. Dry Cleaners subject to BMPs, Treatment Plant 6

Report run on: Tuesday, January 10, 2017 1:12 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: Tuesday, January 10, 2017 1:13 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 CY2016 the program administered 13 SIU permits, covering 14 outfalls and monitored at 15 sample points and one facility was in SNC during the year. These facilities are included in the calculation of the Metro System annual Significant Non-Compliance Rate reported in the CY2016 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 CY2016, 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 CY2016

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 CY2016 Annual Report for the Point Loma POTW NPDES Permit No. CA 0107409

In CY2016, the following SIUs discharging tributary to the SBWRP were in Significant Non-Compliance:

Name	**Address**	**Pollutant in Violation** Report
RJ Donovan Correctional Facility	480 Alta Rd, San Diego, CA 92179	Late > 45 days 1st quarter

RJ Donovan Correctional Facility; IU # 12-0038

This medium security prison discharges about 55,000 gpd from its laundry, kitchen, and bakery. The permit requires quarterly self-monitoring at the combined outfall designated as Connection 100. The IU submitted its Self-Monitoring Reports (SMRs) due January 15, 2016 and April 15, 2016 on June 14, 2016 (151 and 60 days late, respectively), and was therefore in SNC for late reporting in the 1st and 2nd quarters. NOVs were issued for the violations and the SMR due July 15, 2016 was received on time. Subsequently the IU failed to submit the SMRs due October 15, 2016 and January 15, 2017. NOVs have been issued and further actions are planned if the SMRs are not received by the end of the first quarter of 2017.

A. Annual SIU Compliance Status Report

01-Jan-2016 through 31-Dec-2016

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	16-Mar-16	SMR Incomplete					
1215 30th St, San Diego						110	24-Oct-16	SMR Late - written notice					
						110	02-Nov-16	SMR Incomplete					
Emerald Textiles LLC	12-0065	3	66242	No		NA							
1725 Dornoch Ct Suite 100, 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		NA							
7878 Airway Rd, San Diego													
Integrated Energy Technologies Inc	13-0115	1	273	No		200	22-Apr-16	SMR Late - written notice					
757 Main St, Chula Vista						330	06-Jan-16	pH-Instantaneous	4.8	5-12.5	DM	L	N
						330	22-Apr-16	SMR Late - written notice					
						330	01-Dec-16	SMR Incomplete					
						410	22-Apr-16	SMR Late - written notice					
						410	01-Dec-16	SMR Incomplete					
Jensen Meat Company Inc	12-0275	3	18436	No		NA							
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													
Pio Pico Energy Center	36-0009	3	13699	No		NA							
7363 Calzada de la Fuente, San Diego													

A. (cont.) Annual SIU Compliance Status Report

01-Jan-2016 through 31-Dec-2016

SIU Name	IU#	Class	IW Disch	SNC?	[If Yes, Why]	Conn	Violation Date	Description/Parameter	Value	Limit	Period	Cat	TRC
RJ Donovan Correctional Facility 480 Alta Rd, San Diego	12-0038	3	55595	**Yes**	SNC6 - Report Late > 45 (q1, q2, q4)	100	26-Jan-16	SMR Late - written notice					
						100	22-Apr-16	SMR Late - written notice					
						100	27-Jun-16	SMR Incomplete					
						100	24-Oct-16	SMR Late - written notice					
Southwest Products LLC dba Circle Foods 8411 Siempre Viva Rd, San Diego	12-0220	3	99222	No		NA							
Spec-Built Systems Inc 2150 Michael Faraday Dr, San Diego	12-0202	1	30	No		NA							
Spectex Inc dba Specialty Textile Services 1333 30th St Suite A, San Diego	12-0283	3	29000	No		110	25-Jan-16	SMR Incomplete - failed notify in 24 hrs					
						110	25-Jan-16	SMR Incomplete - failed to resample					
US General Services Administration - SYLPOE 720 E San Ysidro Bl, San Diego	12-0285	3	556	No		NA							
UT; Brenntag Pacific Inc 1888 Nirvana Av, Chula Vista	13-0549	2	10080	No		NA							
Vision Systems Inc 11322 N Woodside Av, Santee	21-0288	1		No		NA							

B. NOVs Issued in 2016 for SIUs Discharging to Treatment Plant 6

Report run on: Tuesday, February 28, 2017 10:50 am

Name	*Facility*	*Conn*	*NOV*	*Identified*	*Action*	*Viol Date*	*Fee*	*Level*
AP Precision Metals	12-0144	110	81602	16-Mar-2016	16-Mar-2016		50	Notice only
			83772	24-Oct-2016	24-Oct-2016		100	Initial notice
			83779	02-Nov-2016	02-Nov-2016	30-Sep-2016	50	Notice only
Doncasters GCE Industries	13-0115	200	81873	22-Apr-2016	22-Apr-2016		100	Initial notice
Doncasters GCE Industries	13-0115	330	80984	02-Feb-2016	02-Feb-2016	07-Jan-2016	100	Initial notice
			81874	22-Apr-2016	22-Apr-2016		100	Initial notice
Doncasters GCE Industries	13-0115	410	81875	22-Apr-2016	22-Apr-2016		100	Initial notice
RJ Donovan Correctional Facility	12-0038	100	79061	27-Jul-2015	22-Feb-2016	30-Jun-2015	75	Second notice
			80912	26-Jan-2016	26-Jan-2016		100	Initial notice
			80912	26-Jan-2016	22-Feb-2016		75	Second notice
			81872	22-Apr-2016	22-Apr-2016		100	Initial notice
			82608	27-Jun-2016	27-Jun-2016	31-Dec-2015	50	Notice only
			83771	24-Oct-2016	24-Oct-2016		100	Initial notice
Spectex Inc dba Specialty Textile Services	12-0283	110	80877	25-Jan-2016	09-Feb-2016	04-Dec-2015	100	Initial notice
			80877	25-Jan-2016	09-Feb-2016	04-Dec-2015	100	Final notice
	Total fees:						$1,300	
NOV count:			15					

C. NOVs Issued in 2016 for nonSIUs Discharging to Treatment Plant 6

Report run on: Tuesday, February 28, 2017 10:53 am

Name	*Facility*	*Conn*	*NOV*	*Identified*	*Action*	*Viol Date*	*Fee*	*Level*
Fuller Ford	13-0316	110	81577	14-Mar-2016	14-Mar-2016	03-Mar-2016	50	Notice only
		Total fees:					$50	
NOV count:			1					

