



2019-20
Annual Report
RESOURCE PROTECTION DIVISION

PRETREATMENT PROGRAM



Orange County
Sanitation District

**POTW PRETREATMENT PROGRAM ANNUAL REPORT
CERTIFICATION STATEMENT**

NPDES Permit Holder: Orange County Sanitation District
Report Due Date: October 31, 2020
Period Covered by this Report: July 2019 through June 2020
Period Covered by Previous Report: July 2018 through June 2019*
Name of Wastewater Treatment Plant(s): Reclamation Plant No. 1, and Treatment Plant No. 2
NPDES Permit Number: CA0110604

Person to contact concerning information contained in this report:

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"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

October 21, 2020
Date


Engineering Manager, Resource Protection Division

* See Annual Report 2018-19, Orange County Sanitation District, submitted to EPA Region 9 and California Regional Water Quality Control Board, Santa Ana Region.

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Orange County Sanitation District

10844 Ellis Avenue, Fountain Valley, CA 92708
714.962.2411 • www.ocsd.com

October 21, 2020

Hope A. Smythe, Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Subject: Board Order No. R8-2012-0035, NPDES No. CA0110604
FY 2019/20 Pretreatment Program Annual Report

In accordance with the requirements of NPDES Permit No. CA0110604, attached please find the FY 2019/20 Pretreatment Program Annual Report which provides information on the Orange County Sanitation District's (OCSD) pretreatment program for the period July 1, 2019 through June 30, 2020.

The attached annual report provides an update on the status of OCSD's pretreatment program in achieving its requirements and objectives. Information is also provided on how the program is administered, the resources used to manage the program, the compliance status of industrial users, and the impact of source control efforts on wastewater and biosolids quality.

Some of the program's highlights for this fiscal year are summarized below:

- ▶ The program has continued to effectively reduce heavy metals discharges. Since 1976/77, the total mass of heavy metals entering OCSD's system has decreased by 84% while the mass of metals discharged to the marine environment has decreased by 99%. The influent heavy metals to OCSD's treatment plants meet our NPDES effluent standards before wastewater treatment has occurred.
- ▶ During FY 2019/20, 1,422 inspections of industrial facilities were conducted, and 3,831 samples were collected for analysis. In addition to warning notices and self-monitoring notices, 327 separate enforcement actions were taken against noncompliant industries in FY 2019/20, including compliance meetings and inspections, and the issuance of fees, penalties, enforcement orders and administrative complaint settlements. Over \$97,781 in noncompliance fees and penalties were issued.
- ▶ During FY 2019/20, OCSD continued its oversight of IRWD's and SAWPA's pretreatment programs. Information on IRWD and SAWPA can be found in Chapter 7 and Appendices G and H of this report.

Should you have any questions regarding the information provided in the report or wish to meet with OCSD staff to discuss the report in more detail, please contact me at your convenience at (714) 593-7437.



Roya Sohanaki, PE
Engineering Manager, Resource Protection Division

HTG:aps

- c: EPA Region 9, CWA Compliance Office
SWRCB Pretreatment Program Manager
Submitted electronically to ciwqs.waterboards.ca.gov,
R9pretreatment@epa.gov, and NPDES_Wastewater@waterboards.ca.gov



Our Mission: To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.

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October 21, 2020

Hope A. Smythe, Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Subject: Board Order No. R8-2012-0035, NPDES No. CA0110604
Pretreatment Program Semi-Annual Report for the Period of January 1
through June 30, 2020

As authorized by NPDES Permit No. CA0110604, the Pretreatment Program Semi-Annual Report information for January 1 through June 30, 2020 has been submitted as part of the Orange County Sanitation District's (OCSD) Pretreatment Program Annual Report for the period July 1, 2019 through June 30, 2020. Enforcement action and compliance status information has been divided into appropriate six-month summaries.

Should you have any questions regarding the information provided in the report or wish to meet with OCSD staff to discuss the report in more detail, please contact me at your convenience at (714) 593-7437.



Roya Sohanaki, PE
Engineering Manager, Resource Protection Division

HTG:aps

c: EPA Region 9, CWA Compliance Office
SWRCB Pretreatment Program Manager
Submitted electronically to ciwqs.waterboards.ca.gov,
R9pretreatment@epa.gov, and NPDES_Wastewater@waterboards.ca.gov



Our Mission: To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.

ANNUAL REPORT 2020

PRETREATMENT PROGRAM

**Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley, CA 92708-7018
(714) 962-2411**

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AND SNC NOTICE**

**Appendix I
QA/QC ANALYSIS RESULTS**

**Appendix J
PERMITTEES WITH PRETREATMENT EQUIPMENT**

LIST OF ABBREVIATIONS

BMPs	Best Management Practices
BOD	Biochemical Oxygen Demand
CAN	Corrective Action Notice
CCB	chlorine contact basin
CCTV	closed-circuit TV
CDS	Continuous Deflective Separation
CEPT	Chemically Enhances Primary Treatment
CGS	Central Power Generation System
CIP	Clean in Place
CIU	Categorical Industrial Users
CRWQCB	California Regional Water Quality Control Board
CWA	Clean Water Act
CWEA	California Water Environment Association
DAF	Dissolved Air Flotation
ECSA	Enforcement compliance Schedule Agreements
EMWD	Eastern Municipal Water District
EPA	Environmental Protection Agency
ERP	Enforcement Response Plan
FOG	fats, oils, and grease
FSEs	Food Service Establishments
FTE	full time equivalent
FTU	fixed treatment unit
FVM	fluvoxamine
GAP	Green Acres Project
G.I.	grease interceptors
GIS	geographic information system
GWRS	Groundwater Replenishment System
HC	hydrocarbon
ICP	Inductive Coupled Plasma
IEUA	Inland Empire Utilities Agency
IPA	isopropyl alcohol
IRWD	Irvine Ranch Water District
IU	Industrial User
IUS	Industrial User Survey
IX	Ion Exchange
JCSD	Jurupa Community Service District
JPA	Joint Powers Authority
LACSD	Los Angeles County Sanitation District
LAWD	Los Alisos Water District
LWH	Liquid Waste Haulers
MBR	Membrane Bioreactor
MER	Mass Emission Rates
MDL	method detection limits

LIST OF ABBREVIATIONS

(continued)

MGD	million gallons per day
ML	minimum level
MOUs	Memorandums of Understanding
MWRP	Michelson Water Recycling Plant, IRWD
NISC	Non-Industrial Source Control
NOV	Notice of Violation
NTU	nephelometric turbidity units
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OCA	Order for Corrective Action
OCHCA	Orange County Health Care Agency
OCSD	Orange County Sanitation District
OCPW	Orange County Public Works
OCWD	Orange County Water District
OOB	out of business
ORP	oxidation-reduction potential
OSHA	Occupational Safety & Health Administration
OTCR	one-time compliance report
PCB	polychlorinated biphenyls
PERC	perchloroethylene
POTW	Publicly Owned Treatment Works
PPCDs	Pretreatment Program Control Documents
PSES	Pretreatment Standards of Existing Sources
PSNS	Pretreatment Standards of New Sources
PTP	Potable Treatment Plant
PTS	pretreatment systems
RAS	Return Activated Sludge
RCSA	Regulatory Compliance Schedule Agreement
RL	reporting limit
RO	reverse osmosis
RPD	relative percent difference
SAWPA	Santa Ana Watershed Project Authority
SBMWD	San Bernardino Municipal Water Department
SCAP	Southern California Alliance of Publicly Owned Treatment Works
SCE	Southern California Edison
SCFCC	Supplemental Capacity Facilities Capacity Charge
SIUs	Significant Industrial Users
SLCP	Slug Load Control Plan
SMR	Self-Monitoring Reports
SNC	Significant Noncompliance
SOCWA	South Orange County Wastewater Authority
SPDP	Special Purpose Discharge Permit

LIST OF ABBREVIATIONS

(continued)

SS	suspended solids
SSMP	Sewer System Management Plan
SWRCB	State Water Resources Control Board
SSOs	Sanitary Sewer Overflows
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TOMP	Toxic Organic Management Plan
TRC	Technical Review Criteria
TSS	Total Suspended Solids
TTOs	Total Toxic Organics
WDR	Waste Discharge Requirements
WMWD	Western Municipal Water District
YVWD	Yucaipa Valley Water District
YVRWFF	Yucaipa Valley Regional Water Filtration Facility

EXECUTIVE SUMMARY

Background
Introduction

EXECUTIVE SUMMARY

E.1 BACKGROUND

Recognizing the need to control the quality and quantity of wastewaters discharged to the sewerage system, in February 1954, OCSD's Board of Directors adopted the first Ordinance regulating the use of the sewerage system. This Ordinance was subsequently revised and amended in February 1958, April 1970, July 1976, July 1983, September 1989, February 1992, July 1998, July 2008, October 2009, July 2016, and most recently in July 2019. The 1970 revision formally established OCSD's Industrial Waste Division to issue permits, set flow and quality limits, and monitor and inspect industrial discharges to the sewerage system. Substances monitored and regulated included: oil and grease of mineral and petroleum origin, organic materials, dissolved solids, suspended solids, phenolic compounds, radioactive wastes, combustible materials, and any other contaminants that had the potential to degrade wastewater treatment processes or cause problems in the sewerage facilities. In July 1976, the Ordinance was revised to include heavy metal limits.

In July 1983, the Ordinance was further amended to include enforcement of the EPA's Federal categorical limits and to modify OCSD's local discharge limits for cadmium, copper, polychlorinated biphenyls, pesticides, and total toxic organics. OCSD's pretreatment program was approved by the EPA in January 1984. In September 1989, the Ordinance was revised to streamline administrative and enforcement procedures, incorporate EPA regulations adopted since 1983, clarify the intent of the program through added definitions and procedures, and include special purpose discharge permit requirements and conditions. In February 1992, the Ordinance was amended to revise defined terms, initiate noncompliance sampling fees, and include language giving OCSD authority to levy administrative penalties according to changes to state law enacted in January 1992. In July 1998, revisions were made primarily for the deletion of Class III permits, which were issued for the collection of user charges for the discharge of domestic waste. In July 2008, revisions were made regarding the application of tax credits for user charges, and to include dry weather urban runoff permit requirements and conditions. In October 2009, the Ordinance was revised to provide clarification regarding transfer of permit ownership. In February 2016, the Ordinance was revised to remove the numeric BOD concentration limit, the cyanide amenable and total toxic organic limits, revised chromium, and silver limits, and added 1,4-dioxane, molybdenum, and selenium limits. The most recent revision was adopted in May 2019, and became effective in July 2019, establishing additional discharge requirements and prohibitions among other sections of the Ordinance, but with no change to the local discharge limits.

E.2 INTRODUCTION

The fiscal year (FY) 2019/20 OCSD Annual Report provides the following:

- Information about the industrial pretreatment program as required by OCSD's National Pollutant Discharge Elimination System (NPDES) permit issued by the California Regional Water Quality Control Board, Santa Ana Region (CRWQCB) and the Environmental Protection Agency (EPA); and
- Information on how OCSD's pretreatment program is administered; industrial permittees' compliance status; discharger's effect on OCSD's influent, effluent, and biosolids; the labor, equipment, and capital resources used for the program during the fiscal year; and other documentation.

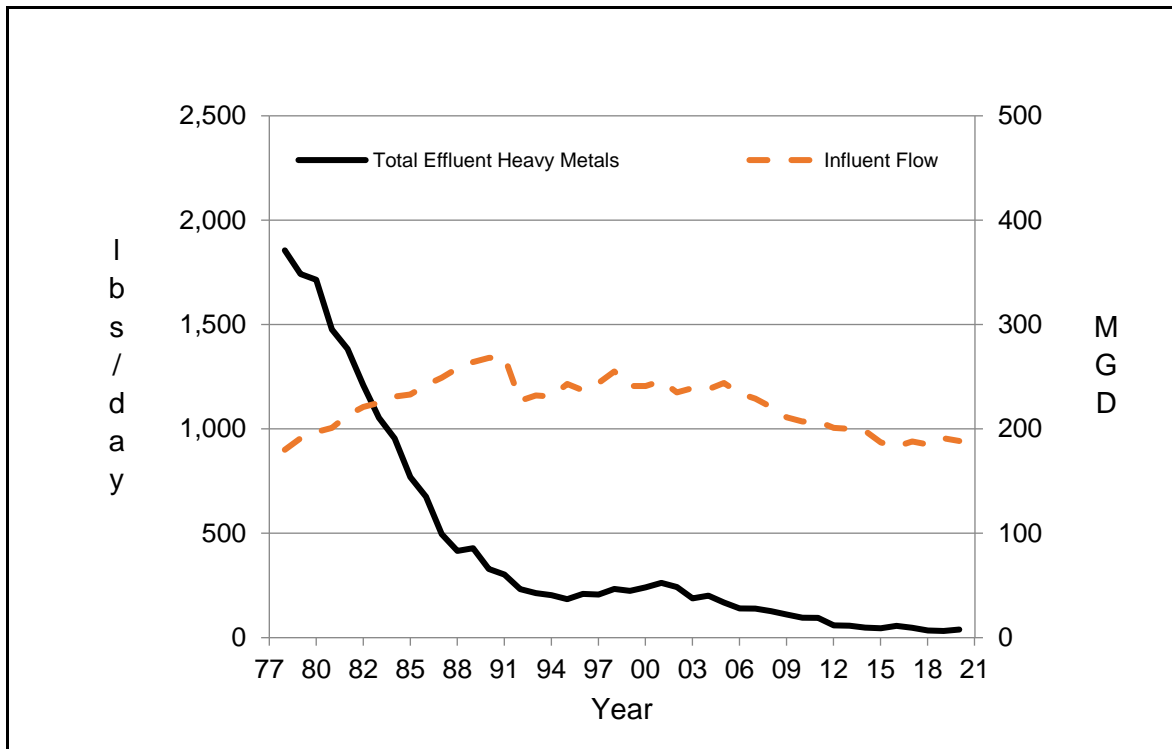


Figure ES-1 Average Effluent Total Heavy Metals and Flows for Past Fiscal Years
Orange County Sanitation District

E.2.1 Pretreatment Program Summary

Control of Pollutants

Since FY 1976/77, while Orange County’s population has grown, the pretreatment program has been successful in reducing the average daily pounds of metals entering OCSD’s system by 84% and metals discharged to the marine environment by 99%. Over this time, individual effluent metals including cadmium, chromium, copper, silver, and lead have been reduced by over 99%; nickel by 96%; and zinc by 96%. Long-term trends of effluent heavy metals show a steady decline since FY 1977 (see Figure ES-1).

OCSD’s pretreatment program has been effective in reducing the toxic priority pollutants discharged to the sewerage system. It has also been effective in protecting the collection, treatment, and disposal facilities from incidents of pass-through or interference, and it has enabled OCSD to meet its NPDES ocean discharge limits. The quality of OCSD’s influent, effluent, and biosolids are evidence of the program’s progress.

Permits

During FY 2019/20, OCSD administered 551 active permits, of which 335 were Class I permits, 21 Class II permits, 40 Wastehauler permits, 2 discharge certifications, 60 Special Purpose permits, 21 Urban Runoff permits, 39 FOG (Fat, Oil, and Grease) permits, and 33 zero discharge certifications. This level of permit activity represents no significant change compared to the total number of active permits at the end of the previous fiscal year. Of the 335 Class I users, 183 were subject to Federal Categorical Pretreatment Standards.

Program Costs

The pretreatment program is funded by industrial permit fees, noncompliance sampling fees, and collection of user charges. The pretreatment program operating expenditures for the fiscal year, including laboratory analyses, totaled \$7,206,630. A total revenue of \$19,013,541 in sewer use charge payments was received and over \$97,781 in noncompliance fees and penalties, including Significant Noncompliance (SNC) reporting and publication fees, were issued through the pretreatment program.

Inspection, Sampling, and Enforcement

OCSD performed 1,422 industrial inspections during the fiscal year, with the collection of 3,831 samples. Seventy-six (76) compliance inspections and twenty-two (22) compliance meetings were held with significant industrial users (SIUs) in order to identify and assess noncompliance problems and propose long-term solutions. OCSD conducted one covert downstream sampling projects. Twenty (20) SIU permittees of the 335 (6%) that were active in FY 2019/20 and listed in the Appendix A (Monitoring and Compliance Status) were determined to be in significant non-compliance and their names were published in the newspaper.

Significant Changes in Operating the Pretreatment Program

There were no significant changes to the OCSD Pretreatment Program during FY 2019/20.

E.2.2 Pretreatment Program Elements

OCSD administers several different program elements designed to meet the goal of controlling discharges from industrial sources. These have a direct influence on OCSD's ability to meet federal, ocean discharge, biosolids reuse and disposal, and water reclamation requirements.

Public Participation

OCSD published those industries that were in significant non-compliance in the local newspaper.

Resource Protection Division staff routinely attend outside agency/association meetings, conferences, and workshops; serve on committees; and give presentations. Working with other agencies and associations benefits OCSD by keeping abreast of potential future regulation and trends which may be beneficial or have impacts that OCSD must prepare for, as well as providing information to the public about OCSD's programs. Please see Chapter 9 for more information.

Wastehauler Program

During FY 2019/20, 40 wastehaulers were under permit with OCSD, having a total of 142 trucks. During the past fiscal year, 12.6 million gallons of waste were discharged by permitted wastehaulers at the Plant No. 1 Wastehauler Station.

Total Toxics Organics Waiver Program

Permittees who have not shown detectable levels of Total Toxic Organics (TTOs) based on their wastewater discharge analytical data for at least one year are eligible to waive the self-monitoring requirement if they can certify that TTOs are not used or present at their facility. For FY 2019/20, OCSD granted 123 companies TTO waivers.

Industrial Operations and Maintenance Improvement Program

The ongoing trend in industrial permittee discharge violations have shown that most cases are due to inadequate operations and maintenance of industry's pretreatment systems as well as industrial operator error. This was recognized years ago, when the U.S. EPA audit findings of 1998 recommended that OCSD develop and implement an industrial operations and improvement program. In 1999/2000, OCSD developed a plan that included outreach and operator training, and enforcement of requirements for operator and operations and maintenance practices which is still in effect today.

In 2019, OCSD conducted a comprehensive training course for industrial wastewater treatment (pretreatment) operators currently employed by facilities holding a Class I Wastewater Discharge Permit. The course was conducted by an engineering services company (selected via bid process for a five-year contract in 2019). OCSD provided this training, free of charge, to assist permittees to obtain and retain a qualified pretreatment operator and to reduce or eliminate noncompliance due to operation and maintenance and/or operator problems. The training course consisted of five 4.5-hour classes and a follow-up wastewater audit at the operator facility to ensure proper implementation of operation and maintenance practices. Those that attended the classes, passed the exam and quizzes, and successfully fulfilled the audit requirements, received Certificates of Completion.

Non-Industrial Source Control Program

The purpose of OCSD's Non-Industrial Source Control (NISC) Program is to promote and implement the application of waste management strategies and practices that will reduce or eliminate the generation of waste at the source, thereby reducing the volume and toxicity of waste streams entering OCSD's sewerage system. The NISC Program also addresses non-industrial pollution sources in our commercial and residential discharger community, more details are available in Chapter 9.

E.2.3 Compliance with NPDES Discharge Requirements

There were no plant upsets, interference, or pass-through incidents attributable to industrial users in FY 2019/20.

NPDES REQUIREMENTS - PRETREATMENT

**Pretreatment Requirements – Compliance with National Pollutant
Discharge Elimination System (NPDES) Permit Requirements**

NPDES REQUIREMENTS - PRETREATMENT**1.1. PRETREATMENT REQUIREMENTS - COMPLIANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS**

This section is a summary of the pretreatment program requirements contained in OCSD's NPDES Permit No. CA0110604, Order No. R8-2012-0035, effective July 20, 2012, jointly issued by the CRWQCB and EPA Region IX. The requirements for the industrial pretreatment program are listed in Section VI (C)(4)(c) and Attachment E of the Permit. The requirements are shown below (in bold italics) using the appropriate numeration found in the permit. Each requirement is followed by a summary of the activity that has resulted in OCSD's compliance with the permit requirements, or a reference may be given where additional information can be found in this annual report.

NPDES Section VI. Provisions, C. Special Provisions, 4. Special Provisions for Municipal Facilities (POTWs Only), c. Pretreatment Program Requirements

- (2) The Discharger shall implement and enforce its approved pretreatment program, and all subsequent revisions, which are hereby made enforceable conditions of this Order/Permit. The Discharger shall enforce the requirements promulgated pursuant to Clean Water Act (CWA) Sections 307(b), 307(c), 307(d), and 402(b) with timely, appropriate, and effective enforcement actions. The Discharger shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements, or, in the case of a new nondomestic user, upon commencement of discharge.***

OCSD has an ongoing commitment to meet the provisions of this requirement, and all pretreatment requirements are enforced as discussed in Chapter 4 of this report. The *Wastewater Discharge Regulations* (Ordinance) contains specific provisions for new dischargers that are more stringent than those required by 40 CFR 403.

The ongoing quarterly inspection, sampling, and monitoring program for each Class I permittee (Significant Industrial User) ensures compliance with federal, state, and local regulations. The compliance statuses of all permittees subject to federal categorical standards are shown in the Fiscal Year 2019-2020 List of SIUs with Monitoring & Compliance Status, presented in Appendix A of this report.

- (3) The Discharger shall perform the pretreatment functions required by 40 CFR Part 403, including, but not limited to:***

- (a) Implement the necessary legal authorities as required by 40 CFR 403.8(f)(1).***

The legal authorities are contained in OCSD's July 1983 *Regulations for Use of District Sewerage Facilities* (Ordinance) which were approved by EPA in January 1984, and affirmed during the May 1986 audit. Revised *Wastewater Discharge Regulations* ordinances were adopted and became effective September 8, 1989, February 7, 1992, July 1, 1998, July 1, 2008, October 1, 2009, July 1, 2016 and most recently on July 1, 2019.

(b) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6.

The requirements to enforce and implement National Pretreatment Standards for general prohibitions and specific industrial subcategories are contained in OCSD's Ordinance. Chapter 4 of this report describes OCSD's enforcement efforts for FY 2019/20.

(c) Implement the programmatic functions as required by 40 CFR 403.8(f)(2).

The required functions include the identification, quantification, permitting, and enforcement of the standards set forth in OCSD's Ordinance. Chapters 3 and 4 of this report describe the permitting and enforcement efforts for FY 2019/20.

(d) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).

The pretreatment program is funded by industrial permit fees, noncompliance sampling fees, and sewer use charges. The pretreatment program's operating expenditures for FY 2019/20, including laboratory analyses, total \$7,206,630. Chapter 5 of this report provides additional details.

(4) By October 31 of each year, the Discharger shall submit an annual pretreatment report to the Regional Water Board, US EPA, the State Water Board's Division of Water Quality-Regulations Unit, and the Orange County Department of Health Services' Hazardous Materials Division, describing its pretreatment activities over the previous fiscal year (July 1 through June 30). In the event the Discharger is not in compliance with any condition or requirement of this Order/Permit, or any pretreatment compliance inspection/audit requirements, the Discharger shall include the reasons for noncompliance and state how and when it will comply with such conditions and requirements. The annual report shall contain, but not be limited to, the following information:

(a) A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the Discharger's influent and effluent for those pollutants US EPA has identified under CWA section 307(a) which are known or suspected to be discharged by nondomestic users. Representative grab sampling shall be employed for pollutants that may degrade after collection, or where the use of automatic sampling equipment may otherwise result in unrepresentative sampling; such pollutants include, but are not limited to, cyanide, oil and grease, volatile organic compounds, chlorine, phenol, sulfide, pH, and temperature. Wastewater sampling and analysis shall be performed in accordance with the minimum frequency of analysis required by the MRP (Attachment E). The Discharger shall also provide influent and effluent monitoring data for non-priority pollutants, which the Discharger believes may be causing or contributing to interference or pass through. The Discharger is not required to sample and analyze for asbestos. Sludge sampling and analysis is addressed elsewhere in this Order/Permit. Wastewater sampling and analysis shall be performed in accordance with 40 CFR 136.

The influent, effluent, and biosolids sampling information is provided in Chapters 2 and 8, and Appendix B of this annual report.

(b) A discussion of upset, interference, or pass through, if any, at the Discharger's facilities, which the Discharger knows or suspects were caused by nondomestic users of the Publicly Owned Treatment Works (POTW) system.

The discussion shall include the reasons why the incidents occurred, any corrective actions taken, and, if known, the name and address of the responsible nondomestic user(s). The discussion shall also include a review of the applicable local pollutant limitations to determine whether any additional limitations, or changes to existing limitations, are necessary to prevent pass-through, interference, or noncompliance with sludge disposal requirements.

There were no plant upsets, interference, or pass-through incidents attributable to industrial users in FY 2019/2020.

- (c) An updated list of the Discharger's SIUs including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The Discharger shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations.***

Appendix A of this report, the Monitoring and Compliance Status Report, is an updated list of significant industrial users which identifies which local or set of categorical standards apply to each SIU.

- (d) The Discharger shall characterize the compliance status of each SIU by providing a list or table for the following:***

Name of SIU;

Category, if subject to categorical standards;

Type of wastewater treatment or control processes in place;

Number of samples taken by SIU during the year;

Number of samples and inspections by Discharger during the year;

For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;

A list of pretreatment standards (categorical or local) violated during the year, or any other violations;

SIUs in significant noncompliance (SNC) as defined at 40 CFR 403.8(f)(2)(viii), at any time during the year;

A summary of enforcement actions or any other actions taken against SIUs during the year. Describe the type of action, final compliance date, and the amount of fines and/or penalties collected, if any. Describe any proposed actions for bringing SIUs into compliance.

This annual report contains all of the items listed above. SIU names, categories, number of samples and inspections, violations, and SNC status are shown in Appendix A. SIU wastewater treatment is shown in Appendix J, Total Toxic Organic waivers are shown in Chapter 6, and enforcement actions are shown in Chapter 4 and Appendix D.

- (e) A brief description of any programs the Discharger implements to reduce pollutants from nondomestic users not classified as SIUs.**

The activities for OCSD's pollution prevention programs and non-industrial source control are discussed in Chapters 6 and 9.

- (f) A brief description of any significant changes in operating the pretreatment program which differ from the previous year, including, but not limited to, changes in the program's administrative structure, local limits, monitoring program, legal authority, enforcement policy, funding, and staffing levels.**

The description of significant changes to the pretreatment program, if any, are discussed in Chapter 6.

- (g) A summary of the annual pretreatment program budget, including the cost of pretreatment program functions and equipment purchases.**

For FY 2019/20, the operating expenses for the pretreatment program were approximately \$7,206,630. Additional information on pretreatment program costs and purchases are shown in Chapter 5 of this report.

- (h) A summary of activities to involve and inform the public of the pretreatment program, including a copy of the newspaper notice, if any, required by 40 CFR 403.8(f)(2)(vii)[sic].**

A copy of the significant non-compliance (SNC) notice for newspaper publication can be found in Appendix E.

- (i) A description of any changes in sludge disposal methods.**

Biosolids information can be found in Chapter 8 of this report.

- (j) A description of the program to quantify, characterize, regulate, and treat flow from low-flow urban runoff diversion systems and "first flush" industrial storm water diversion systems that are routed to the sanitary sewer collection system.**

Information on OCSD's urban runoff program is shown in Chapter 9 of this report.

- (k) A discussion of any concerns not described elsewhere in the annual report.**

There were no concerns for FY 2019/20.

(6) Nonindustrial Source Control Program and Public Education Program

The Discharger shall continue to develop and implement its nonindustrial source control program and public education program. The purpose of these programs is to eliminate the entrance of nonindustrial toxic pollutants and pesticides into the POTW. The nonindustrial source control program will be supplemented with an updated survey of industrial and nonindustrial contaminant sources. These programs shall be periodically reviewed and addressed in the annual report.

The non-industrial source control program (NISC) information can be found in Chapter 9 of this annual report.

ATTACHMENT E, SECTION VII. Effluent Mass Emission Benchmarks

The following mass emission benchmarks [Table E-5] have been established for the effluent discharge. For each parameter with a mass emission benchmark, the Discharger shall report the annual mass emission, and the effluent concentrations and flows used to calculate the annual mass emission, in the annual pretreatment report and annual receiving water monitoring report (effluent chapter).

The mass emission benchmark information is contained in Chapter 2 of this annual report.

OCSD's FACILITIES AND COMPLIANCE WITH DISCHARGE REQUIREMENTS

Introduction

Existing OCSD Facilities

**Compliance with National Pollutant Discharge Elimination
System (NPDES) Requirements**

Effluent Characteristics

Facilities Special Projects

Metals

Mass Emission Benchmarks

OCSD FACILITIES AND COMPLIANCE WITH DISCHARGE REQUIREMENTS

2.1 INTRODUCTION

OCSD is responsible for collecting, transporting and treating wastewater, and reusing or disposing of the treated wastewater and the separated solids in accordance with all applicable federal, state and local laws and regulations. The following pages present a summary of the operation of the wastewater treatment and collection facilities, and the historical data and the regulatory compliance record for FY 2019/20 (July 1, 2019 through June 30, 2020). OCSD is also enrolled in the statewide Waste Discharge Requirements program for sanitary sewers.

OCSD operates and maintains Reclamation Plant No. 1 and Treatment Plant No. 2, 389 miles of sewers, and 15 outlying pump stations. The treatment plants and pump stations are supervised, operated, and maintained by highly trained professionals with appropriate certifications from the California State Water Resources Control Board for treatment plant operators, and voluntary certifications from the California Water Environment Association.

The treated wastewater is either discharged into the Pacific Ocean in strict and consistent compliance with state and federal requirements as set forth in OCSD's NPDES permit, or directed to the Orange County Water District (OCWD) for reclamation. Approximately 120 million gallons per day (MGD) of treated wastewater was routed to facilities operated by OCWD during FY 2019/20. The Groundwater Replenishment System (GWRS) produces purified recycled water used to recharge the Orange County Groundwater Basin and protect it from degradation due to seawater intrusion. Phase II of GWRS continues to produce 100 MGD of reclaimed water.

During FY 2019/20, OCSD beneficially recycled 100% of the dewatered biosolids for use as agricultural soil amendments and compost products. Total biosolids production for this fiscal year was approximately 211,629 wet tons, more than 20% reduction from 254,405 wet tons in 2018/19. This is mainly due to higher solids separation from the new centrifuge operations at Plant No. 1 and Plant No. 2 starting early 2019. As such, solids content has been increased to 24.2% for Plant No. 1 and 27.9% for Plant No. 2. Two management options (land application and composting) were utilized through four vendor contracts in two states and five counties. OCSD's Biosolids Management Compliance Report for calendar year 2019 describes the solids management program in more detail (ocsd.com/503). Grit and screenings are transported under contract for landfill disposal. Debris and grit removed from the sewers during cleaning is dried at Plant No. 1 and then hauled to a landfill for disposal.

OCSD's primary and secondary treatment, digestion, and dewatering facilities were all operated within their respective design capacities for the entire fiscal year.

2.2 EXISTING OCSD FACILITIES

OCSD's operations start with the collection of wastewater from the residential, commercial, and industrial customers in 20 cities, four special districts, and portions of unincorporated Orange County. The average daily flow tributary to OCSD per year since 1997 is shown in TABLE 2.1.

Fiscal Year	Influent MGD	Effluent MGD	Fiscal Year	Influent MGD	Effluent MGD
1997	244	242	2009	211 ^a	167
1998	255 ^c	255	2010	207	152
1999	241	239	2011	207	152
2000	241	236	2012	201	139
2001	246	244	2013	200	137
2002	235	231	2014	198	137
2003	239	235	2015	187	117
2004	238	238	2016	183	92
2005	244	247 ^b	2017	188	101
2006	234	235	2018	185	88
2007	229	232 ^b	2019	191	104
2008	221 ^a	212 ^d	2020	188	101

a. Decrease due to drought; less infiltration due to drier soils and business recession.
b. There was more effluent than influent due to in-plant construction dewatering that was discharged downstream of influent metering.
c. El Niño (wet year).
d. Beginning in 2008, more influent than effluent due to Groundwater Replenishment System

2.2.1 Description of Treatment Plants

Based on population served, OCSD is one of the largest wastewater facilities in the United States. The network of interceptor sewers, treatment units and disposal systems are quite complex. The following sections provide an overview of the treatment facilities.