D. Sampling in 2016 at SIUs discharging to Treatment Plant 6

Report run on: Tuesday, February 28, 2017 3:54 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	COD	3	2
					OIL/GREASE	1	2
					BIOHAZARD CERT		1
					SOLVENT CERT		1
					TSS	3	2
					PH	3	2
12-0065 04-A	Emerald Textiles LLC	110	Commercial Laundry	L	FLOW MAX		12
					PH	4	4
					TDS	4	4
					PH LOWEST	4	
					COD	4	4
					PH HIGHEST	4	
					TSS	4	4
					CHLORIDE	4	4
					OIL/GREASE	4	4
					SULFIDE DISSOLVD	18	
					FLOW		12
12-0144 04-A	AP Precision Metals	110	Metal Coating (Iron Phosphating)	F	COPPER	4	4
					TTO(413+433)-P	1	
					CHROMIUM	4	4
					SILVER	4	4
					CYANIDE(T)	4	4
					FLOW MAX		2
					LEAD	4	4
					PH	4	4
					CADMIUM	4	4
					NICKEL	4	4
					TTO CERT		4
					ZINC	4	4
					FLOW		2
12-0154 04-A	Heinz Frozen Foods	110	Food Manufacturing	L	COD	12	12
					SULFIDE DISSOLVD	18	
					OIL/GREASE	11	12
					PH LOWEST		
					TSS	12	12
					FLOW TOTIMPORTED		12
					TEMP	11	12
					FLOW MAX		12
					OIL/G SCREEN		
					PH HIGHEST		
					CHROMIUM	4	4
					FLOWMETER READ 1	11	12
					PH	11	12

D. (cont.) Sampling in 2016 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			FLOW		12
					FLOWMETER READ 2	12	12
12-0202 03-A	Spec-Built Systems Inc	110	Iron Phosphating	F	CHROMIUM	2	2
					NICKEL	2	2
					CYANIDE(T)	2	2
					ZINC	2	2
					FLOW MAX		4
					LEAD	2	2
					PH	2	2
					COPPER	2	2
					FLOW		4
					SILVER	2	2
					CADMIUM	2	2
					TTO CERT		4
					TTO(413+433)-P	1	
12-0220 04-A	Southwest Products LLC dba Circle Foods	110	Food manufacturing	L	OIL/GREASE	1	12
					SULFIDE DISSOLVD	4	
					PH HIGHEST		
					TEMP	1	12
					OIL/G SCREEN		
					PH	1	12
					PH LOWEST		
12-0244 02-B	Harcon Precision Metals Inc	110	Chemical conversion coating & water Jet	F	CYANIDE(T)	2	2
					PH	2	2
					TSS	2	2
					TTO CERT		2
					FLOW		2
					TTO(413+433)-P	1	
					NICKEL	2	2
					CHROMIUM	2	2
					COD	2	2
					CADMIUM	2	2
					FLOW MAX		2
					ZINC	2	2
					COPPER	2	2
					LEAD	2	2
					SILVER	2	2
		120	CNC milling machining	L	ZERODISCHRG CERT		
12-0275 02-A	Jensen Meat Company Inc	110	Meat processing, cleaning/sanitizing	L	CHLORIDE	4	4
					TDS	4	4
					CLARIFIER RPT		4
					PH LOWEST	3	
					RAIN DIVERT CERT		1

D. (cont.) Sampling in 2016 at SIUs discharging to Treatment Plant 6

Report run on: Tuesday, February 28, 2017 3:54 pm

Facility Pmt	Name	Conn	Principle Process	Pmt Include	Parmcode	City Samples	Self Samples
12-0275 02-A	Jensen Meat Company Inc	110			OIL/GREASE	8	4
					TSS	4	4
					TFDS	4	4
					FLOW MAX		12
					SULFIDE DISSOLVD	19	
					COD	4	4
					PH	8	4
					FLOW		12
					PH HIGHEST	3	
12-0283 02-A	Spectex Inc dba Specialty Textile Services	110	Commerical Laundry	L	PH	2	5
					FLOW		12
					PH HIGHEST	3	
					SULFIDE DISSOLVD	8	
					OIL/GREASE	2	5
					PH LOWEST	3	
					TSS	2	5
					COD	2	5
					FLOW MAX		12
12-0285 02-A	US General Services Administration - SYLPOE	110	Waste activated sludge	L	SULFIDE DISSOLVD	4	4
					TDS	2	
					TSS	4	12
					COD	4	12
		120	Untreated wastewater	L			
		130	Treated wastewater	L			
13-0115 05-B	Integrated Energy Technologies Inc	200	Bldg 2 Lateral, 1887 Nirvana Av	L	ZERODISCHRG CERT		4
		300	Bldg 3 Lateral, 757 Main St	L	SILVER CERT		2
		330	Dye Pen / Vibra Clean	F	ZINC	5	4
					COPPER	5	4
					FLOW MAX		4
					PH LOWEST	5	
					SILVER	5	4
					TTO CERT		4
					FLOW		4
					LEAD	5	4
					PH	7	4
					CADMIUM	5	4
					CHROMIUM	5	4
					CYANIDE(T)	5	4
					NICKEL	5	4
					PH HIGHEST	5	
					TTO(413+433)-P	1	
		410	Dye Pen / Parts Washing	F	CADMIUM	4	3
					CYANIDE(T)	4	3

D. (cont.) Sampling in 2016 at SIUs discharging to Treatment Plant 6

Report run on: Tuesday, February 28, 2017 3:54 pm

Facility Pmt	Name	Conn	Principle Process	Pmt Include	Parmcode	City Samples	Self Samples
13-0115 05-B	Integrated Energy Technologies Inc	410			PH LOWEST	2	
					FLOW MAX		4
					PH	4	3
					FLOW		4
					SILVER	4	3
					TTO(413+433)-P	1	
					CHROMIUM	4	3
					COPPER	4	3
					PH HIGHEST	2	
					TTO CERT		4
					ZINC	4	3
					LEAD	4	3
					NICKEL	4	3
13-0549 01-A	UT; Brenntag Pacific Inc	100	Groundwater Remediation	L	BNZ(W/OAGG)		
					FLOW RATE MIN		
					TSS		
					3CLETHE		
					FLOW TOTIMPORTED		1
					FLOWMETER READ 2		
					COD		
					FLASH		
					FLOW MAX		
					FLOW RATE MAX		
					FLOWMETER READ 1		
					AUTOSHUTDOWN RPT		
					BTEX		
					4CLETHE		
36-0001 02-A	Otay Mesa Energy Center LLC	110	WetSac blowdown + OWS	F	CHROMIUM	4	4
					PH LOWEST		
					FLOW MAX		4
					ZINC	4	4
					PH	4	4
					OIL/GREASE	4	4
					PH HIGHEST		
					FLOW		4
					TDS	2	4
		120	PCB zero discharge	F	ZERODISCHRG CERT		4
		140	Turbine washing	F	COPPER		
					FLOW MAX		
					FLOW		1
	13						