2.2.1.1 Reclamation Plant No. 1

Reclamation Plant No. 1 is located in the City of Fountain Valley adjacent to the Santa Ana River. The metering and diversion structure, constructed in 1974, allows the excess wastewater from any of the six trunk sewers tributary to Plant No. 1 to be diverted to Plant No. 2 in order to not overload the capacity of Plant No. 1 and also to provide for maintenance or construction activities. The metering and diversion structure also contains pH meters, conductivity meters, and flow meters to monitor the incoming wastewater on each trunk sewer. This operational flexibility also allows Plant No. 1 to provide the highest quality of wastewater for reclamation at OCWD. Flows from the Santa Ana River Interceptor trunkline, which contains Santa Ana Watershed Project Authority (SAWPA) discharges, are diverted to Plant No. 2.

The wastewater flows through bar screens with 5/8-inch-wide openings where large solids (e.g., rags, non-dispersible materials, plastics, grease chunks) are removed. Wastewater is then pumped to aerated grit chambers where the velocity of the water is slowed to allow coffee grounds, seeds, sand, gravel, and other heavy particulate debris to settle out. All the screenings and grit are hauled by a contractor to a landfill for disposal. Foul air at the treatment plants is captured from the trunk sewers at the metering and diversion structure, headworks structures and grit chambers for treatment in the odor control chemical scrubbers. Five

main sewage pumps (four on-duty and one standby) lift flow to the grit chambers.

For improved performance, OCSD conducts chemically enhanced primary treatment (CEPT). Ferric chloride and anionic polymer are added to the primary clarifiers to enhance the settling of the organic solids. Each primary clarifier is covered to capture foul air for treatment in scrubbers. Plant No. 1 has a primary treatment capacity of 204 MGD.

During FY 2019/20, 100% of the Plant No. 1 primary effluent received secondary (biological) treatment either in a conventional air activated sludge secondary treatment process or in trickling filters. An average of 117 MGD of the secondary treated water was pumped to OCWD's GWRS and the Green Acres Project (GAP) for advanced tertiary treatment. Advanced tertiary treatment prepares the water for injection into the groundwater as a barrier against saltwater intrusion, and for percolation to the aquifer for water reclamation and reuse. OCWD also provides GAP water for industrial uses to OCSD. The balance of the Plant No. 1 secondary effluent flows by gravity to Plant No. 2 where it is blended with treated wastewater from Plant No. 2 prior to pumping and ocean disposal.

Solids collected in the primary and secondary clarifiers are pumped to anaerobic digesters for organic waste stabilization and pathogen destruction at 98 degrees Fahrenheit (°F). Following digestion, the sludge is dewatered using a centrifuge process. The centrifuge-dewatered biosolids are removed by private contractors. Stabilization results in the production of digester gas, a fuel which is approximately 63% methane and 36% carbon dioxide. This fuel has a heating value of about 619 British Thermal Units per cubic feet (BTU/cu. ft). The primary and secondary sludge is blended and thickened in the thickening centrifuge units prior to digestion. Digester gas is gathered, compressed, cleaned, and distributed to the Central Power Generation System (CGS) at each plant as a renewable fuel for energy generation.

At Plant No. 1, natural gas and digester gas fuel three internal combustion engines that power 2,500 kilowatt (kW) electric generators. During winter months (Oct.-May) only two of the three engine generators operate at one time to meet air quality permit limits. During Summer months (June-Sept.) all three engines operate during peak hours to reduce Southern California Edison (SCE) electricity cost. Supplemental power was purchased from SCE to provide for the remainder of the Plant No. 1 energy demand. The internal combustion engines were fueled primarily with digester gas with a small amount (approximately 5-10%) of purchased natural gas added to aid combustion.

2.2.1.2 Treatment Plant No. 2

Treatment Plant No. 2 is located in the city of Huntington Beach near the mouth of the Santa Ana River. Five trunk sewers transport wastewater into Headworks D facility, which contains pH meters, conductivity meters, and flow meters, along with six mechanically cleaned bar screens, seven main sewage pumps and six grit tanks. All screenings and grit are hauled by a private contractor to a landfill for disposal. The foul air from the headworks, grit tanks, and primary sedimentation basins is collected for treatment in a combination of chemical scrubbers and bio-towers.

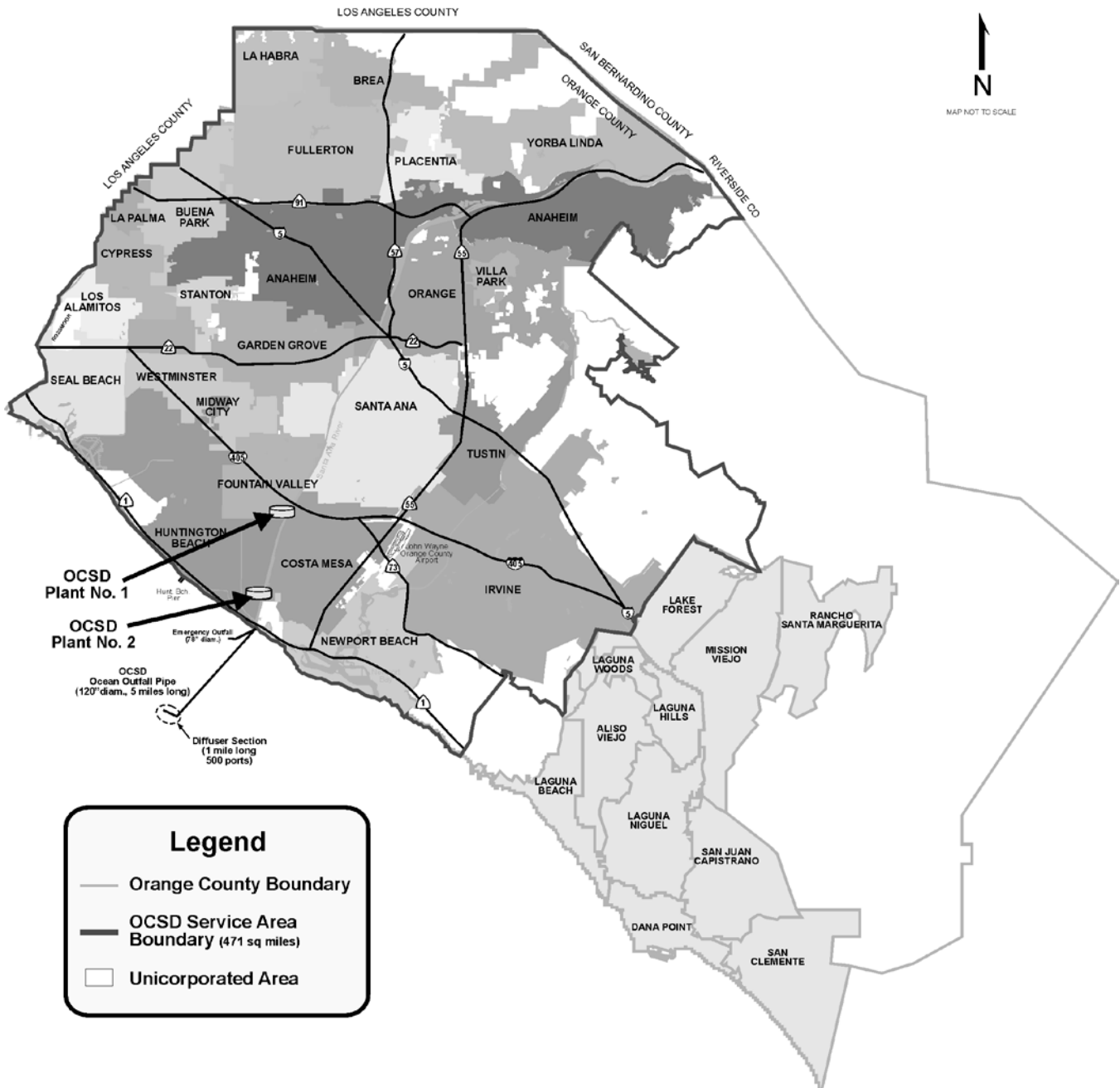
Ferric chloride and anionic polymer are used to enhance the settling of solids during primary treatment. Settleable and suspended solids, and floatable particulates are removed from the wastewater in primary sedimentation basins and pumped to anaerobic digesters for stabilization. Plant No. 2 primary effluent receives 100% secondary treatment in either oxygen activated sludge process or trickling filters.

Sludge from the primary and secondary settling basins is treated in anaerobic digesters. Secondary sludge is thickened in Dissolved Air Flotation (DAF) units prior to digestion. Following digestion, the sludge is dewatered using a dewatering centrifuge process. The centrifuge-dewatered biosolids are removed by private contractors.

The Plant No. 2 Central Power Generation System has five internal combustion engines that power five 3,000 kW electric generators and a 1,000-kW steam turbine powered by engine exhaust waste heat. Only three engine generators are usually operated at any one time based on digester gas availability. During periods of lower demand, excess power is sold to Southern California Edison (SCE), and imported during periods of high demand. The internal combustion engines are fueled primarily with digester gas with a small amount (approximately 5-10%) of natural gas.



MAP NOT TO SCALE



Legend

- Orange County Boundary
- OCSD Service Area Boundary (471 sq miles)
- Unicorporated Area

Figure 2-1 Map of Orange County Sanitation District's Service Area
Orange County Sanitation District, Resource Protection Division

2.2.1.3 Joint Works Facilities

Facilities common to both plants are designated as Joint Works Facilities. These include the bypass sewer to divert wastewater from Plant No. 1 to Plant No. 2, effluent lines to convey treated wastewater from Plant No. 1 to Plant No. 2 for ocean discharge, a fiber optic cable line for interplant communication, digester gas transmission and storage line, two outfall pumping stations, two ocean outfalls (designated in the NPDES permit as Discharge Serial Nos. 001 and 002), and the emergency gravity overflow flap gate valves into the Santa Ana River (Discharge Serial No. 003).

Treated secondary effluent from Plants Nos. 1 and 2 is pumped to OCSD's main discharge point, the 120-inch diameter, 5-mile long ocean outfall (the last mile of which is a diffuser with 503 ports that provides a minimum of 250:1 dilution). During FY 2019/20 all influent received secondary treatment.

2.3 COMPLIANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS

This section provides a summary of limitations contained in OCSD's NPDES permit (Order No. R8-2012-0035/NPDES Permit No. CA0110604, effective on July 20, 2012). TABLE 2.2 shows NPDES permit discharge requirements and OCSD's annual average influent and final effluent discharge values for this reporting period.

TABLE 2.2 NPDES Permit Discharge Requirements and OCSD's Annual Average Influent and Final Effluent Discharge Values for Fiscal Year 2019-20
Orange County Sanitation District, Resource Protection Division

Constituent	OCSD's Combined Influent Annual Average	NPDES Permit Discharge Requirement			Final Effluent Annual Average ¹	OCSD's Compliance with NPDES Permit Limits
		30-Day Average	7-Day Average	Daily Maximum		
Flow, MGD	188	--	--	--	101	NA
BOD-C, mg/L	209	25	40	--	5.4	Yes
BOD-C, lb./day	--	57,129	91,406	--	4,435	Yes
BOD-C percent removal	--	>85 ²	--	--	97	Yes
Suspended Solids, mg/L	327	30	45	--	5.3	Yes
Suspended Solids, lb./day	--	68,555	102,832	--	4,583	Yes
TSS percent removal	--	>75 ²	--	--	99.0	Yes
Grease and Oil, mg/L	42.1	25	40	75	1.0	Yes
Grease and Oil, lb./day	--	57,129	91,406	171,387	1,027	Yes
Settleable Solids, mL/L	--	1.0	1.5	3.0	ND	Yes
Toxicity, acute	--	--	--	Pass/Fail	P	Yes
Toxicity, chronic	--	--	--	Pass/Fail	P	Yes
Turbidity, NTU	--	75	100	225	2.4	Yes
pH	7.8 (P1), 8.0 (P2)	6.0 to 9.0	6.0 to 9.0	9.0	8.1	Yes
Total Chlorine Residual, mg/L	--	0.36 ³	--	1.45	0.08 ³	Yes
Total Chlorine Residual, lb./day	--	823 ³	--	3,313	61 ³	Yes
Benzidine, µg/L	ND	0.01249	--	--	ND	Yes
Benzidine, lb./day	--	0.0285	--	--	--	Yes
Chlordane, µg/L	ND	0.00416	--	--	ND	Yes
Chlordane, lb./day	--	0.0097	--	--	--	Yes
3,3-dichlorobenzidine, µg/L	ND	1.4661	--	--	ND	Yes
3,3-dichlorobenzidine, lb./day	--	3.3992	--	--	--	Yes
Hexachlorobenzene, µg/L	ND	0.0380	--	--	ND	Yes
Hexachlorobenzene, lb./day	--	0.0868	--	--	--	Yes
PAHs, µg/L	ND	1.5928	--	--	ND	Yes
PAHs, lb./day	--	3.6929	--	--	--	Yes
PCBs, µg/L	ND	0.0034	--	--	ND	Yes
PCBs, lb./day	--	0.0078	--	--	--	Yes
TCDD equivalents, pg/L	NR	0.706	--	--	ND	Yes
TCDD equivalents, Mlb/day	--	0.001613	--	--	--	Yes
Toxaphene, µg/L	NR	0.03801	--	--	ND	Yes
Toxaphene, lb./day	--	0.0869	--	--	--	Yes

Additional influent/effluent data is shown in Appendix B

-- Not determined

¹ Based on the average of the values reported in the monthly Discharge Monitoring Report. For values based on 30-day rolling maximum averages, refer to the Benchmark section of the Source Control and Ocean Monitoring Annual Reports.

² Monthly average minimum

³ 6-month median

ND Non-detectable

NR Not required. NPDES Permit requires monitoring and analysis of TCDD equivalents in effluent only.

NA Not Applicable

2.4 EFFLUENT CHARACTERISTICS

2.4.1 General

The OCSD National Pollutant Discharge Elimination System (NPDES) permit establishes water quality effluent constituent compliance limits for major wastewater parameters and toxic materials. The following sections represent a review of the current and historical compliance status for the major wastewater parameters. OCSD's annual average ocean discharge parameters for the past five fiscal years are shown in TABLE 2.3.

2.4.2 Suspended Solids

During FY 2019/20, the suspended solids discharge was in complete compliance with our NPDES permit effluent limits. The final effluent monthly average suspended solids concentration of 5.3 mg/L for a monthly average discharge mass emissions rate of 4,583 pounds per day (lb./day) during FY 2019/20 is 18% of the allowable 30-day average concentration limit of 30 mg/L, and 6.7% of the mass emissions limit of 68,555 lb./day. A summary of the suspended solids data for the past five years is shown in TABLE 2.3.

2.4.3 Carbonaceous Biochemical Oxygen Demand (BOD-C)

The current 30-day average discharge permit limit for carbonaceous BOD is 25 mg/L. The discharge was in consistent compliance for FY 2019/20. The final effluent 30-day average for FY 2019/20 was 5.4 mg/L with a removal rate of 97%. A summary of the carbonaceous BOD data for the past five years is shown in TABLE 2.3.

Fiscal Year	SUSPENDED SOLIDS				BOD-C			
	Influent		Effluent		Influent		Effluent	
	mg/L	lb./day	mg/L	lb./day	mg/L	lb./day	mg/L	lb./day
2015-16	362	552,500	6.0	4,600	212	323,600	4.4	3,400
2016-17	396	620,900	5.3	4,500	212	332,400	4.8	4,000
2017-18	396	611,000	5.0	3,700	220	339,400	4.4	3,200
2018-19	382	611,700	5.7	4,990	214	342,700	4.8	4,200
2019-20	327	512,700	5.3	4,583	209	327,700	5.4	4,435

2.4.4 Oil and Grease

The NPDES 30-day effluent limit for oil and grease is 25 mg/L and 57,129 lb./day. Average oil and grease was measured at 1.0 mg/L in the treated effluent during this fiscal year.

2.4.5 Settleable Solids

The 30-day average permit limit for settleable solids is 1.0 milliliter per liter (mL/L) with a maximum at any time of 3.0 mL/L. The FY 2019/20 average for settleable solids was non-detectable. A summary of the annual average settleable solids data for the past five years is shown in TABLE 2.4.