D. (cont.) Sampling in 2016 at SIUs discharging to Treatment Plant 6

Report run on: Tuesday, February 28, 2017 3:54 pm

Facility Pmt	*Name*	*Conn*	*Principle Process*	*Pmt Include*	*Parmcode*	*City Samples*	*Self Samples*
SIUs:							

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 24 through 45 provide results for all influent and effluent during CY2016 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 2016

ND or <MDL = 1/2 MDL

	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	7.40	0.5	3.5	52	3.0	5.6	0	103
Feb	7.46	0.41	3.8	78	0.84	5.17	0	161
Mar	7.52	0.13	6.1	86	2.0	11.0	0	159
Apr	7.47	0.43	3.6	75	2.0	6.16	0	169
May	7.59	0.35	3.9	83	0.8	6.88	0.80	178
Jun	7.70	0.4	5.3	83	4.0	6.61	0	250
Jul	7.59	0.13	2.5	76	2.0	5.53	0	179
Aug	7.59	0.15	5.0	99	5.0	5.29	0	204
Sep	7.46	0.42	3.7	96	4.0	5.44	0	1.74
Oct	7.25	0.13	6.6	123	4.0	5.72	26.00*	217
Nov	7.29	NA*	NA*	NA*	NA*	NA*	NA*	NA*
Dec	7.26	0.13	3.5	88	0.84	4.77	0	177
Average Flow MGD	7.47							
Average ug/L		0.29	4.32	85.36	2.59	6.20	0.07	163.52
LBS/day		0.02	0.27	5.31	0.16	0.39	0.00	10.18
PL Total Lbs HM	16.50							
PL Total lb (-)Ag	16.33							

*This result appears to be a dump event; not included in the average.
NA – Autosampler malfunction occurred on 11/8/16; insufficient influent sample collected.

TABLE V.A-2
SOUTH BAY WATER RECLAMATION PLANT EFFLUENT HEAVY METALS
Average Concentration and Loadings for 2016

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	6.11	0	2.5	6	0	5.1	0	32.0
Feb	4.12	0	2.7	9	0	3.89	0	45.2
Mar	4.31	0	2.1	9	0	8.56	0	30.5
Apr	3.95	0	2.3	10	0	4.09	0	55.9
May	3.45	0	2	9	0	6.76	0	57.0
Jun	2.47	0.29	2.6	11	0	4.23	0	142.0
Jul	1.50	0	0.6	13	0.28*	3.82	0	55.2
Aug	1.58	0	2.2	13	0	3.48	0	9.2
Sep	2.61	0	1.1	18	0	3.65	0	35.0
Oct	1.53	0	1.3	9	0	3.82	0	12.0
Nov	3.02	0	1.2	18	0	3.46	0	44.9
Dec	5.02	0	0.7	11	0	2.62	0	42.5
Average Flow MGD	3.31							
Average ug/L		0.02	1.78	11.33	0.02	4.46	0.0	46.78
LBS/day		0.00	0.05	0.31	0.00	0.12	0.01	1.29
Total lb HM	1.8							
Total lb (-)Ag	1.8							

*Result using method 200.8 with MDL of 0.23 ug/L

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

ANNUAL 2016

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 -2016	7.40	268	246	91.8	16540
FEBRUARY -2016	7.46	262	245	93.5	16301
MARCH -2016	7.52	273	254	93.0	17122
APRIL -2016	7.47	270	251	93.0	16821
MAY -2016	7.59	277	259	93.5	17534
JUNE -2016	7.70	303	282	93.1	19458
JULY -2016	7.59	276	253	91.7	17471
AUGUST -2016	7.59	288	266	92.4	18231
SEPTEMBER-2016	7.46	274	252	92.0	17047
OCTOBER -2016	7.25	297	273	91.9	17958
NOVEMBER -2016	7.29	279	256	91.8	16963
DECEMBER -2016	7.26	280	261	93.2	16954
Average	7.47	279	258		17367

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 -2016	6.11	7.3	6.5	89.0	372	97.3	97.4
FEBRUARY -2016	4.12	7.0	6.4	91.4	241	97.3	97.4
MARCH -2016	4.31	6.4	5.9	92.2	230	97.7	97.7
APRIL -2016	3.95	6.8	6.2	91.2	224	97.5	97.5
MAY -2016	3.45	7.3	6.8	93.2	210	97.4	97.4
JUNE -2016	2.47	6.6	6.0	90.9	136	97.8	97.9
JULY -2016	1.50	6.0	5.4	90.0	75	97.8	97.9
AUGUST -2016	1.58	<2.5	<2.5	*	0	100.0	100.0
SEPTEMBER-2016	2.61	<2.5	<2.5	*	0	100.0	100.0
OCTOBER -2016	1.53	<2.5	<2.5	*	0	100.0	100.0
NOVEMBER -2016	3.02	<2.5	<2.5	*	0	100.0	100.0
DECEMBER -2016	5.02	2.6	<2.5	0.0	109	99.1	100.0
Average	3.31	4.2	3.6		133	98.5	98.6

*= undetermined, the percent VSS was not calculated because TSS and VSS results were below the MDL.

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 2016

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 -2016	7.40	NR	1060	318	268	246	NR
FEBRUARY -2016	7.46	7.59	1060	319	262	245	213
MARCH -2016	7.52	NR	1080	320	273	254	NR
APRIL -2016	7.47	NR	1080	312	270	251	NR
MAY -2016	7.59	7.29	1080	314	277	259	226
JUNE -2016	7.70	NR	1060	325	303	282	NR
JULY -2016	7.59	NR	1050	292	276	253	NR
AUGUST -2016	7.59	7.53	1030	293	288	266	228
SEPTEMBER-2016	7.46	NR	1010	316	274	252	NR
OCTOBER -2016	7.25	7.51	1050	348	297	273	256
NOVEMBER -2016	7.29	NR	1050	345	279	256	NR
DECEMBER -2016	7.26	NR	1090	361	280	261	NR
Average	7.47	7.48	1058	322	279	258	231

NR=not detected
NR=not required

SOUTH BAY WATER RECLAMATION PLANT

Annual 2016

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 -2016	6.11	7.35	ND	8	7.3	6.5	1010
FEBRUARY -2016	4.12	7.37	ND	11	7.0	6.4	949
MARCH -2016	4.31	7.46	ND	11	6.4	5.9	994
APRIL -2016	3.95	7.34	ND	10	6.8	6.2	1020
MAY -2016	3.45	7.33	ND	11	7.3	6.8	1020
JUNE -2016	2.47	7.35	ND	8	6.6	6.0	1010
JULY -2016	1.50	7.31	ND	6	6.0	5.4	1060
AUGUST -2016	1.58	7.37	ND	5	<2.5	<2.5	974
SEPTEMBER-2016	2.61	7.30	ND	<5	<2.5	<2.5	986
OCTOBER -2016	1.53	7.28	ND	3	<2.5	<2.5	1010
NOVEMBER -2016	3.02	7.26	ND	4	<2.5	<2.5	1010
DECEMBER -2016	5.02	7.25	ND	4	2.6	<2.5	1080
Average	3.31	7.33	0.0	7	4.2	3.6	1010

Analyte:	Oil & Grease	Outfall Temperature	Residual Chlorine	Turbidity	Dissolved Oxygen
Units:	(mg/L)	(°C)	(mg/L)	(NTU)	(mg/L)
JANUARY -2016	2.4	22.8	0.04	2.35	4.84
FEBRUARY -2016	1.6	23.8	0.06	3.61	3.69
MARCH -2016	1.2	24.2	0.05	3.27	3.75
APRIL -2016	1.2	25.0	0.04	2.90	3.46
MAY -2016	1.2	25.5	0.05	3.46	4.40
JUNE -2016	2.4	26.4	0.05	3.19	4.19
JULY -2016	2.9	27.9	0.05	2.81	3.15
AUGUST -2016	<5.1	28.6	0.05	1.66	2.74
SEPTEMBER-2016	<1.2	28.3	0.06	1.52	1.46
OCTOBER -2016	3.7	27.2	0.03	1.31	2.15
NOVEMBER -2016	3.3	26.2	0.04	1.57	1.37
DECEMBER -2016	2.0	24.0	ND	1.60	1.34
Average	1.8	25.8	0.04	2.44	3.05

NR=not detected
NR=not required

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Trace Metals

ANNUAL 2016

Analyte:	Aluminum	Aluminum	Antimony	Antimony	Arsenic	Arsenic
MAX_MDL Units:	23.8	23.8	2.44	2.44	.824	.412
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						2800
JANUARY -2016	629	ND	4.0	ND	1.1	0.9
FEBRUARY -2016	580	ND	ND	ND	0.7	0.4
MARCH -2016	585	<24	ND	<2.4	0.9	0.5
APRIL -2016	559	44	ND	ND	0.7	0.5
MAY -2016	501	ND	ND	ND	0.9	0.6
JUNE -2016	533	ND	ND	ND	1.0	0.6
JULY -2016	532	ND	ND	ND	2.8	2.0
AUGUST -2016	516	ND	ND	ND	1.5	1.2
SEPTEMBER-2016	506	ND	ND	ND	1.0	0.7
OCTOBER -2016	611	ND	ND	ND	ND	0.1
NOVEMBER -2016	499	26	3.6	4.4	1.2	0.8
DECEMBER -2016	497	ND	ND	ND	0.4	ND
AVERAGE	546	6	0.6	0.4	1.0	0.7

Analyte:	Barium	Barium	Beryllium	Beryllium	Boron	Boron
MAX_MDL Units:	.7	.7	.05	.05	2.66	2.66
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						
JANUARY -2016	77.8	62.6	ND	ND	331	328
FEBRUARY -2016	79.5	54.1	ND	ND	397	384
MARCH -2016	98.0	62.6	ND	ND	360	359
APRIL -2016	116	79.2	ND	ND	334	319
MAY -2016	113	85.1	ND	ND	382	352
JUNE -2016	117	74.4	ND	ND	395	393
JULY -2016	134	84.3	ND	ND	471	466
AUGUST -2016	117	32.1	ND	ND	327	331
SEPTEMBER-2016	110	66.5	ND	ND	294	314
OCTOBER -2016	160	51.5	ND	ND	314	323
NOVEMBER -2016	127	86.0	ND	ND	331	334
DECEMBER -2016	121	83.8	ND	ND	357	377
AVERAGE	114	68.5	0.0	0.0	358	357

Analyte:	Cadmium	Cadmium	Chromium	Chromium	Cobalt	Cobalt
MAX_MDL Units:	.26	.26	.54	.54	.54	.24
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		48		760		
JANUARY -2016	0.50	ND	3.5	2.5	NR	0.50
FEBRUARY -2016	0.41	ND	3.8	2.7	0.61	0.44
MARCH -2016	ND	ND	6.1	2.1	0.76	0.53
APRIL -2016	0.43	ND	3.6	2.3	0.67	0.52
MAY -2016	0.35	0.32	3.9	2.0	0.83	0.60
JUNE -2016	0.39	0.28	5.2	2.6	0.78	0.57
JULY -2016	0.13	ND	2.5	0.6	0.53	0.25
AUGUST -2016	0.15	ND	5.0	2.2	1.07	0.82
SEPTEMBER-2016	0.42	ND	3.7	1.1	0.73	0.33
OCTOBER -2016	ND	ND	6.6	1.3	1.14	0.75
NOVEMBER -2016	ND	ND	4.9	1.2	1.39	1.03
DECEMBER -2016	ND	ND	3.5	0.7	0.64	ND
AVERAGE	0.23	0.05	4.4	1.8	0.83	0.53

ND= not detected
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Trace Metals

ANNUAL 2016

Analyte:	Copper	Copper	Iron	Iron	Lead	Lead
MAX_MDL Units:	2.16	2.16	15.6	15.6	1.68	1.68
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		960				760
JANUARY -2016	52	6	750	51	3.0	ND
FEBRUARY -2016	78	9	548	50	ND	ND
MARCH -2016	86	9	581	66	2.2	ND
APRIL -2016	75	10	729	49	2.2	ND
MAY -2016	83	9	630	51	ND	ND
JUNE -2016	83	11	682	56	3.1	ND
JULY -2016	76	13	744	58	1.7	0.3
AUGUST -2016	99	13	6040	283	4.6	ND
SEPTEMBER-2016	96	18	835	79	3.9	ND
OCTOBER -2016	123	9	3860	189	4.1	ND
NOVEMBER -2016	112	18	822	49	2.0	ND
DECEMBER -2016	88	11	648	60	ND	ND
AVERAGE	88	11	1406	87	2.2	0.0