2.4.6 Turbidity

Turbidity is a measurement of the microscopic suspended solids or finely divided silty particles in water discharged to the ocean. The compliance limit for turbidity is 75 nephelometric turbidity units (NTU) based on a 30-day average. The FY 2019/20 average turbidity was 2.4 NTU. A summary of the turbidity data for the past five years is shown in TABLE 2.4.

2.4.7 pH

According to OCSD's NPDES permit, the pH of the ocean discharge shall neither exceed 9.0 nor be less than 6.0. The effluent was in compliance throughout FY 2019/20. The annual mean pH was 8.1, which is well within the high and low pH effluent limits. The ocean discharge pH has remained relatively constant over the past five years, as summarized in TABLE 2.4.

Fiscal Year	Settleable Solids mL/L	Turbidity NTU	pH
2015-16	ND	3.1	7.9
2016-17	ND	3.1	8.1
2017-18	ND	3.4	8.0
2018-19	ND	2.5	8.0
2019-20	ND	2.4	8.1

2.4.8 Toxicity

OCSD's NPDES permit (Order No. R8-2012-0035) requires that the final effluent be tested once a month for chronic toxicity, and quarterly for acute toxicity. Results of acute and chronic toxicity tests are reported as either a "Pass" or "Fail" following the Test of Significant Toxicity hypothesis testing approach described in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010).

Every calendar year the effluent must be tested using each of the species listed in the NPDES permit to determine which species are most sensitive to the effluent. The most sensitive test species are then used as the test organisms for monthly and quarterly testing. In November 2019, acute toxicity tests were performed to determine the more sensitive of two acute test species: the topsmelt fish, *Atherinops affinis* and mysid crustacean, *Americamysis bahia*. The tests demonstrated that the topsmelt was the more sensitive species for the acute test. All FY 2019/20 quarterly acute tests utilized the topsmelt.

In November 2019, chronic toxicity tests were performed to determine the most sensitive of three chronic test species: the giant kelp, *Macrocystis pyrifera*; the purple sea urchin, *Strongylocentrotus purpuratus*; and the topsmelt, *Atherinops affinis*. The tests demonstrated that the purple sea urchin was the more sensitive species for the chronic test. All FY 2019/20 monthly chronic tests utilized the purple sea urchin.

TABLE 2.5 summarizes the toxicity testing results for fiscal years 2015/16 through 2019/20. All FY 2019/20 acute (n=4 tests) and chronic (n=12) toxicity tests passed indicating no final effluent toxicity

TABLE 2.5 Final Effluent Yearly Average Toxicity Results for Fiscal Years 2016-2020 Orange County Sanitation District, Resource Protection Division		
Fiscal Year		Toxicity
2015/2016 ⁽¹⁾	Acute (<i>A. affinis</i>)	Pass
	Chronic (<i>S. purpuratus</i> & <i>A. affinis</i>)	Pass
2016/2017 ⁽²⁾	Acute (<i>A. affinis</i>)	Pass
	Chronic (<i>A. affinis</i> & <i>S. purpuratus</i>)	Pass
2017/2018	Acute (<i>A. affinis</i>)	Pass
	Chronic (<i>S. purpuratus</i>)	Pass
2018/2019	Acute (<i>A. affinis</i>)	Pass
	Chronic (<i>S. purpuratus</i>)	Pass
2019/2020	Acute (<i>A. affinis</i>)	Pass
	Chronic (<i>S. purpuratus</i>)	Pass

⁽¹⁾ FY 2015/16 monthly chronic testing was conducted using the purple sea urchin from July 2015 to December 2015 and the topsmelt from January 2016 to June 2016.

⁽²⁾ FY 2016/17 monthly chronic testing was conducted using topsmelt from July 2016 to October 2016 and the purple sea urchin from November 2016 to June 2017.

2.5 FACILITIES SPECIAL PROJECTS

2.5.1 Plant No. 1 and Plant No. 2 Thickening & Dewatering Centrifuge Facilities

OCSD has been commissioning new dewatering centrifuge processes at Plant No. 1 and Plant No. 2, replacing belt-filter presses. Plant No. 1 centrifuges started operation in Dec. 2018 and Plant No. 2 centrifuges started operation in Apr. 2019. Due to the improved dewaterability, both wet-tonnage solids and biosolids trucks have been reduced by one third, and the total percentage solids have been increasing significantly, resulting in approximately 24.2% at Plant No. 1 and 27.9% at Plant No. 2. As a result, a significant saving in biosolids hauling has been observed. The project has also replaced the existing dissolved air floatation thickening units with the thickening centrifuges. The new thickening centrifuges co-thicken primary and secondary-blended sludge, and the co-thickened sludge with 5.5% total solids are being fed into digesters. OCSD continuously optimizes the operational conditions for better centrate quality and dryer cake at Plant No. 1 and No. 2.

2.5.2 Plant No. 1 AS1 Return Activated Sludge (RAS) Header Piping Replacement

The Return Activated Sludge (RAS) facility at Plant No. 1 was constructed under Project No. P1-16 in 1974. Over the past few years, the header piping failed in numerous locations due to internal corrosion, warranting replacement of the header piping. The work consists of the removal and replacement of an existing deteriorated 30-inch steel discharge header piping, valves, flexible couplings, and pipe hangers in the RAS Pump Room at Plant No. 1, and approximately 220 linear feet of buried discharge piping.

2.6 METALS

The concentrations of seven metals (cadmium, chromium, copper, lead, nickel, silver, and zinc) are monitored monthly by OCSD. The results of these analyses are used to evaluate efficiencies, trend inputs from discrete sources, and potential toxic concentrations in the secondary facilities, anaerobic digesters, and dewatered sludges.

The average metal concentrations in OCSD's influent and effluent for the last five years are shown in TABLE 2.6.

Constituent	INFLUENT					EFFLUENT				
	15-16	16-17	17-18	18-19	19-20	15-16	16-17	17-18	18-19	19-20
Cadmium lbs/day	1	2	2	2	1	ND	ND	0.02	ND	0.02
Chromium lbs/day	13	13	12	12	11	0.6	0.6	0.5	0.7	0.9
Copper lbs/day	184	188	161	165	149	11	8	4	3	4
Lead lbs/day	4	3	4	4	4	ND	ND	0.05	0.05	0.4
Nickel lbs/day	23	23	18	16	15	14	11	8	7	7
Silver lbs/day	2	2	2	2	1	0.02	0.02	ND	ND	ND
Zinc lbs/day	297	318	286	274	248	29	27	22	20	21
Total Average lbs/day	524	549	486	476	429	55	47	35	32	33
ND Non-detect 2015-16 Influent mass based on 183 MGD 2016-17 Influent mass based on 188 MGD 2017-18 Influent mass based on 185 MGD 2018-19 Influent mass based on 191 MGD 2019-20 Influent mass based on 188 MGD 2015-16 Effluent mass based on 92 MGD 2016-17 Effluent mass based on 101 MGD 2017-18 Effluent mass based on 88 MGD 2018-19 Effluent mass based on 104 MGD 2019-20 Effluent mass based on 101 MGD										

2.7 MASS EMISSION BENCHMARKS

OCSD's NPDES permit (Order R8-2012-0035, NPDES Permit No. CA0110604, in effect during this July 1, 2019 through June 30, 2020 reporting period) contains Mass Emission Benchmarks for 72 constituents as identified in Section VII. Effluent Mass Emission Benchmarks, Table E-5 on pg. E-31 of Attachment E (Monitoring and Reporting Program). These mass emission benchmarks are not water quality-based effluent limits; however, OCSD will use this information as part of its annual evaluation of local limits.

The mass emission benchmarks report is required to compare each constituent's sample result with the minimum level (ML) for that constituent contained in the permit. According to the permit requirement, sample results that are less than the reported ML but greater than the method detection limit (MDL) are to be reported as zero prior to calculating the 12-month constituent average. Some of the values in the Mass Emission Benchmarks report differ from those found in the Priority Pollutants report since the former relies on the ML as the threshold of detection, while the latter uses the MDL as the threshold for reporting.

Most of the heavy metal results fell in the range of 0.0% to 19% of their respective benchmarks with the exception of selenium which was 43%. Unlike many of the benchmarked organic constituents, OCSD had extensive historic heavy metals sampling frequencies and detectable levels on which to base its benchmarks. As a result, the heavy metal data has less statistical variance from the established benchmarks. With continuing improvements in the pretreatment program, the heavy metals benchmark

results verify the decreasing mass emission trends since constituents are less than their historic values. Heavy metals are covered under existing local pretreatment limits. The local limits for those constituents were evaluated as part of the revised wastewater ordinance and local limits effective on July 1, 2016.

Most of the organic compounds with benchmarks were rarely detected in the effluent. As a result, only 4 of 72 constituents exceeded 10% of their respective benchmarks. More than half of the 72 constituents were not detected in OCSD's effluent, and are listed as zero (0) metric tons/year emitted and zero (0) percent of the benchmark. Historically, these constituents were rarely detected in OCSD's effluent, so the benchmarks could only be based on the method detection limits (MDL). As OCSD continues to increase the sensitivity of its detection limits, some constituents may be more discernible in the future. That is, as detection limits are lowered, there will likely be fewer zero-tons-emitted constituents in OCSD's list of benchmarks.

TABLE 2.7 Mass Emissions for All Benchmark Constituents – Fiscal Year 2019-20
 Orange County Sanitation District, Resource Protection Division

Constituent	2019-20	2019-20	2019-20	Min. Mass	Max. Mass	Sample Freq.	Freq. Detected	Avg. Flow	Avg. Conc
	12-Mo. Avg Benchmark	12-Mo. Avg Actual	Percent of Benchmark						
	MT/Year	MT/Year	Percent	Tons/Year	Tons/Year	Count	Count	MGD	(µg/L)
1,1,1-trichloroethane	7.13	0	0	0	0	12	0	100.73	0
1,1,2,2-tetrachloroethane	1.92	0	0	0	0	12	0	100.73	0
1,1,2-trichloroethane	1.92	0	0	0	0	12	0	100.73	0
1,1-dichloroethylene	1.92	0	0	0	0	12	0	100.73	0
1,2-dichloroethane	1.92	0	0	0	0	12	0	100.73	0
1,2-diphenylhydrazine	15.4	0	0	0	0	12	0	109.33	0
1,3-dichloropropene	1.92	0	0	0	0	12	0	100.73	0
1,4-Dichlorobenzene	7.68	0	0	0	0	12	0	109.33	0
2,4,6-Trichlorophenol	7.68	0	0	0	0	12	0	109.33	0
2,4-Dinitrophenol	76.81	0	0	0	0	12	0	109.33	0
2,4-Dinitrotoluene	7.68	0	0	0	0	14	0	103.79	0
3,3'-Dichlorobenzidine	4.989	0	0	0	0	14	0	103.79	0
4,6-Dinitro-2-methylphenol	76.81	0	0	0	0	12	0	109.33	0
Acrolein	24.96	0	0	0	0	12	0	100.73	0
Acrylonitrile	18.06	0	0	0	0	12	0	100.73	0
Aldrin	0.08	0	0	0	0	2	0	96.87	0
Antimony	19.2	0.191	0.99	0.12799	0.27061	12	12	109.33	1.32
Arsenic	1.92	0.357	18.59	0.319012	0.405915	12	12	109.33	2.52
Benzene	3.23	0	0	0	0	12	0	100.73	0
Benzidine	76.81	0	0	0	0	14	0	103.79	0
Beryllium	1.92	0	0	0	0	12	0	109.33	0
bis(2-Chloroethoxy)methane	15.4	0	0	0	0	14	0	103.79	0
bis(2-Chloroethyl)ether	15.4	0	0	0	0	12	0	109.33	0
bis(2-Chloroisopropyl)ether	15.4	0	0	0	0	12	0	109.33	0
bis(2-Ethylhexyl)phthalate	36.67	0	0	0	0	14	0	103.79	0
Cadmium	0.55	0.003	0.55	0	0.03111	12	1	109.33	0.02
Carbon tetrachloride	1.92	0	0	0	0	12	0	100.73	0

TABLE 2.7 Mass Emissions for All Benchmark Constituents – Fiscal Year 2019-20
Orange County Sanitation District, Resource Protection Division

Constituent	2019-20 12-Mo. Avg Benchmark	2019-20 12-Mo. Avg Actual	2019-20 Percent of Benchmark	Min. Mass	Max. Mass	Sample Freq.	Freq. Detected	Avg. Flow	Avg. Conc
	MT/Year	MT/Year	Percent	Tons/Year	Tons/Year	Count	Count	MGD	(µg/L)
Chlordane total	0.76	0	0	0	0	3	0	96.87	0
Chlorobenzene	1.91	0	0	0	0	12	0	100.73	0
Chloroform	2.74	1.164	42.48	0.625754	1.933193	12	12	100.73	8.73
Chromium	2.94	0.157	5.34	0.130715	0.262571	12	12	109.33	1.07
Copper	31.52	0.756	2.4	0.408823	2.171735	12	12	109.33	4.92
Cyanide	7.75	0.597	7.7	0.329231	1.032105	12	12	109.33	4.07
DDT	0.26	0	0	0	0	2	0	96.87	0
Dichlorobenzenes	15.4	0	0	0	0	12	0	109.33	0
Dichloromethane	19.2	0	0	0	0	12	0	100.73	0
Dieldrin	0.08	0	0	0	0	2	0	96.87	0
Diethylphthalate	13.65	0.185	1.36	0	1.50603	12	2	109.33	0.95
Dimethylphthalate	7.68	0	0	0	0	12	0	109.33	0
Di-n-butylphthalate	15.39	0	0	0	0	14	0	103.79	0
Endosulfan	0.23	0	0	0	0	2	0	96.87	0
Endrin	0.04	0	0	0	0	2	0	96.87	0
Ethylbenzene	1.92	0	0	0	0	12	0	100.73	0
Fluoranthene	7.68	0	0	0	0	14	0	103.79	0
Halomethanes	13.44	0.026	0.19	0	0.178761	12	2	100.73	0.2
HCH	0.3	0	0	0	0	2	0	96.87	0
Heptachlor	0.08	0	0	0	0	4	0	96.87	0
Hexachlorobenzene	7.68	0	0	0	0	14	0	103.79	0
Hexachlorobutadiene	15.4	0	0	0	0	14	0	103.79	0
Hexachlorocyclopentadiene	15.4	0	0	0	0	14	0	103.79	0
Hexachloroethane	7.68	0	0	0	0	14	0	103.79	0
Isophorone	7.68	0	0	0	0	14	0	103.79	0
Lead	1.29	0.08	6.2	0	0.304288	12	8	109.33	0.46
Mercury	0.08	0.001	1.25	0.000499	0.001316	12	12	109.33	0.01
Nickel	10.55	1.128	10.69	0.820131	1.852723	12	12	109.33	7.75

TABLE 2.7 Mass Emissions for All Benchmark Constituents – Fiscal Year 2019-20
 Orange County Sanitation District, Resource Protection Division

Constituent	2019-20 12-Mo. Avg Benchmark	2019-20 12-Mo. Avg Actual	2019-20 Percent of Benchmark	Min. Mass	Max. Mass	Sample Freq.	Freq. Detected	Avg. Flow	Avg. Conc
	MT/Year	MT/Year	Percent	Tons/Year	Tons/Year	Count	Count	MGD	(µg/L)
Nitrobenzene	7.68	0	0	0	0	14	0	103.79	0
n-Nitrosodimethylamine	4.61	0	0	0	0	14	0	103.79	0
n-Nitrosodiphenylamine	7.68	0	0	0	0	14	0	103.79	0
PAHs	99.854	0	0	0	0	12	0	109.33	0
PCB	13.44	0	0	0	0	2	0	96.87	0
Selenium	1.92	0.816	42.5	0.602704	1.050829	12	12	109.33	5.81
Silver	2.67	0	0	0	0	12	0	109.33	0
TCDD Equivalents	19.21	0.000102	0.0005	0	0.00018	4	3	99.92	0.000739
Tetrachloroethylene	1.92	0.016	0.83	0	0.187754	12	1	100.73	0.13
Thallium	3.84	0	0	0	0	12	0	109.33	0
Toluene	3.98	0	0	0	0	12	0	100.73	0
Total Chlorinated Phenols	27.6	0	0	0	0	12	0	109.33	0
Total Non-Chlorinated Phenols	218	0	0	0	0	12	0	109.33	0
Toxaphene	1.92	0	0	0	0	2	0	96.87	0
trichloroethene	1.92	0	0	0	0	12	0	100.73	0
vinyl chloride	3.84	0	0	0	0	12	0	100.73	0
Zinc	40.7	3.507	8.62	3.044427	4.515246	12	12	109.33	24.49

PERMITS

Introduction

Permit Classifications

Permit Issuance

Discharge Limits

Establishing Mass Emission Rates (MER)

3.1 INTRODUCTION

The Orange County Sanitation District (OCSD) implements permitting and certification control mechanisms which contain effluent limits for all standards; statements of duration and non-transferability; self-monitoring, sampling, reporting, record-keeping and notification requirements; and statements of applicable civil and criminal penalties for discharge violations. The following sections describe the different classifications of permits, how new permittees are identified, and how discharge limits are established.