Analyte:	Manganese	Manganese	Mercury	Mercury	Molybdenum	Molybdenum
MAX_MDL Units:	.78	.78	.025	.005	.32	.32
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:				15.00		
JANUARY -2016	93.1	74.8	0.036	ND	NR	4.90
FEBRUARY -2016	82.1	34.2	0.051	0.007	9.14	5.86
MARCH -2016	85.4	43.7	0.069	ND	7.41	4.55
APRIL -2016	89.2	23.3	0.159	ND	6.74	3.98
MAY -2016	73.8	25.2	0.090	0.006	7.44	4.25
JUNE -2016	86.5	33.1	0.100	0.005	9.16	4.41
JULY -2016	98.8	36.0	0.166	ND	7.22	3.82
AUGUST -2016	95.2	75.4	0.146	ND	6.79	5.34
SEPTEMBER-2016	81.1	33.4	0.139	ND	14.2	5.90
OCTOBER -2016	94.5	56.2	0.156	ND	7.89	4.23
NOVEMBER -2016	99.4	33.3	0.120	ND	7.14	3.71
DECEMBER -2016	95.5	15.5	0.139	0.003	7.23	3.59
AVERAGE	89.5	40.3	0.114	0.002	8.21	4.55

Analyte:	Nickel	Nickel	Selenium	Selenium	Silver	Silver
MAX_MDL Units:	.53	.53	.17	.17	.73	.73
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:		1900		5700		250
JANUARY -2016	5.60	5.10	1.04	0.40	ND	ND
FEBRUARY -2016	5.17	3.89	1.33	0.35	ND	ND
MARCH -2016	11.0	8.56	2.21	0.55	ND	ND
APRIL -2016	6.16	4.09	2.36	0.92	ND	ND
MAY -2016	6.88	6.76	1.65	0.88	0.75	ND
JUNE -2016	6.61	4.23	1.76	0.69	ND	ND
JULY -2016	5.53	3.82	2.78	1.12	ND	ND
AUGUST -2016	5.29	3.48	1.73	0.85	ND	ND
SEPTEMBER-2016	5.44	3.65	2.10	0.50	ND	ND
OCTOBER -2016	5.72	3.82	1.25	0.54	26.0	ND
NOVEMBER -2016	5.02	3.46	1.78	0.73	25.5	ND
DECEMBER -2016	4.77	2.62	1.47	0.37	ND	ND
AVERAGE	6.10	4.46	1.79	0.66	4.35	0.0

ND= not detected
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Trace Metals

ANNUAL 2016

Analyte:	Thallium	Thallium	Vanadium	Vanadium	Zinc	Zinc
MAX_MDL Units:	3.12	3.12	2.2	2.2	4.19	4.19
Source:	Influent	Effluent	Influent	Effluent	Influent	Effluent
Month/Limit:						6900
JANUARY -2016	ND	ND	NR	1.10	103	32.0
FEBRUARY -2016	ND	ND	1.85	0.80	161	45.2
MARCH -2016	ND	ND	2.47	0.87	159	30.5
APRIL -2016	ND	ND	1.81	0.63	169	55.9
MAY -2016	ND	ND	2.59	1.30	178	57.0
JUNE -2016	ND	ND	1.78	ND	250	142
JULY -2016	ND	ND	4.46	3.20	179	55.2
AUGUST -2016	ND	ND	9.85*	3.47*	204	9.2
SEPTEMBER-2016	ND	ND	2.20	1.59	174	35.0
OCTOBER -2016	ND	ND	2.44	2.03	217	12.0
NOVEMBER -2016	ND	3.81	1.88	ND	201	44.9
DECEMBER -2016	ND	ND	1.99	1.18	177	42.5
AVERAGE	0.0	0.32	2.35	1.15	181	46.8

ND= not detected
NR= not required

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Ammonia-Nitrogen and Total Cyanides

ANNUAL 2016

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 -2016	36.7	ND	ND	ND
FEBRUARY -2016	37.8*	ND*	ND	ND
MARCH -2016	37.6	0.6	ND	ND
APRIL -2016	37.7	ND	ND	ND
MAY -2016	33.6	ND	ND	ND
JUNE -2016	36.7	ND	ND	ND
JULY -2016	34.6	ND	<0.002	ND
AUGUST -2016	37.6	7.4	ND	0.002
SEPTEMBER-2016	33.2	ND	ND	ND
OCTOBER -2016	30.5	ND	ND	ND
NOVEMBER -2016	37.6	ND	ND	ND
DECEMBER -2016	42.5	ND	ND	ND
Average:	36.2	0.7	0.0	0.0

*= The ammonia was analyzed with an expired buffer solution, not used in average.

ND= not detected

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

Analyzed by: TestAmerica Laboratories Richland

ANNUAL 2016

Month	Gross Alpha Radiation	Gross Beta Radiation
JANUARY -2016	-0.3 ± 4.4	20.1 ± 5.2
FEBRUARY -2016	-0.7 ± 3.6	20.1 ± 4.2
MARCH -2016	3.1 ± 3.0	23.3 ± 4.5
APRIL -2016	7.8 ± 5.2	24.3 ± 6.2
MAY -2016*	8.6 ± 2.1	10.1 ± 1.6
JUNE -2016*	2.2 ± 2.1	4.2 ± 1.9
JULY -2016*	3.4 ± 2.0	8.8 ± 1.6
AUGUST -2016*	4.3 ± 2.3	6.6 ± 1.6
SEPTEMBER-2016*	4.6 ± 2.7	10.5 ± 2.5
OCTOBER -2016*	4.8 ± 3.1	5.1 ± 2.1
NOVEMBER -2016*	6.2 ± 2.5	12.1 ± 1.8
AVERAGE	4.0 ± 3.0	13.2 ± 3.0

*= analyzed by: FGL Environmental Laboratory

Units in picocuries/liter (pCi/L)

SOUTH BAY WATER RECLAMATION PLANT
SOURCE: INFLUENT (SB_INF_02)

CHLORINATED PESTICIDE ANALYSIS, EPA Method 608 (WITH ADDITIONS)

ANNUAL 2016

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	2.15	NG/L	ND	ND	ND	ND	ND
BHC, Beta isomer	2	NG/L	ND	ND	ND	ND	ND
BHC, Gamma isomer	1.71	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	340	ND	85
o,p-DDE	2	NG/L	ND	ND	ND	ND	ND
o,p-DDT	2.4	NG/L	ND	ND	ND	ND	ND
Heptachlor	.89	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	1.83	NG/L	ND	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA	NA
Gamma Chlordene		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	2.15	NG/L	0	0	0	0	0
DDT and derivatives	4	NG/L	0	0	340	0	85
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	340	0	85

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
SOURCE: EFFLUENT (SB_OUTFALL_01)

CHLORINATED PESTICIDE ANALYSIS, EPA Method 608 (WITH ADDITIONS)