3.2 PERMIT CLASSIFICATIONS

There are seven permit and certification classifications for users that discharge to OCSD's sewerage system: Class I, Class II, Wastehaulers, Special Purpose, Urban Runoff, FOG (Fats, Oils, and Grease), and Discharge Certifications.

Class I Permits

Class I dischargers are defined as Significant Industrial Users (SIUs) in accordance with federal regulations. Examples of these users include plating shops, printed circuit board shops, large food processors, textile companies with high-volume flows, and industries capable of discharging non-compatible pollutants. A listing of the Class I permittees is given in Appendix A.

A Class I Permit is issued to any user who meets any one of the following conditions:

1. Is subject to federal Categorical Pretreatment Standards; or
2. Averages 25,000 gallons per day or more of regulated process wastewater; or
3. Has a reasonable potential for adversely affecting OCSD's operation or for violating any pretreatment standard, local limit, or discharge requirement; or
4. May cause pass through or interference with OCSD's sewerage facilities.

Class II Permits

Class II permittees include commercial enterprises such as restaurants, supermarkets, large entertainment/service venues, or other high-use non-significant users.

A Class II Permit is issued to any user who meets all the following conditions:

1. Has a charge for use greater than the ad valorem tax basic levy allocated to OCSD; and
2. Discharges waste other than sanitary; and
3. Is not otherwise required to obtain a Class I permit.

Wastehauler Permits

Wastehauler permits are issued to those users who are engaged in vehicular transport and subsequent disposal of biodegradable waste into OCSD's system. Wastehauler permittees dispose of septic tank/cesspool, restaurant grease trap, and portable toilet wastes at OCSD's dedicated disposal facility located at Reclamation Plant No. 1 in Fountain Valley. The discharge of industrial wastewater by any wastehauler is prohibited unless written authorization from OCSD has been obtained.

Special Purpose Permits

Special Purpose permits are issued to dischargers for the purpose of discharging groundwater, surface run-off, subsurface drainage, or unpolluted water directly or indirectly to OCSD's facilities when no alternative method of disposal is reasonably available, or to mitigate an environmental risk or health hazard. This presently includes groundwater remediation and construction dewatering projects.

Urban Runoff Permits

Urban Runoff is contaminated water that is the result of daily activities such as over-irrigating landscape, cleaning streets and sidewalks, and washing cars. OCSD enforces wastewater discharge limits by issuing permits to urban runoff dischargers to ensure that the quality of wastewater does not compromise OCSD's facilities.

FOG (Fats, Oil, and Grease) Permits

OCSD is administering the local FOG Program for Food Service Establishments (FSEs) that discharge directly to OCSD owned sewer pipelines. Ordinance OCSD-25 provides for the establishment of the FOG program and the enforcement of program requirements by OCSD's Resource Protection Division. The goal of the program is to eliminate Sanitary Sewer Overflows (SSOs) which emanate from FSEs. Additional information can be found in Chapter 9.

Discharge Certifications

A Discharge Certification may be issued to non-categorical industries that generate wastewater containing pollutants of concern and have the potential for violating any pretreatment standard or requirement. Zero Discharge Certifications are issued to those industries that have operations subject to a federal category regulated by the EPA, but do not discharge industrial wastewater generated from these operations to the sewer.

3.3 PERMIT ISSUANCE

During FY 2019/20, the pretreatment program managed a total of 551 active permits/certifications. Thirty-two (32) permits were listed as void or expired during the fiscal year (most due to ownership, location, or class changes and subsequent re-issuances), including nine (9) Class I permits, two (2) Class 2 permits, one (1) discharge certification, eighteen (18) special purpose discharge permits, one (1) FOG permit, and one (1) zero discharge certification. Forty-five (45) new permits were issued, including sixteen (16) Class I permits, seven (7) wastehauler permits, and thirteen (13) special purpose discharge permits. Of the eighteen (18) special purpose discharge permits that were voided/expired, and the thirteen (13) newly issued special purpose discharge permits, eight (8) of these were short-term issuances, i.e. newly issued and voided during the same reporting period.

This level of permit activity represents no significant change compared to the total number of active permits at the end of the previous fiscal year. Of the 335 Class I permits (significant industrial users), 183 were subject to Federal Categorical Pretreatment Standards, and the other 152 industrial permits (non-categorical) were issued to non-categorical users that discharge 25,000 gallons per day or more of

process water, have a reasonable potential for adversely affecting OCSD's plant operations, or have a reasonable potential to violate any pretreatment standard or requirement.

3.3.1 Identification of New Permittees

OCSD checks various sources for companies that may be subject to Federal Categorical Standards or local limits. Wastewater permits are issued to those businesses as required. OCSD obtains new business information from the following:

- City Business Licensing Departments
- Santa Ana Regional Water Quality Control Board's permit database
- OCSD Engineering Department connection permits
- OCSD Finance Department new sewer service referrals
- OC Register newspaper
- Agency referrals during Strike Force meetings
- Currently permitted industries

Up until recently, most new permittees had been identified by OCSD field inspectors during the course of inspecting existing permittees, and when following up on new industries that move into a former permittee's company location. Since 2018, OCSD has collaborated with all of its member agencies and set up an ongoing program to collect quarterly data on all new and renewed business licenses. The initial effort also included a plan for OCSD to identify industrial dischargers from county and unincorporated areas where business licenses are not issued. These areas require physical searches to ensure that OCSD's entire service area is covered to comply with EPA's requirements for comprehensive Industrial Waste Survey.

3.4 DISCHARGE LIMITS

3.4.1 Industrial

In 1976, OCSD established discharge limits for specific pollutants. These limits became increasingly restrictive over a three-phased implementation period designed to give industry adequate time to comply with the more stringent standards. The limits were adopted by OCSD's Boards of Directors in 1976 and were published in OCSD's *Regulations for Use of District Sewerage Facilities* (Ordinance). New concentration limits were adopted in the revised Ordinance, which became effective July 1, 1983.

On September 8, 1989, the Boards of Directors adopted a new ordinance entitled *Wastewater Discharge Regulations* which contained essentially the same concentration limits as the previous Ordinance. Revisions included the creation of a specific limit of 0.1 milligrams per liter (mg/L) for polychlorinated biphenyls (PCB), a limit of 0.1 mg/L for pesticides, and specific limits for wastehaulers. It also included specific discharge limits for biochemical oxygen demand (BOD); the daily maximum BOD limit was 15,000 pounds per day (lb/day). These BOD limits were established to prevent pass-through and interference.

The 1989 Ordinance was subsequently revised in February 1992, July 1998, July 2007, July 2008, and October 2009, but with no change to the local discharge limits. Since the implementation of the Federal Categorical Standards in April 1984, OCSD applies either the Federal Categorical Standards or OCSD's local discharge limits, whichever are more stringent. In 2016, OCSD completed a local limits study and revised its Ordinance, per EPA audit findings, effective July 1, 2016. The 2016 Ordinance removed the numeric BOD concentration limit, removed the cyanide amenable and total toxic organic limits, revised chromium, and silver limits, and added 1,4-dioxane, molybdenum, and selenium limits. The 2016 Ordinance was revised in July 2019, but with no change to the local discharge limits. As of this reporting period, the limits set in 2016 are still in effect and shown in TABLE 3.1.

TABLE 3.1 OCSD's Maximum Allowable Discharge Limits in Milligrams Per Liter (mg/L) Orange County Sanitation District, Resource Protection Division			
Constituent	Limit (mg/L)	Constituent	Limit (mg/L)
1,4-Dioxane	1.0	Nickel	10.0
Arsenic	2.0	Oil and Grease of Mineral or Petroleum Origin	100.0
Cadmium	1.0	Pesticides	0.01
Chromium (Total)	20.0	Polychlorinated Biphenyls (PCB)	0.01
Copper	3.0	Selenium	3.9
Cyanide (Total)	5.0	Silver	15.0
Lead	2.0	Sulfide (Dissolved)	0.5
Mercury	0.03	Sulfide (Total)	5.0
Molybdenum	2.3	Zinc	10.0

3.4.2 Wastehaulers

After evaluating reference materials from the EPA and laboratory results from wastehauler samples taken by OCSD, pollutant limits were established for wastehaulers discharging domestic waste that express the maximum expected heavy metal concentrations from domestic wastes found in septic tank/cesspool wastes. These limits are shown in TABLE 3.2.

TABLE 3.2 OCSD's Maximum Allowable Discharge Limits in Milligrams Per Liter (mg/L) Orange County Sanitation District, Resource Protection Division	
Maximum Allowable Discharge Limits for Wastehaulers Discharging Domestic Septage to the OCSD Wastehauler Station	
Constituent	Limit (mg/L)
Cadmium	1.0
Chromium	35.0
Copper	25.0
Lead	10.0
Nickel	10.0
Zinc	50.0

3.5 ESTABLISHING MASS EMISSION RATES (MER)

OCSD uses a dual approach to regulating wastewater constituents. Most Class 1 permits are issued both concentration-based limits and mass emission limits to encourage water conservation, waste minimization, and recycling, to limit the total mass of pollutants that enter the treatment facilities, and to deter facilities from achieving compliance through dilution. For concentration limits OCSD applies either the Federal Categorical Standards or OCSD's local discharge limits (shown in TABLE 3.1), whichever are more

stringent. Mass emission rate limits are calculated using the applicable concentration limits in combination with an industry's three-year average wastewater flow (referred to as a flow base rate). The flow base rate is determined at the time a permit is initially issued, renewed, or revised.

The volume of wastewater used in establishing a permittee's limits is based on water meter information or additional reports submitted to OCSD. Unless additional water losses can be substantiated, or another batch, process, or effluent meter measurement device is in place, 95% of the influent city water meter reading is considered to be discharged to the sewer. The remaining 5% is a standard allowance for losses in process, evaporation, and landscape use. An allowance for domestic waste is computed based on a daily usage rate of 25 gallons per employee per 8-hour shift. If there is documentation showing other water losses, such as product water loss or boiler loss, that are greater than the standard 5% deduction, then adjustments can be made to accommodate these losses. If water conservation beyond normal industrial practice takes place, the permitted flow may be adjusted to account for water conservation and/or water recycling.

The user's annual average industrial wastewater discharge, calculated as described above, is divided by the number of operational discharge days per year to yield the net discharge in gallons per day. Because the mass limit (expressed in lbs/day) provides a pollutant "ceiling," the user is prevented from introducing large quantities of water in an attempt to dilute concentrations to meet categorical requirements. If a discharger wishes to increase production by expanding capacity or increasing the number of hours worked, pretreatment capabilities must be increased to meet future requirements and ensure long-term compliance with the applicable limits.

If a permittee exceeds the MER or concentration discharge limits, the permittee is subject to enforcement action(s) in accordance with OCSD's *Wastewater Discharge Regulations Ordinance* and *Enforcement Response Plan*, which may include administrative penalties.

**INSPECTION, SAMPLING, COMPLIANCE,
ENFORCEMENT**

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Non-Routine Sampling and Inspection

Orange County Hazardous Materials Strike Force and Joint Agency Inspections

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INSPECTION, SAMPLING, COMPLIANCE, & ENFORCEMENT

4.1 INTRODUCTION

This chapter details the inspection, sampling, and enforcement activities of the Orange County Sanitation District (OCSD) Industrial Pretreatment Program for FY 2019/20.

The goal of OCSD's Industrial Pretreatment Program is to ensure that dischargers maintain compliance with Federal Pretreatment Standards and OCSD's *Wastewater Discharge Regulations* (Ordinance) and discharge limits through monitoring and verification, in addition to controlling and reducing industrial pollutants.

An individual industrial discharge status summary of all Class I permittees is provided in the Monitoring and Compliance Status Report for FY 2019/20 (Appendix A). The following sections describe OCSD's inspection, monitoring and enforcement efforts and summarize permittees' compliance with EPA Categorical Standards and OCSD's local limits.

4.2 ROUTINE INSPECTION AND SAMPLING

OCSD's Source Control Inspection group consists of 1 Supervisor, 1 Principal Environmental Specialist, 1 Lead Inspector, 9 Inspectors, 3 Technicians, and 1 Administrative Assistant. Inspectors provide a visible presence at industrial facilities and deter non-compliant conduct through on-site sampling and inspections. The Inspectors perform inspections at each permittee's facility at least once per calendar quarter. Discharge samples are taken during each inspection for all pertinent regulated constituents based on permit requirements.

Inspections may include an evaluation of manufacturing plant processes and pretreatment equipment to observe and discuss changes; verification of waste manifests and other waste disposal documents; measurement of industrial wastewater flows; field testing and sample collection of wastewater; and a review of regulations, policies, and procedures for the implementation of the pretreatment program.

Composite samples of a permittee's discharge are collected using automatic samplers and are time-composited over a 24-hour period. EPA sampling guidelines are used by the Source Control Inspectors for collecting and preserving samples. In conjunction with each Inspector's on-site observations, the results of laboratory analyses are used to verify compliance status, help disclose potential operational and housekeeping problems, evaluate the adequacy of pretreatment systems, and detect new sources of regulated substances. Grab samples are collected for the determination of compliance with TTOs, cyanides, Oil and Grease and pH.

During FY 2019/20, OCSD staff conducted 1,422 inspections and collected 3,831 samples. Compared to last fiscal year, the number of conducted inspections increased this year by 4% and the number of samples collected increased by 18%.

TABLE 4.1 Summary of Inspections, Sampling, and Laboratory Analyses, Fiscal Years 2016-20 Orange County Sanitation District, Resource Protection Division					
Action/Status	Fiscal Years				
	2015-16	2016-17	2017-2018	2018-2019	2019-2020
Inspections*	1,609	1,344	1,192	1,362	1,422
Samples Collected	2,252	2,263	3,406	3,235	3,831
* Site visits to facilities to address compliance.					

4.3 NON-ROUTINE SAMPLING AND INSPECTION

OCSD Source Control Inspection staff perform field duties beyond routine sampling and inspection, as summarized below:

- Enforcement inspections are performed in response to compliance problems and typically involve close cooperation with the permittee to identify and correct deficiencies. Source Control Inspectors resample noncompliant industries within 30 days from the date the violation is issued and submit compliance inspection reports to document corrective measures taken and to support enforcement actions.
- Inspectors participate in multi-agency operations such as warrant inspections and environmental audits. Working jointly with other agencies enables Inspectors to recognize potential problems in other regulatory areas such as air quality and hazardous waste.
- Chronic violators are subject to increased monitoring and inspection activity, which may include extended periods of on-site sampling.
- Source Control Inspectors perform routine sampling for cyanide at facilities that have cyanide treatment systems on site. The sampling occurs at the end of cyanide treatment or at the end of pipe, just prior to discharge. The purpose of this sampling is to confirm that all cyanide-bearing wastewater is treated.
- Random sampling throughout the collection system is performed in areas where there is an increased potential for illegal dumping by industries. These sampling events are generally precursors to downstream monitoring projects (described in Section 4.3.1) when illicit discharging is suspected.
- Field support is provided to the Non-Industrial Source Control (NISC) team within the Resource Protection Division in support of their ongoing programs including quarterly sampling at 21 dry-weather urban runoff diversions and inspections at 27 dry cleaners.
- Providing resources to OCSD's Operations, Collections, Compliance, and Laboratory groups in performing sampling and inspections in relation to special studies or ongoing projects.
- On a monthly basis, Source Control Inspection staff collect composite samples on each of OCSD's twelve trunklines at both OCSD Plants for several days to a week. This monitoring allows OCSD to identify any potential problems on individual trunk lines, as well as to study the correlation between our influent and our effluent and biosolids.