ANNUAL 2016

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	2.15	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	1.71	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	.89	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	1.83	NG/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha Chlordene		NG/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma Chlordene		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	2.15	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
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Organophosphorus Pesticides - EPA Method 614/622 (with additions)

ANNUAL 2016

Source:			Influent	Influent	Effluent	Effluent
Date:			03-MAY-2016	04-OCT-2016	03-MAY-2016	04-OCT-2016
Analyte	MDL	Units	P857791	P895201	P857796	P895206
Demeton O	.02	UG/L	ND	ND	ND	ND
Demeton S	.08	UG/L	ND	ND	ND	ND
Diazinon	.04	UG/L	ND	ND	ND	ND
Guthion	.09	UG/L	ND	ND	ND	ND
Malathion	.06	UG/L	ND	ND	ND	ND
Parathion	.07	UG/L	ND	ND	ND	ND
Dichlorvos	.04	UG/L	ND	ND	ND	ND
Disulfoton	.04	UG/L	ND	ND	ND	ND
Dimethoate	.12	UG/L	ND	NR	ND	NR
Stirophos	.05	UG/L	ND	ND	ND	ND
Coumaphos	.07	UG/L	ND	ND	ND	ND
Chlorpyrifos	.04	UG/L	ND	ND	ND	ND
Thiophosphorus Pesticides	.09	UG/L	0.0	0.0	0.0	0.0
Demeton -O, -S	.08	UG/L	0.0	0.0	0.0	0.0
Total Organophosphorus Pesticides	.12	UG/L	0.0	0.0	0.0	0.0

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Tributyl Tin Analysis

ANNUAL 2016

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	NR	ND
Tributyltin	2	UG/L	ND	ND	ND	ND	ND

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	NR	ND
Tributyltin	2	UG/L	ND	ND	ND	ND	ND

ND=not detected; NR=not required

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

PRIORITY POLLUTANT ANALYSIS-ACID EXTRACTABLE COMPOUNDS, EPA Method 625

ANNUAL 2016

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	30.4	40.5	53.8	54.4	44.8
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	30.4	40.5	53.8	54.4	44.8
Total Phenols	2.16	UG/L	30.4	40.5	53.8	54.4	44.8
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	83.9	104	115	121	106
2,4,5-Trichlorophenol	1.66	UG/L	ND	ND	ND	ND	ND

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

ND=not detected; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02)

Priority Pollutants Base/Neutral Compounds, EPA Method 625

ANNUAL 2106

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	5.6	3.9	5.2	4.9	4.9
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	16.3	ND	29.2	34.0	19.9
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	21.9	3.9	34.4	38.9	24.8
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

*= Quality control for internal check standard and matrix spike standard was below acceptance criteria. Data not reportable and not included in average calculations.
ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: EFFLUENT (SB_OUTFALL_01)

Priority Pollutants Base/Neutral Compounds, EPA Method 625

ANNUAL 2106

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	25.7	6.4
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	<9.0	ND	0.0
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	0.0	25.7	6.4

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

*= Quality control for internal check standard and matrix spike standard was below acceptance criteria. Data not reportable and not included in average calculations.
ND= not detected

SOUTH BAY WATER RECLAMATION PLANT
SOURCE: INFLUENT (SB_INF_02)

Priority Pollutants Purgeable Compounds, EPA Method 624 & 8260B

ANNUAL 2016

Source:			INFLUENT				
Date:			FEB	MAY	AUG	OCT^	
Analyte	MDL	Units					Average
Dichlorodifluoromethane	2.39	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	DNQ0.53*	DNQ0.6	0.0
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	.37	UG/L	DNQ0.5	DNQ0.9	DNQ0.9	DNQ1.0	0.0
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	.3	UG/L	DNQ1.3	2.3	2.4	2.7	1.9
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	.43	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	.38	UG/L	ND	ND	ND	ND	ND
Toluene	.4	UG/L	DNQ1.0	DNQ0.9	DNQ0.5	DNQ0.8	0.0
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	.41	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	.46	UG/L	DNQ0.4	DNQ1.3	ND	DNQ0.7	0.0
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	0.6	0.0
Total Dichlorobenzenes	.5	UG/L	0.0	0.0	0.0	0.0	0.0
Total Chloromethanes	.5	UG/L	0.0	2.3	2.4	2.7	1.9
Purgeable Compounds	1.3	UG/L	0.0	2.3	2.4	2.7	1.9

Additional analytes determined

Methyl Iodide	.6	UG/L	ND	ND	ND	ND	ND
Carbon disulfide	.6	UG/L	4.0	6.8	3.8	5.7	5.1
Acetone	6.74	UG/L	143	189	135	361	207
Allyl chloride	.6	UG/L	ND	ND	ND	ND	ND
Methyl tert-butyl ether	.4	UG/L	DNQ0.6	ND	ND	DNQ0.5	0.0
Chloroprene	.4	UG/L	ND	ND	ND	ND	ND
1,2-Dibromoethane	.41	UG/L	ND	ND	ND	ND	ND
2-Butanone	6.3	UG/L	DNQ6.6	DNQ6.5	ND	DNQ7.3	0.0
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	.85	UG/L	ND	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND	ND
Isopropylbenzene	.41	UG/L	ND	ND	ND	ND	ND
Styrene	.38	UG/L	ND	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND	ND

*= Method blank value above the MDL; result not used in average calculations.
^= Sample analyzed outside the 12-hour period for BFB instrument tuning per method requirement.

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

SOUTH BAY WATER RECLAMATION PLANT

SOURCE: EFFLUENT (SB_OUTFALL_01)

Priority Pollutants Purgeable Compounds, EPA Method 624 & 8260B

ANNUAL 2016

Source:			EFFLUENT				
Date:			FEB	MAY	AUG	OCT^	
Analyte	MDL	Units					Average
Dichlorodifluoromethane	2.39	UG/L	ND	ND	ND	ND	ND
Chloromethane	.5	UG/L	ND	DNQ0.8	ND	ND	0.0
Vinyl chloride	.4	UG/L	ND	ND	ND	ND	ND
Bromomethane	.7	UG/L	ND	ND	DNQ0.57*	DNQ0.7	0.0
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	.37	UG/L	ND	DNQ0.7	DNQ0.38*	DNQ0.6	0.0
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	.3	UG/L	DNQ0.7	13.5	DNQ0.3	DNQ1.6	3.4
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	.43	UG/L	ND	ND	ND	ND	ND
Bromodichloromethane	.5	UG/L	ND	11.2	ND	ND	2.8
2-Chloroethylvinyl ether	1.1	UG/L	ND	ND	ND	ND	ND
cis-1,3-dichloropropene	.38	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	5.2	ND	ND	1.3
Chlorobenzene	.4	UG/L	ND	ND	ND	ND	ND
Ethylbenzene	.41	UG/L	ND	ND	ND	ND	ND
Bromoform	.5	UG/L	ND	DNQ0.5	ND	ND	0.0
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	.46	UG/L	ND	DNQ0.9	ND	ND	0.0
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	1.3	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	13.5	0.0	0.0	3.4
Purgeable Compounds	1.3	UG/L	0.0	29.9	0.0	0.0	7.5
Additional analytes determined							
Methyl Iodide	.6	UG/L	ND	ND	ND	ND	ND
Carbon disulfide	.6	UG/L	ND	ND	ND	ND	ND
Acetone	6.74	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	.41	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	.85	UG/L	ND	ND	ND	ND	ND
ortho-xylene	.4	UG/L	ND	ND	ND	ND	ND
Isopropylbenzene	.41	UG/L	ND	ND	ND	ND	ND
Styrene	.38	UG/L	ND	ND	ND	ND	ND
Benzyl chloride	1.1	UG/L	ND	ND	ND	ND	ND

*= Method blank value above the MDL; result not used in average calculations.
^= Sample analyzed outside the 12-hour period for BFB instrument tuning per method requirement.

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

SOUTH BAY WATER RECLAMATION PLANT
SOURCE: INFLUENT (SB_INF_02)

Dioxin and Furan Analysis

ANNUAL 2016

Source:				INF	INF	INF	INF
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P829455	P831481	P840218	P851725
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	DNQ2.42	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	21.9	DNQ13.7	DNQ12.5	DNQ16.8
octa CDD	.0012	PG/L	0.001	210	150	120	150
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	DNQ1.61
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	DNQ1.95
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	DNQ4.58	DNQ4.26	DNQ2.86	DNQ3.47
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	DNQ9.05	DNQ9.68	DNQ7.64	DNQ7.08

Source:				INF	INF	INF	INF
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P857791	P863744	P873572	P878460
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	DNQ3.27	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	DNQ3.7	DNQ10.6	DNQ7.11
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	DNQ16.6	25.9	70.4	42.7
octa CDD	.0012	PG/L	0.001	160	140	130	170
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	DNQ1.11	DNQ3.08
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	DNQ2.87
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	DNQ4.55	DNQ3.85
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	DNQ7.83	DNQ8.85	DNQ8.06

Source:				INF	INF	INF	INF
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P886308	P895201	P902955	P909776
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	DNQ8.18	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	48.7	DNQ3.71	DNQ3.39
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	DNQ13.8	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	DNQ18.1	282	DNQ15.0	DNQ16.5
octa CDD	.0012	PG/L	0.001	130	240	110	110
2,3,7,8-tetra CDF	.0307	PG/L	0.100	DNQ0.706	DNQ1.82	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	DNQ5.08	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	DNQ0.948	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	DNQ1.52	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	DNQ1.99	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	DNQ2.36	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	DNQ2.91	DNQ6.13	DNQ3.16	DNQ2.88
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	DNQ1.59	ND	ND
octa CDF	.0017	PG/L	0.001	DNQ6.09	DNQ9.37	DNQ6.56	DNQ5.49

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
SOURCE: EFFLUENT (SB_OUTFALL_01)

Dioxin and Furan Analysis

ANNUAL 2016

Source:				EFF	EFF	EFF	EFF
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P829459	P831486	P840222	P851729
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	ND	ND	ND	DNQ2.14
octa CDD	.0012	PG/L	0.001	DNQ4.64	DNQ5.03	DNQ4.11	DNQ34.0
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	ND	ND	ND

Source:				EFF	EFF	EFF	EFF
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P857796	P863748	P873576	P878465
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	ND	ND	DNQ2.20	ND
octa CDD	.0012	PG/L	0.001	ND	ND	DNQ4.42	DNQ5.46
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	ND	ND	ND

Source:				EFF	EFF	EFF	EFF
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P886312	P895206	P903458	P909780
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	ND	DNQ1.92	ND	ND
octa CDD	.0012	PG/L	0.001	DNQ5.43	DNQ7.09	ND	ND
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	ND	ND	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
SOURCE: INFLUENT (SB_INF_02)

Dioxin and Furan Analysis

ANNUAL 2016

Source:				INF	INF	INF	INF
				TCCD	TCCD	TCCD	TCCD
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P829455	P831481	P840218	P851725
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	DNQ0.242	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	0.219	DNQ0.137	DNQ0.125	DNQ0.168
octa CDD	.0012	PG/L	0.001	0.210	0.150	0.120	0.150
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	DNQ0.161
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	DNQ0.195
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	DNQ0.046	DNQ0.043	DNQ0.029	DNQ0.035
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	DNQ0.009	DNQ0.010	DNQ0.008	DNQ0.007

Source:				INF	INF	INF	INF
				TCCD	TCCD	TCCD	TCCD
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P857791	P863744	P873572	P878460
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	DNQ0.327	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	DNQ0.370	DNQ1.060	DNQ0.711
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	DNQ0.166	0.259	0.704	0.427
octa CDD	.0012	PG/L	0.001	0.160	0.140	0.130	0.170
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	DNQ0.111	DNQ0.308
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	DNQ0.287
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	DNQ0.046	DNQ0.039
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	DNQ0.008	DNQ0.009	DNQ0.008

Source:				INF	INF	INF	INF
				TCCD	TCCD	TCCD	TCCD
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P886308	P895201	P902955	P909776
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	DNQ0.818	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	4.870	DNQ0.371	DNQ0.339
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	DNQ1.380	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	DNQ0.181	2.820	DNQ0.150	DNQ0.165
octa CDD	.0012	PG/L	0.001	0.130	0.240	0.110	0.110
2,3,7,8-tetra CDF	.0307	PG/L	0.100	DNQ0.071	DNQ0.182	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	DNQ0.254	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	DNQ0.474	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	DNQ0.152	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	DNQ0.199	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	DNQ0.236	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	DNQ0.029	DNQ0.061	DNQ0.032	DNQ0.029
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	DNQ0.016	ND	ND
octa CDF	.0017	PG/L	0.001	DNQ0.006	DNQ0.009	DNQ0.007	DNQ0.005

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
SOURCE: EFFLUENT (SB_OUTFALL_01)
Dioxin and Furan Analysis

ANNUAL 2016

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

Source:				EFF	EFF	EFF	EFF
				TCCD	TCCD	TCCD	TCCD
Date:				JAN	FEB	MAR	APR
Analyte	MDL	Units	Equiv	P829459	P831486	P840222	P851729
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	ND	ND	ND	DNQ0.021
octa CDD	.0012	PG/L	0.001	DNQ0.005	DNQ0.005	DNQ0.004	DNQ0.034
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	ND	ND	ND