4.3.1 Downstream Sampling

Covert sampling is conducted downstream of an industry to verify continued discharge compliance or to identify illicit discharges. Sampling is conducted both upstream and downstream in order to isolate the industry's discharge. This sampling is performed in manhole structures in local sewer systems over the course of several days.

One downstream monitoring event was conducted during the period from July 1, 2019 through June 30, 2020.

4.4 ORANGE COUNTY HAZARDOUS MATERIALS STRIKE FORCE (STRIKE FORCE) AND JOINT AGENCY INSPECTIONS

The Orange County Strike Force is comprised of state, county, city, and other local agencies capable of identifying, investigating, and prosecuting dischargers of hazardous materials to the environment. The initial goals of the Strike Force were to define the roles and responsibilities of each participating agency; establish the scope of the cases to be handled; emphasize cooperative identification, investigation, and prosecution of violators; and develop protocols among all participating agencies to create a coordinated enforcement system. An overall protocol was adopted by the Orange County Board of Supervisors in June 1988. The Orange County District Attorney's Office conducts monthly Strike Force meetings to discuss investigative strategies, ongoing investigations/cases, and identification of potential new cases.

OCSD's staff spent approximately 140 hours assisting the Strike Force in FY 2019/20 by attending meetings and conducting fieldwork in support of Strike Force activities. In FY 2019/20, OCSD performed inspection related activities involving strike force referrals or investigations.

OCSD participates in joint agency inspections of industries suspected of violating hazardous waste and sewer discharge regulations. This cooperative effort involves other agencies such as the Orange County Health Care Agency and the Orange County's District Attorney's office, responsible for environmental management and citizen safety. OCSD conducts both referral based and Agency independent Inspections as well as joint inspections with other Agencies when necessary. These inspections aid in correcting existing and potential discharge problems and alerted each of the participating agencies to the concerns of the other cooperating agencies.

4.5 INDUSTRIAL COMPLIANCE STATUS WITH DISCHARGE LIMITS

OCSD monitors and evaluates the compliance status of all regulated industries to determine the applicability of additional enforcement actions. Analytical monitoring results are reviewed by the source control supervisor, and limit exceedances are investigated and re-sampled to determine if the cause is a chronic problem. Additionally, should the inspectors identify any deficiencies in an industry's process and/or discharge system, the industry is notified of the situation, findings are documented in inspection reports and discussed with permit engineers, and corrective measures as required are communicated to the industry to be implemented. A summary of the significant industrial users' compliance status for FY 2019/20 is shown in Appendix A.

4.5.1 Industries in Significant Noncompliance (SNC)

At the end of each quarter, OCSD is required to evaluate their industrial user's compliance status using a six-month time frame. Under this system, each industrial user is evaluated for SNC four times during the year, and the total evaluation period covers 15 months (i.e., beginning with the last quarter of the previous pretreatment year through the end of the current year). OCSD is required to annually publish in the local newspaper all industrial users that have been identified as SNC during the past year when the SNC criteria were met during any of the previous four quarters. If a facility has been determined to

be in SNC based solely on violations which occurred in the first quarter of the 15-month evaluation (i.e., the last quarter of the previous pretreatment year) and the facility has demonstrated consistent compliance in the subsequent four quarters, then OCSD is not required to publish the Industrial User (IU) in the newspaper if the IU was published in the previous year for the same violations.

As of June 30, 2020, of the active 335 Class I permittees, there were 20 (6%) that had been classified as SNC; 15 of these were categorical industries, and 5 were non-categorical. An industry was determined to be in SNC if it incurred a violation that met one or more of the criteria listed below as provided in 40 CFR, Part 403.

- Chronic violations of discharge limits are defined as those in which 66% or more of all measurements taken during a six-month period exceed (by any magnitude) the daily maximum or the average limits for the same pollutant.
- Acute violations of discharge limits are defined as those in which 33% or more of all measurements taken during a six-month period constitute a Technical Review Criteria (TRC) violation of the daily maximum or the average limits.
- Any other violation of a pretreatment effluent limit that has caused, either alone or in combination with other discharges, interference or pass through.
- Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or the environment; or has resulted in OCSD's exercise of its emergency authorities.
- Failure to meet within 90 days after the scheduled date of a compliance schedule milestone contained in an enforcement order for starting construction, completing construction, or for attaining final compliance.
- Failure to provide required reports including, but not limited to, periodic self-monitoring reports and reports with compliance schedules within 45 days of the due date.
- Failure to accurately report noncompliance with discharge limits or any other requirements applicable to the user pursuant to OCSD's Ordinance.
- Any other violation or group of violations that will adversely affect the operation or implementation of OCSD's pretreatment program.

A summary of the permittees in SNC is presented in TABLE 4.2. The SNC list was published in the October 21, 2020 issue of The Orange County Register; a copy of the announcement is presented in Appendix E.

TABLE 4.2 Summary of Companies in Significant Noncompliance (SNC), Fiscal Year 2019-2020 Orange County Sanitation District, Resource Protection Division			
Company Name	Permit No.	Category	City
<u>Industries SNC Due to Discharge Violations</u>			
Advance Tech Plating, Inc.	1-021389	Metal Finishing	Anaheim
Allied International	1-031107	Soap And Detergent Manufacturing	Buena Park
Bodycote Thermal Processing	1-031120	OCS D Local Limits	Westminster
Howmet Global Fastening Systems Inc.	1-021081	Aluminum Forming, Metal Finishing, Nonferrous Metals Forming And Metal Powders	Fullerton
Mckenna Labs, Inc.	1-021422	Soap And Detergent Manufacturing	Fullerton
Superior Plating	1-021090	Metal Finishing	Anaheim
Superior Processing	1-021403	Metal Finishing	Placentia
<u>Industries SNC Due to Reporting Violations</u>			
American Circuit Technology, Inc.	1-021249	Metal Finishing	Anaheim
Aviation Equipment Processing	1-071037	Metal Finishing	Costa Mesa
Cadillac Plating, Inc.	1-021062	Metal Finishing	Orange
Golden State Pumping LLC	1-600975	OCS D Local Limits	Anaheim
Imperial Plating	1-031106	Metal Finishing	Fullerton
Patio and Door Outlet, Inc.	1-521783	Metal Finishing	Orange
Quality Aluminum Forge, LLC (Cypress North)	1-521833	Aluminum Forming	Orange
Quality Aluminum Forge, LLC (Cypress South)	1-600272	Aluminum Forming	Orange
Robinson Pharma, Inc. (Harbor South)	1-511412	Pharmaceutical Manufacturing	Santa Ana
Simply Fresh, LLC	1-600709	OCS D Local Limits	Buena Park
Thermal-Vac Technology, Inc.	1-021282	Metal Finishing	Orange
Vi-Cal Metals, Inc.	1-521846	OCS D Local Limits	Anaheim
<u>Industries SNC Due to Discharge and Reporting Violations</u>			
Republic Waste Services	1-521827	OCS D Local Limits	Anaheim

4.6 ENFORCEMENT ACTIVITIES

During FY 2019/20, OCSD initiated or continued various enforcement actions to bring industries into compliance. This section describes the types of enforcement actions taken against noncompliant significant industrial users. In addition, Appendix J shows a listing of pretreatment equipment that has been installed by OCSD's permittees.

As provided in the Ordinance and Enforcement Response Plan (ERP), OCSD has a broad range of enforcement mechanisms available, including issuing noncompliance sampling fees, administrative penalties, Notices of Violation, compliance letters, Probation Orders, and Enforcement Compliance Schedule Agreements (ECSA); and instituting Emergency Suspension Orders, Permit Suspension, and Permit Revocation Orders.

OCSD's enforcement program is designed to bring noncompliant industries back into compliance with federal pretreatment standards and OCSD's local discharge limits. If permittees violate a discharge limit, enforcement action is initiated. This includes the assessment and issuance of noncompliance sampling fees and requiring the permittee to conduct additional sampling along with OCSD conducting additional sampling. Subsequent noncompliance may result in issuing an order/compliance requirement letter detailing corrective measures, requiring the installation of additional pretreatment equipment, requiring the implementation of pollution prevention measures, issuing Emergency Suspension Orders, or suspending or revoking the discharge permit.

4.6.1 Compliance Inspections

In order to identify and assess any noncompliance problems, corrective actions, and the progress of permittees operating under the terms of a Probation Order, Enforcement Compliance Schedule Agreement (ECSA), or any other enforcement action, an OCSD pretreatment program engineer and inspector conduct special compliance inspections.

During FY 2019/20 OCSD conducted **seventy-six (76) compliance inspections**.

4.6.2 Compliance Meetings

Compliance meetings are held as a result of the permittee's inability to achieve compliance with discharge requirements or to comply with OCSD's Ordinance. The meetings are held with company representatives to discuss the discharge problems and proposed long-term solutions.

During FY 2019/20, OCSD conducted **twenty-two (22) compliance meetings**.

4.6.3 Compliance Requirement Letters

Compliance requirement letters are issued to require a permittee to comply with a specific condition of the permit and/or Ordinance, or to notify the permittee of an enforcement in accordance with the Enforcement Response Plan, such as a compliance meeting.

During FY 2019/20, OCSD issued **fifty-five (55) compliance requirement letters**.

4.6.4 Order to Cease/Terminate Non-Compliance/Discharge

Orders are issued where a permittee is continually non-compliant or has committed one or more significant violations of the permit and/or Ordinance. The Order requires a permittee to comply with a specific condition of the permit and/or Ordinance and may notify the permittee of escalated enforcement in accordance with the Enforcement Response Plan, such as a compliance meeting.

During FY 2019/20, OCSD issued **twenty (20) orders**.

4.6.5 Notices of Violation – Noncompliance Fees, Penalties

A Notice of Violation (NOV) is a written notification from OCSD that references findings from recent sampling programs and indicates that specific violations of the permittees' discharge limits have occurred. The NOV is usually accompanied by non-compliance sampling and/or processing fees. The NOV instructs the permittee to take immediate action to correct the problem.

During FY 2019/20, **one hundred and twenty-six (126) notices of violations** were issued to **seventy (70) significant industrial users**.

When a permittee violates its permit limits or conditions, noncompliance fees are assessed at rates that have been adopted by OCSD's Board of Directors. For FY 2019/20, non-compliance fees, penalties, settlements, interest, and judgments totaling \$97,981 were issued to SIUs (for details see Appendix D). Fees also include those from SNC permittees whose names were published in the local newspaper, and for individual self-monitoring non-compliance fees.

4.6.6 Probation Orders

Upon determination that a permittee is in non-compliance with the terms and conditions specified in its permit or any provision of OCSD's Ordinance, OCSD may issue a Probation Order. The Probation Order contains conditions, requirements, and a compliance schedule. The term of a Probation Order does not exceed ninety (90) days. The permittee is required to comply with all conditions and requirements within the time specified, including the submittal of information pertaining to waste source characterizations, pretreatment modifications, and waste minimization alternatives; and the performance of accelerated self-monitoring.

During FY 2019/20, OCSD issued **two (2) probation orders**.

4.6.7 Enforcement Compliance Schedule Agreement

An Enforcement Compliance Schedule Agreement (ECSA) is an agreement between the permittee and OCSD specifying that pretreatment equipment is installed or pollution prevention measures are implemented by the permittee within a scheduled time period, and that the permittee remains in consistent compliance during the term of the ECSA. The ECSA contains terms and conditions by which the permittee must operate and specifies dates for construction or acquiring and installing the pretreatment equipment and/or implementing waste minimization to achieve compliance. During the ECSA, inspection and sampling of the facilities are conducted monthly by OCSD's inspectors to verify that all terms and conditions of the ECSA are met. In addition, the permittee is required to perform accelerated and extended self-monitoring.

During FY 2019/20, OCSD issued **one (1) enforcement compliance schedule agreement**.

4.6.8 Regulatory Compliance Schedule Agreement

Subsequent to the issuance of an Industrial Wastewater Discharge Permit to an industrial user, federal Categorical Pretreatment Standards may be adopted or revised by the EPA, or OCSD may enact revised discharge limits. If the General Manager, or his or her designee, determines that a permittee would not be in compliance with the newly adopted or revised limits, the permittee may be required to enter into a Regulatory Compliance Schedule Agreement (RCSA) with OCSD. The terms and conditions of a RCSA require the permittee to achieve compliance with all new standards by a specific date. RCSAs have a maximum term of two-hundred-and-seventy (270) days.

The issuance of a RCSA may contain terms and conditions including but not limited to requirements for installation of pretreatment equipment and facilities, submittal of drawings or reports, waste minimization practices, or other provisions to ensure compliance with OCSD's Ordinance. While the RCSA is in effect, any discharge by the permittee in violation of the RCSA will require payment of non-compliance sampling fees in accordance with Article 6 of OCSD's Ordinance.

During FY 2019/20, OCSD did not issue any regulatory compliance schedule agreements.

4.6.9 Administrative Complaints, Penalties, and Settlement Agreements

Pursuant to the authority of California Government Code Section 54740.5, OCSD may issue administrative complaints and penalties against the responsible officer or owner of any company that violates any permit condition or effluent limit. In accordance with an OCSD Board of Directors Resolution, OCSD may also negotiate a Settlement Agreement in lieu of an administrative complaint, which includes corrective actions on the part of the industry and reduced administrative penalties.

During FY 2019/20, OCSD issued **five (5) administrative penalties in the form of settlement agreements, totaling \$224,000.00, not including interest and processing fees.**

4.6.10 Permit Suspensions

When OCSD believes that grounds exist for permit suspension, the permittee is notified in writing of the reasons for permit suspension and the date of the permit suspension hearing. At the hearing, OCSD staff and the permittee are provided the opportunity to present evidence to a designated hearing officer. After the conclusion of the hearing, a written determination is made by the hearing officer. Upon issuance of a suspension order, the permittee must cease all discharges to the sewer for the duration of the suspension.

During FY 2019/20, OCSD did not issue any permit suspensions.

4.6.11 Permit Revocations

The last recourse in the chain of administrative enforcement provisions is permit revocation. A permittee with a critical noncompliance record or who has failed to pay fees and charges is notified in writing of the reasons for permit revocation and the date of the permit revocation hearing. At the hearing, OCSD staff and the permittee are provided the opportunity to present evidence to a designated hearing officer. After the conclusion of the hearing, the hearing officer makes a determination if permit revocation is warranted and provides a written report to the General Manager for final determination. Should the General Manager determine that the noncompliance record is substantial, revocation of the industrial waste discharge permit and loss of sewer discharge privileges may result.

During FY 2019/20, OCSD did not issue any permit revocations.

4.6.12 Emergency Suspension Order

Pursuant to Section 614 of OCSD's Wastewater Discharge Regulations, an Emergency Suspension Order may be ordered to stop an actual or impending discharge which presents or may present an imminent or substantial endangerment to the health and welfare of persons, or to the environment, or may cause interference to OCSD's sewerage facilities, or may cause OCSD to violate any state or federal law or regulation.

During FY 2019/20, OCSD did not issue any emergency suspension orders.

4.6.13 Civil/Criminal Complaints

When a permittee intentionally or negligently violates any provision of the Ordinance, permit conditions, or discharge limits, OCSD may petition to the Superior Court for the issuance of a preliminary or permanent restraining order. In addition, OCSD can petition the Court to impose, assess, and recover civil penalties for each day that violation occurs or seek criminal penalties for illegal disposal in accordance with OCSD's Ordinance.

OCSD did not file any civil or criminal complaints during FY 2019/20.

4.7 ENFORCEMENT SUMMARY

This section summarizes various enforcement actions conducted for permittees in the FY 2019/20 reporting year. Potential enforcement actions include compliance inspections, compliance meetings, probation orders, enforcement compliance schedule agreements (ECSA), orders to cease, permit revocations, permit suspensions, among others.

A & R Powder Coating, Inc. (Permit No. 1-021088)

A & R Powder Coating, Inc. (A & R) performs powdercoating and painting of cold rolled steel and aluminum parts that are brought in by outside customers. The parts are processed through an iron phosphate conversion coating line and then heated briefly in an oven to dry off residual moisture prior to spray painting or powder coating per customer requirements. A & R employs a batch holding tank to store wastewater from the iron phosphate wash line. The batch is reportedly allowed to sit overnight and checked for zinc concentration with a Hach field test kit periodically, with the results entered onto a logbook. After testing and inspection, the tank is drained the next morning into a small three-stage clarifier. The holding tank is opaque and has a conical bottom for ease of inspection and solids removal, and a cartridge filter system is installed on the inlet plumbing line to remove solids during transfer of the rinse water from the wash line.

In June 2019, A & R Powder Coating (A & R) had a molybdenum violation.

July 1 – December 31, 2019

On **August 8, 2019**, OCSD issued a Notice of Violation for the June 2019 molybdenum noncompliance. On **September 4, 2019**, OCSD conducted a Compliance Inspection and resampling during which the iron phosphate solution used at A & R had been identified to be the source of violation as it contained sodium molybdate, which was subsequently dragged to discharged rinses. A & R mentioned that in mid-August, shortly after receiving the Notice of Violation, A & R pumped out the tanks and clarifier and replaced the iron phosphate solution with a non-molybdate chemical to prevent future violations. The resampling results showed compliance.

January 1 – June 30, 2020

A & R had no further violations during this reporting period. OCSD will continue to monitor A & R's discharge and compliance status on a quarterly basis.

Accurate Circuit Engineering (Permit No. 1-011138)

Accurate Circuit Engineering (Accurate) is a printed circuit board manufacturer with an in-house design and engineering team, as well as large scale manufacturing operations. Accurate manufactures various types of printed circuit boards, including rigid single sided, rigid double-sided, and rigid multilayer. Wastewater is primarily generated by the photo developing operations, etching, scrubbing via hyoki, alkaline cleaning, Cobra bond micro-etch, black oxide line, electroless copper and electrolytic copper plating, screen wash booths, cross-sectional grinding, and associated rinses. Pretreatment consists of

continuous ion exchange and hydroxide precipitation.

In April 2019, Accurate had silver daily and monthly average discharge limit violations, as well as a copper monthly average discharge limit violation. In May 2019, OCSD issued a Notice of Violation for the silver daily limit violation. OCSD conducted a Compliance Inspection during which it was determined that the silver recovery unit was not operating properly and Accurate was not verifying silver compliance before discharging to the sewer. Accurate opted to wastehaul all developer wastewater to avoid future silver violations.

July 1 – December 31, 2019

On **July 1, 2019**, OCSD issued a Notice of Violation for the April 2019 copper and silver monthly limit violations.

January 1 – June 30, 2020

Accurate had no further violations during this reporting period. OCSD will continue to monitor Accurate's discharge and compliance status on a quarterly basis. This permit may be removed from these summaries.

Active Plating, Inc. (Permit No. 1-011115)

Active Plating, Inc. (Active Plating) is a job shop metal finishing facility. Active Plating performs zinc plating with clear and gold chromate conversion coating on steel, and chemfilm operations on aluminum parts. Parts are generally used in electronics or computer applications. Wastewater is segregated between hexavalent chrome bearing operations and other metal-bearing/alkaline wastestreams. Pretreatment consists of chromium reduction, hydroxide precipitation, with settling and flocculation in two parallel clarification tanks. Active Plating has pH and ORP probes connected to an advanced programmable logic controller which automates the treatment system.

In April 2018, Active Plating had a zinc violation, and was issued a Notice of Violation. In May 2018, OCSD conducted a Compliance Inspection during which the pH and ORP probes were found not operating properly. OCSD also noted that Active Plating periodically takes one of the clarification tanks off-line for batch treatment or solids removal. When this occurs, floc carry-over into the sample point becomes an issue due to reduced treatment capacity. In June 2018, OCSD held a Compliance Meeting with Active Plating during which the company was required to come up with a long-term solution for implementing effective process controls and treatment when one clarification tank is offline. The company was also required to submit detailed pretreatment system drawings and an updated facility plot plan.

In October 2018, Active Plating had another zinc violation, and was issued another Notice of Violation. In December 2018, OCSD conducted a follow-up Compliance Inspection during which treatment concerns involving hydraulic capacity of the system were identified. Hence, OCSD issued a Compliance Requirements Letter to Active Plating to address the noted deficiency.

In January 2019, OCSD held a Compliance Meeting with Active Plating to discuss corrective actions. In April 2019, OCSD issued a Probation Order providing deadlines for corrective actions. In June 2019, OCSD issued another Compliance Requirement Letter extending Probation Order deadlines.

July 1 – December 31, 2019

On **September 4, 2019**, OCSD observed a flexible hose discharging tap water into Active Plating's sample point while Active Plating was conducting self-monitoring. Thus, on **September 24, 2019**, OCSD issued a Compliance Requirement Letter and an Order to Cease Noncompliant Discharges requiring the company to take immediate corrective actions to prevent dilution sources. Additionally, OCSD issued a follow-up Compliance Requirements Letter to address Active Plating's failure to submit

documents required in the Probation Order and directing Active Plating to attend a compliance meeting. On **October 29, 2019**, OCSD held the Compliance Meeting with Active Plating, during which OCSD informed Active Plating of its intention to issue an Administrative Complaint. Active Plating expressed interest in settling the administrative civil liability charges with OCSD.

January 1 – June 30, 2020

On **April 8, 2020**, OCSD entered into a Settlement Agreement in lieu of issuing an Administrative Complaint to settle the charges associated with Active Plating's zinc violations, chronic failure to submit self-monitoring reports, and sample tampering observed in September 2019. On **May 11, 2020**, OCSD issued a Compliance Requirements Letter directing Active Plating to attend a compliance meeting to discuss Active Plating's failure to submit payment of the agreed upon \$7,000 settlement charges and the written documentation for the facility's wastewater treatment operator's qualifications and certification. On **May 26, 2020**, OCSD issued an Order to Cease Noncompliance for reporting. On **June 6, 2020**, Active Plating sent the payment but not the required operator documentation. On **June 8, 2020**, OCSD held the Compliance Meeting with Active Plating during which the company stated that it is still working on getting its operators certified. On **June 29, 2020**, Active Plating communicated to OCSD that four operators have been enrolled to the CWEA's Industrial Wastewater Treatment Plant Certification for the Fall of 2020.

Advance Tech Plating, Inc. (Permit No. 1-021389)

Advance Tech Plating, Inc. (ATP) is a job shop metal finishing facility. The facility performs anodizing and passivation on steel, aluminum, and some copper/brass parts. Operations at ATP start with precleaning and etching, then deoxidizing with muriatic acid and anodizing with sulfuric acid, followed by chem filming and dye coloring per customer specification. To protect the dyed surface, the parts are dipped in a clear anoseal followed by final rinsing and drying. Most of the wastewater is generated from the rinsing operations. ATP operates a continuous and a batch pretreatment system which consists of chrome reduction, pH adjustment, flocculation, metal precipitation and clarification. ATP utilizes a filter press for sludge dewatering.

In May 2019, ATP had pH violations and major zinc, copper, and nickel daily and monthly average discharge limit violations. OCSD issued ATP Notices of Violation along with an Order to Cease Noncompliant Discharges due to the severity of the violations. OCSD also conducted a Compliance Inspection during which ATP was directed to stop noncompliant discharges and determine the cause of the violations. ATP submitted a response letter indicating that a clogged discharge tube on the sodium hydroxide metering pump led to a low pH and, hence, incomplete treatment of metals. ATP's corrective actions included installation of a low pH alarm and a recirculation line, which would allow ATP to recirculate noncompliant wastewater back into the treatment tanks.

In June 2019, OCSD issued a Compliance Requirement Letter directing ATP to attend a Compliance Meeting to discuss the violations. During the Compliance Meeting, ATP was directed to take the following additional corrective measures: automating the low pH recirculation line with, employing a qualified operator present during all discharge hours, maintaining the pretreatment tanks, good housekeeping, and performing a hydraulic evaluation of the pretreatment system.

July 1 – December 31, 2019

On **July 9, 2019**, OCSD issued a Compliance Requirements Letter requiring ATP to have a qualified operator present during all discharge hours, maintain the pretreatment tanks, ensure good housekeeping, and perform a hydraulic evaluation of the pretreatment system by the end of **August 2019**. On **August 6, 2019**, ATP had multiple major zinc violations. On **August 8** and **August 21, 2019**, Notices of Violation were issued to ATP to address the May 2019 monthly limit violations and the most recent zinc violations, respectively. On **September 9, 2019**, OCSD conducted a Compliance Inspection during which ATP attributed the violation to malfunctioning pH and ORP controllers. The malfunction was due to an issue with the grounding of the controller which was immediately fixed upon discovery.

OCSD once more emphasized the importance of installation of pH alarm and automatic controller to prevent future violations and required ATP to record and maintain a batch treatment log on site. ATP also mentioned that due to lack of a qualified operator on the second shift, the facility plans to operate the continuous pretreatment system only during the first shift. During the second shift, all generated industrial wastewater is to be routed to the batch treatment tank. The operator then treats the batch the following day and will gradually bleed the treated wastewater to the continuous system.

The installation of a low/high pH alarm and automatic controller was completed and confirmed on **October 7, 2019**. At OCSD's direction, ATP conducted multi-day self-monitoring on **October 7 - 12, 2019** to verify compliance after the installation, and the results showed compliance. On **November 4, 2019**, OCSD issued a Notice of Violation for the August 2019 zinc monthly limit violation. Furthermore, OCSD increased the frequency of ATP's heavy metals self-monitoring frequency from monthly to weekly effective **December 1, 2019**.

January 1 – June 30, 2020

Advance Tech Plating (ATP) had no further violations during this reporting period. OCSD will continue to monitor ATP's discharge and compliance status on a quarterly basis.

Alliance Medical Products, Inc. (Permit No. 1-541182)

Alliance Medical Products, Inc. (Alliance) is a manufacturer of medical surgical devices along with aqueous and injectable drugs which are produced under aseptic conditions. Medical devices include corneal storage media, ocular implants, and other clinical products. Other manufactured items include medical delivery devices, sterile ointments and gels, as well as several clinical products that are considered combination products by the FDA. Wastewater is generated from the aseptic sterile filling process, cleaning of glassware in the labs, production of steam for the autoclaves, rinsing and cleaning of manufacturing equipment and tooling, and surplus injection water not utilized during a production run. The wastewater is discharged to the sewer without any form of pretreatment.

In June 2019, Alliance had a pH violation.

July 1 – December 31, 2019

On **July 9, 2019**, OCSD issued a Notice of Violation for the June 2019 pH violation. On **August 2, 2019**, OCSD conducted a Compliance Inspection during which Alliance indicated that the source of the violation is the Clean in Place (CIP) process. The current process at Alliance uses a Jensen CIP system, which operates on a selector switch scheme. Alliance determined that an operator selected the wrong position on the drain switch and incorrectly diverted low pH rinse water to the drain. On **August 7, 2019**, Alliance submitted a corrective action letter, which included implementation of a new batch process where all CIP wastewater will be discharged to a waste drum. This wastewater will be analyzed for pH and will be discharged to the drain only if the wastewater is within an allowable pH range.

During the investigation of the probable source of the pH violation, OCSD instructed Alliance to prepare a plumbing plan of the facility to determine all the wastewater discharge points. As a result of this study, it was determined that Alliance's sample point is not representative of the discharge at the facility.

January 1 – June 30, 2020

During this reporting period, OCSD continued to conduct multiple inspections and meetings with Alliance to refine the plumbing study and correct any missing items on the plumbing plan to determine an appropriate path forward. On **June 30, 2020**, OCSD issued a Compliance Requirements Letter directing Alliance to eliminate any bypasses and install the proposed solution by the next reporting period.

OCSD will continue to monitor Alliance's discharge and compliance status on a quarterly basis.

Allied International (Permit No. 1-031107), formerly listed as Hanson-Loran

Allied manufactures water-based floor finishers and specialty cleaners for distribution and sales by various independent contractors. The processes include dry blending (from which there is no wastewater discharge) and wet blending. The dry blending process is located inside the building, where dry powders are blended to produce Allied's industrial cleaners. Wet blending is accomplished in four mixing tanks at the rear of the building. Products include floor cleaners, waxes, strippers, cleaners, degreasers, sanitizers, disinfectants, and soaps. Allied's treatment system consists of an underground three-stage clarifier with manual pH adjustment using pH strips and addition of granulated citric acid.

In October 2017 Allied had pH violations. In November 2017, OCSD conducted a compliance inspection and resampling, during which OCSD noted that the treatment system lacked adequate control. Hence, OCSD advised Allied to take corrective measures to prevent further pH noncompliance. Allied installed an automated pH control system to prevent further pH violations. The resampling result showed compliance. In 2018, Allied installed a second probe to verify the pH following adjustment in the clarifier.

In March 2019, Allied had another pH violation. In April 2019, OCSD conducted a Compliance Inspection during which it was determined that the pH adjustment system's set points were not adequately set; therefore, the system was over-dosing caustic to the clarifier. The pretreatment system operators were also manually adding citric acid to the final stage of the clarifier prior to the sample point to reduce the pH. However, due to lack of proper mixing of the chemical, a layer of citric acid had developed at the bottom of the clarifier.

In April and May 2019 Allied had further pH violations. In June 2019, OCSD issued a Compliance Requirements Letter directing Allied to attend a compliance meeting.

July 1 – December 31, 2019

On **July 3, 2019**, OCSD held the Compliance Meeting with Allied. During the meeting, Allied re-iterated that improper set points in the pH adjustment system led to operators manually adding citric acid to the final stage of the clarifier in order to reduce the pH. This caused a layer of citric acid to develop in the clarifier, thus resulting in the pH violation.

On **July 22, 2019**, OCSD issued a Compliance Requirements Letter requiring Allied to propose and install an automatic batch pH adjustment system outside of the clarifier with an automatic chemical feed, a mixer, an automatic shutoff valve, and a 24-hour continuous pH chart recorder. Allied was also required to determine the dimensions and volume/capacity of the clarifier to ensure the sample point was adequately representative, and sampled wastewater was not retained past the discharge sample date.

On **November 13, 2019**, OCSD conducted a Compliance Inspection to review the progress of the installation and to review a proposed amendment to the previously accepted plan. The plan included routing all wastewater to the first stage of the clarifier and then to the automatic pH adjustment batch tank to avoid re-plumbing costs and reduce pump demand. OCSD accepted the amendment on **December 5, 2019**.

January 1 – June 30, 2020

On **January 23, 2020** Allied had a zinc violation, for which a Notice of Violation was issued on **February 25, 2020**. During routine sampling on **February 25, 2020**, OCSD verified the installation of the automated pH adjustment system. Allied had determined that the zinc violation resulted from the temporary use of a holding tank formerly used in manufacturing a floor cleaner that contained zinc (which is no longer manufactured by Allied), to collect and store wastewater while the pH adjustment system was being installed. Allied removed the holding tank from the manufacturing and pretreatment area and discontinued its use.

OCSD will continue to monitor Allied's discharge and compliance status on a quarterly basis.

Alloy Die Casting Co. (Permit No. 1-531437)

Alloy Die Casting Co. (Alloy Die) is a non-ferrous metal former that manufactures diecast parts to customer's specifications from aluminum and zinc alloys. Molten metal is injected into a steel die cavity at a controlled temperature under high pressure. Once the metal part is cooled and has reached sufficient rigidity, the mold opens up and the part is ejected. After casting, the part will undergo manual pneumatic grinding or belt sanding, followed by wet deburring to clean, de-flash, and/or provide a surface finish. Alloy Die uses two batch treatment systems, both of which perform pH adjustment and metals removal through flocculation, while one performs oil & grease removal as well. The treated metal-bearing wastestream passes through a filter press, from which the filtrate is discharged to the sewer. The oil & grease wastestream is sent through an oil/water separator, from which the separated water is sent to the other batch treatment tank and the separated oil & grease is wastehailed.