Source:				EFF	EFF	EFF	EFF
				TCCD	TCCD	TCCD	TCCD
Date:				MAY	JUN	JUL	AUG
Analyte	MDL	Units	Equiv	P857796	P863748	P873576	P878465
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	ND	ND	DNQ0.022	ND
octa CDD	.0012	PG/L	0.001	ND	ND	DNQ0.004	DNQ0.005
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	ND	ND	ND

Source:				EFF	EFF	EFF	EFF
				TCCD	TCCD	TCCD	TCCD
Date:				SEP	OCT	NOV	DEC
Analyte	MDL	Units	Equiv	P886312	P895206	P903458	P909780
2,3,7,8-tetra CDD	.316	PG/L	1.000	ND	ND	ND	ND
1,2,3,7,8-penta CDD	.3035	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8_hexa_CDD	.0808	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDD	.0891	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDD	.0756	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDD	.00857	PG/L	0.010	ND	DNQ0.019	ND	ND
octa CDD	.0012	PG/L	0.001	DNQ0.005	DNQ0.007	ND	ND
2,3,7,8-tetra CDF	.0307	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8-penta CDF	.02105	PG/L	0.050	ND	ND	ND	ND
2,3,4,7,8-penta CDF	.2155	PG/L	0.500	ND	ND	ND	ND
1,2,3,4,7,8-hexa CDF	.0486	PG/L	0.100	ND	ND	ND	ND
1,2,3,6,7,8-hexa CDF	.0521	PG/L	0.100	ND	ND	ND	ND
1,2,3,7,8,9-hexa CDF	.0556	PG/L	0.100	ND	ND	ND	ND
2,3,4,6,7,8-hexa CDF	.0663	PG/L	0.100	ND	ND	ND	ND
1,2,3,4,6,7,8-hepta CDF	.00489	PG/L	0.010	ND	ND	ND	ND
1,2,3,4,7,8,9-hepta CDF	.0069	PG/L	0.010	ND	ND	ND	ND
octa CDF	.0017	PG/L	0.001	ND	ND	ND	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
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Cations

ANNUAL 2016

Source:	Calcium		Magnesium		Lithium	
MDL/Units:	.04 mg/L		.1 mg/L		.002 mg/L	
Source:	INF	EFF	INF	EFF	INF	EFF
JANUARY -2016	66.5	69.4	31.2	29.9	0.041	0.039
FEBRUARY -2016	62.4	64.5	27.9	27.6	0.034	0.029
MARCH -2016	72.0	71.3	34.2	33.4	NA	0.039
APRIL -2016	79.4	78.6	28.8	28.0	0.048	0.046
MAY -2016	81.4	88.3	31.5	31.0	0.054*	0.055*
JUNE -2016	74.6	76.0	25.9	25.4	0.047	0.047
JULY -2016	74.2	75.3	26.8	26.2	0.040	0.040
AUGUST -2016	76.1	73.1	27.9	27.4	0.038	0.037
SEPTEMBER-2016	61.3	62.6	23.2	22.7	0.040	0.038
OCTOBER -2016	70.9	74.3	27.1	28.2	0.044	0.045
NOVEMBER -2016	85.2	88.2	32.0	31.4	0.052	0.046
DECEMBER -2016	75.9	81.3	28.2	28.0	0.047	0.046
Average:	73.3	75.2	28.7	28.3	0.043	0.041

Source:	Sodium		Potassium	
MDL/Units:	1 mg/L		.3 mg/L	
Source:	INF	EFF	INF	EFF
JANUARY -2016	217	224	18.6	17.2
FEBRUARY -2016	196	194	19.7	17.5
MARCH -2016	214	214	21.7	19.5
APRIL -2016	192	198	20.4	18.8
MAY -2016	219	220	23.8	21.3
JUNE -2016	184	180	19.2	17.5
JULY -2016	187	190	19.6	18.0
AUGUST -2016	196	198	20.7	18.8
SEPTEMBER-2016	164	165	18.1	16.5
OCTOBER -2016	204	187	19.3	17.9
NOVEMBER -2016	243	242	21.4	19.7
DECEMBER -2016	190	196	18.6	17.2
Average:	201	201	20.1	18.3

*= method blank > 10% samples.

ND=not detected; NA=not analyzed

SOUTH BAY WATER RECLAMATION PLANT
SAMPLE SOURCE: INFLUENT (SB_INF_02) AND EFFLUENT (SB_OUTFALL_01)

Anions

ANNUAL 2016

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 -2016	0.4	0.4	245	283	0.23	0.47
FEBRUARY -2016	0.3	0.4	240	238	0.16	0.51
MARCH -2016	0.3	0.3	237	242	0.15	0.48
APRIL -2016	0.3	0.3	223	234	0.22	0.44
MAY -2016	0.4	ND	230	238	0.46	0.49
JUNE -2016	0.4	0.4	222	231	0.44	0.46
JULY -2016	0.4	0.4	231	242	0.33	0.49
AUGUST -2016	0.3	0.3	218	225	0.36	0.45
SEPTEMBER-2016	0.3	0.3	210	212	0.31	0.41
OCTOBER -2016	0.3	0.3	228	226	0.27	0.42
NOVEMBER -2016	0.3	0.3	218	231	0.29	0.45
DECEMBER -2016	0.3	0.3	234	233	0.26	0.42
AVERAGE	0.3	0.3	228	236	0.29	0.46

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 -2016	1.32	51.0	10.6	1.4	159	181
FEBRUARY -2016	1.12	56.7	11.6	0.8	140	154
MARCH -2016	0.23	13.0	11.2	1.0	153	182
APRIL -2016	1.97	37.6	10.8	4.9	201	235
MAY -2016	0.74	36.9	10.8	7.5	171	225
JUNE -2016	2.32	41.4	10.5	5.7	173	233
JULY -2016	1.06	38.3	9.4	7.1	177	226
AUGUST -2016	1.57	15.8	9.0	1.7	167	208
SEPTEMBER-2016	2.09	35.0	9.1	6.1	160	198
OCTOBER -2016	<0.04	42.7	10.1	5.8	169	210
NOVEMBER -2016	0.06	50.1	10.8	5.6	174	233
DECEMBER -2016	<0.04	51.0	10.5	1.0	193	241
AVERAGE	1.04	39.1	10.4	4.1	170	211

ND= not detected

B. Upset, Interference, and Pass-through

In CY2016, there were no reported incidents of interference with collection system, pump station, or treatment plant operations.

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 CY16 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.