January 1 – June 30, 2020

On **May 4, 2020**, Alloy Die had a zinc violation, for which a Notice of Violation was issued on **June 4, 2020**. Alloy Die noted increased production of zinc dies during the time of the violation. Alloy Die stated they have introduced in-situ zinc testing prior to each batch discharge to verify compliance with the zinc discharge limits. This daily limit violation resulted in exceedance of the zinc monthly average discharge limit for **May 2020** as well. A Notice of Violation for the monthly exceedance will be issued in the following quarter.

OCSD will continue to monitor Alloy Die's discharge and compliance status on a quarterly basis.

Aluminum Precision Products, Inc. - Susan (Permit No. 1-011100)

Aluminum Precision Products, Inc. – Susan (Aluminum Precision) manufactures parts for the aerospace, automotive, commercial, military/defense, recreational, and transportation industries utilizing hot press forging techniques. Support services include assembly, CNC machining, engineering, mold making, painting, and plating. Some metal finishing and painting operations are performed offsite by outside vendors. The company performs cleaning/chemical etching on forged parts using acidic and caustic solutions, however, these finishing operations default to forming regulations. Wastewater is generated by multiple stage countercurrent rinses following the etching/deoxidation operations, the spray rinse following the dye penetrant testing/inspection, and the spent solutions from the vibratory deburring operations. Pretreatment at Aluminum Precision consists of a continuous hydroxide precipitation system.

July 1 – December 31, 2019

On **November 5, 2019**, Aluminum Precision had a zinc violation, for which a Notice of Violation was issued on **November 26, 2019**. On **December 17, 2019**, Aluminum Precision submitted a written description of the cause of the violation and the corrective actions taken by the company. Aluminum Precision attributed the violation to a faulty pH probe in the receiving/pH adjustment tank. The pH probe had since been replaced and an additional probe was installed in the discharge tank as well. Aluminum Precision also purchased two hand-held pH meters and stopped using pH strips for compliance confirmation in the receiving and discharge tanks. Additional corrective actions included setting an alarm in the discharge tank when the pH drops below 9.0 or raises above 10.0, and training operators to ensure they understand the changes made and the steps to follow when the pH alarms are triggered. Aluminum Precision also conducted multi-day sampling, the results of which all showed compliance.

January 1 – June 30, 2020

Aluminum Precision had no further violations during this reporting period. OCSD will continue to monitor Aluminum Precision's discharge and compliance status on a quarterly basis.

Anchen Pharmaceuticals, Inc. - Fairbanks (Permit No. 1-541180)

Anchen Pharmaceuticals, Inc. - Fairbanks (Anchen Fairbanks) manufactures pharmaceutical tablets and capsules. The manufacturing process includes weighing, mixing, granulation, drying, blending, compression, coating, and encapsulation (for capsules). Wastewater is generated by the cleaning of the equipment used in the production operations. Anchen Fairbanks does not have a pretreatment system and relies solely on best management practices in handling solvents used at the facility. Out of the five volatile organic compounds regulated under the Pharmaceutical Manufacturing federal category, acetone is the main constituent of concern at Anchen Fairbanks. When acetone is used in a formulation, it is also used to clean out residues in the mixing/blending equipment.

July 1 – December 31, 2019

On **November 8, 2019**, Anchen Fairbanks had a pH violation.

January 1 – June 30, 2020

On **January 23, 2020**, OCSD issued a Notice of Violation for the November 2019 pH violation. On **January 28, 2020**, OCSD issued a Compliance Requirements Letter directing Anchen to attend a Compliance Meeting on **February 25, 2020**. OCSD decided to discuss all violations at Anchen's facilities (Permit No. 1-541180, Permit No. 1-600359, and Permit No. 1-541179) in a combined manner at the same time at the Compliance Meeting. During the meeting, Anchen indicated that they could not identify the exact source for the pH violation. OCSD directed Anchen to submit a proposal for appropriate spill containment measures to prevent slug discharge from equipment failure during production. Additionally, OCSD advised Anchen that the company may be required to install pretreatment equipment if the facility continues to be noncompliant. Anchen complied with all the requirements set forth in the Compliance Requirements Letter.

OCSD will continue to monitor Anchen Fairbanks' discharge and compliance status on a quarterly basis.

Anchen Pharmaceuticals, Inc. - Goodyear (Permit No. 1-600359)

Anchen Pharmaceuticals, Inc. - Goodyear (Anchen) manufactures pharmaceutical tablets and capsules. The manufacturing process includes weighing, mixing, granulation, drying, blending, compression, coating, and encapsulation (for capsules). Wastewater is generated by the cleaning of the equipment used in the production operations. Anchen does not have a pretreatment system and relies solely on best management practices in handling solvents used at the facility. Out of the five volatile organic compounds regulated under the Pharmaceutical Manufacturing federal category, acetone is the main constituent of concern at Anchen. When acetone is used in a formulation, it is also used to clean out residues in the mixing/blending equipment.

In January 2019, Anchen had acetone daily and monthly average discharge limit violations. In February 2019, a Notice of Violation was issued for the acetone daily limit violation. In March 2019, OCSD conducted a Compliance Inspection during which Anchen indicated that the company has not been able to determine the exact cause or source of the exceedance, although it can most likely be attributed to Anchen staff's failure to follow proper equipment cleaning procedures. In April 2019, OCSD issued a Notice of Violation for the January 2019 acetone monthly limit violation. OCSD also issued a Compliance Requirement Letter and held a Compliance Meeting with Anchen during which Anchen indicated that they have reminded their staff to follow proper waste handling procedures. Anchen also reminded their Technical Services and QC Laboratory group leaders that discharge of chemicals into any building's floor drains, sinks, and fume hood cup sinks is prohibited. OCSD advised Anchen that the company may be required to install pretreatment equipment if the facility continues to be noncompliant. In May 2019, Anchen notified OCSD via an email that the main product line at the Goodyear facility has been transferred to Anchen's Fairbanks facility. OCSD issued another Compliance Requirements Letter directing Anchen to increase the frequency of acetone self-monitoring from semi-annual to quarterly, effective June 2019. OCSD revised Anchen's permit to reflect this

increased self-monitoring frequency for acetone.

July 1 – December 31, 2019

On **December 23, 2019**, Anchen Goodyear had another acetone violation. This daily limit exceedance also resulted in an acetone monthly average discharge limit violation.

January 1 – June 30, 2020

On **January 16, 2020**, OCSD issued a Notice of Violation for the December 2019 acetone violation. Anchen Goodyear failed to satisfy OCSD with a proper corrective action. On **January 28, 2020**, OCSD issued a Compliance Requirements Letter directing Anchen to attend a Compliance Meeting on **February 25, 2020**. Due to the chronic nature of the acetone violations at all Anchen facilities, OCSD decided to discuss all violations at Anchen's facilities (Permit No. 1-541180, Permit No. 1-600359, and Permit No. 1-541179) in a combined manner at the same time at the Compliance Meeting. During the meeting, Anchen attributed the most recent violation to a manufacturing equipment that was processing Fluvoxamine (FVM) during the sample event. Anchen conveyed that this specific equipment utilizes nozzles that spray Isopropyl Alcohol (IPA) for testing, which subsequently discharges to the sewer system via a floor drain in the processing area. IPA is known to metabolize into acetone. Anchen stated that the company has moved the FVM process from the Goodyear facility to Fairbanks facility, where the equipment is fitted with liners around the spray nozzles that prevent IPA waste discharge to the sewer system. Additionally, Anchen specified that the company is transitioning from IPA bottles to wipes. OCSD informed Anchen that these corrective measures were committed to by Anchen in 2019 but were not completed.

On **March 9, 2020**, OCSD issued a Notice of Violation for the December 2019 acetone monthly limit violation. On **March 17, 2020**, OCSD issued a Compliance Requirements Letter directing Anchen to submit a proposal for appropriate spill containment measures to prevent any slug discharge due to an equipment failure during production operations, submit a proposal to collect more representative samples and mitigate any uncontrolled solvent discharge to the sewer. Additionally, OCSD advised Anchen that the company may be required to install pretreatment equipment if the facility continues to be noncompliant. Anchen complied with all the requirements set forth in the Compliance Requirements Letter.

OCSD will continue to monitor Anchen Goodyear's discharge and compliance status on a quarterly basis.

Anchen Pharmaceuticals, Inc. - Jeronimo (Permit No. 1-541179)

Anchen Pharmaceuticals, Inc. - Jeronimo (Anchen Jeronimo) manufactures pharmaceutical tablets and capsules. The manufacturing process includes weighing, mixing, granulation, drying, blending, compression, coating, and encapsulation (for capsules). Wastewater is generated by the cleaning of the equipment used in the production operations. Anchen Jeronimo does not have a pretreatment system and relies solely on best management practices in handling solvents used at the facility. Out of the five volatile organic compounds regulated under the Pharmaceutical Manufacturing federal category, acetone is the main constituent of concern at Anchen Jeronimo. When acetone is used in a formulation, it is also used to clean out residues in the mixing/blending equipment.

July 1 – December 31, 2019

In **August 2019**, Anchen Jeronimo had an acetone monthly average discharge limit violation, for which a Notice of Violation was issued on **November 7, 2019**. On **December 5, 2019**, Anchen Jeronimo submitted a corrective action report indicating that the company has not been able to determine the exact cause or source of the exceedance. Anchen Jeronimo also stated that the company has reduced the amount of Isopropyl Alcohol (IPA – which can lead to acetone generation) used in production, removed the laboratory fume hood cup sinks, and will conduct quarterly audits to ensure that there is

no future acetone violation.

January 1 – June 30, 2020

On **January 28, 2020**, OCSD issued a Compliance Requirements Letter directing Anchen to attend a Compliance Meeting on **February 25, 2020**. Due to the chronic nature of the acetone violations at all Anchen's facilities, OCSD decided to discuss all violations at Anchen's facilities (Permit No. 1-541180, Permit No. 1-600359, and Permit No. 1-541179) in a combined manner at the same time at the Compliance Meeting. During the meeting, Anchen attributed the most recent violation at its Goodyear facility to a manufacturing equipment that was processing Fluvoxamine (FVM) during the sample event. Anchen conveyed that this specific equipment utilizes nozzles that spray Isopropyl Alcohol (IPA) for testing, which subsequently discharges to the sewer system via a floor drain in the processing area. IPA is known to metabolize into acetone. Anchen stated that the company has moved this process from the Goodyear facility to Fairbanks facility, where the equipment is fitted with liners around the spray nozzles that prevent IPA waste discharge to the sewer system. Additionally, Anchen specified that the company is transitioning from IPA bottles to wipes. OCSD informed Anchen that these corrective measures were committed to by Anchen in 2019 but were not completed.

During the meeting, OCSD directed Anchen to submit a proposal for appropriate spill containment measures to prevent any slug discharge due to an equipment failure during production operations, submit a proposal to collect more representative samples and mitigate any uncontrolled solvent discharge to the sewer. Additionally, OCSD advised Anchen that the company may be required to install pretreatment equipment if the facility continues to be noncompliant. Anchen complied with all the requirements set forth in the Compliance Requirements Letter.

OCSD will continue to monitor Anchen Jeronimo's discharge and compliance status on a quarterly basis.

APCT Anaheim (Permit No. 1-600689), formerly listed as Cirtech Inc.

APCT Anaheim (APCT) is a manufacturer of electronic circuit boards for various industries. Wastewater is generated from the cleaning, circuit image developing, ammonia etching, resist stripping, oxide coating, copper plating, tin plating, copper etching, and soldermasking processes and associated rinses.

APCT uses a reverse osmosis (RO) system to supply water for its process lines. RO reject is plumbed downstream of the sample point, as are the air scrubber and cooling tower bleeds.

APCT operates a wastewater pretreatment system that consists of three fixed treatment units (FTU #1, FTU #2, and FTU #3). FTU #1 is a batch treatment system used daily. FTU #2 is a continuous pretreatment system designed to supplement FTU #1 if flows generated from periods of high production exceed flows manageable to FTU #1. FTU #3 is a batch pretreatment for resist stripper waste. FTU #2 and FTU #3 are currently not in use. FTU #1 discharges to Discharge Tank 6A, which also receives from flows characterized as not needing pretreatment. Discharge Tank 6A is equipped with automatic pH control and discharges to a final, below-ground, three-stage clarifier.

January 1 – June 30, 2020

APCT had a copper violation on **June 16, 2020**, for which Notice of Violation will be issued in July during the next quarter. OCSD will conduct enforcement during the next reporting period and continue to monitor APCT's discharge and compliance status on a quarterly basis.

ARO Service (Permit No. 1-021192)

ARO Service (ARO) performs repair and refurbishment of aluminum aircraft skins and wing components for the aviation industry. Operation at ARO includes chemical surface treatment. The conversion coating line at ARO consists of alkaline cleaning followed by a series of phosphoric acid/deoxidizer treatment and conversion coating and associated deionized water spray rinses. Wastewater from the rinse tanks

is collected in a batch tank where soda ash is added and mixed with an air sparger to obtain a pH of 7.0 or higher before discharge to the sewer.

January 1 – June 30, 2020

In **April 2020**, ARO had copper and zinc monthly average discharge limit violations, for which a Notice of Violation will be issued in July in the next reporting period. ARO had no other violations during this reporting period. OCSD will continue to monitor ARO's discharge and compliance status on a quarterly basis.

Arrowhead Products Corporation (Permit No. 1-031137)

Arrowhead Products Corporation (Arrowhead) manufactures air ducting systems, fuel manifolds, flexible metallic joints connectors, and complex fabricated components for aerospace applications. Wastewater generating operation(s) include abrasive jet machining, caustic dip, dye penetrant testing, general pickling, titanium pickling, alkaline cleaning, permanganate cleaning, pressure testing, Turco cleaning, and ultrasonic cleaning. Arrowhead operates a continuous pretreatment system, which consists of pH adjustment, chrome reduction, filtration, media adsorption, and clarification.

January 1 – June 30, 2020

In **February 2020**, Arrowhead had a nickel monthly average discharge limit violation. On **April 8, 2020**, Arrowhead had a pH violation, for which a Notice of Violation was issued on **April 30, 2020**. On **April 17, 2020**, due to recurring valve failures during the regeneration of their ion exchange system, Arrowhead submitted a proposal to reconfigure their pretreatment system and replace their ion exchange units with new Evoqua vessels with media adsorption units that will be regenerated offsite once spent. On **May 7, 2020**, OCSD issued a Notice of Violation for the February 2020 nickel monthly violation. On **May 13, 2020**, OCSD conducted a Compliance Inspection and resampling during which Arrowhead attributed the pH violation to a failure in their pH adjustment system due to a faulty electrical component in their pH controller, which Arrowhead fixed immediately upon discovery. Resampling results showed compliant pH.

On **June 1, 2020**, Arrowhead submitted a corrective action report stating that the pretreatment system reconfiguration and upgrade had been completed and included a pH alarm and an automatic fail-safe, shut-off controls. On **June 9, 2020**, OCSD issued a Compliance Inspection Findings and Requirements Letter requiring Arrowhead to demonstrate that the newly installed Evoqua vessels can reliably meet compliance for heavy metals. At OCSD's direction, Arrowhead is currently conducting wastewater characterization to assess/demonstrate the effectiveness of the Evoqua vessels. The sampling results will be submitted to OCSD in the next reporting period.

OCSD will continue to monitor Arrowhead's discharge and compliance status on a quarterly basis.

Aseptic Technology LLC (Permit No. 1-600716)

Aseptic Technology LLC (Aseptic) manufactures products such as fruit juice, fruit smoothies, nut milk and plant-based proteins. Batch process at Aseptic includes blending of wet/dry ingredients, pasteurization, and filling of beverages into bottles. Wastewater is generated from equipment clean in place (CIP) process, as well as from facility sanitation. Wastewater is routed to a three-stage underground clarifier for pH adjustment and solids settling prior to discharge to the sewer.

During routine inspections in March and April 2020, OCSD observed that Aseptic's pH adjustment system was removed without prior notification to OCSD. Although the effluent meters were inaccessible due to excessive flooding in the effluent meter boxes, OCSD discovered a bypass piping around the effluent meters. On **April 16, 2020**, Aseptic reinstalled the pH adjustment system at OCSD's direction. However, the system's low setpoint was at 6.0, which was a concern. Furthermore, Aseptic's effluent meters failed the calibration test performed on the same day. The calibration report, which was

submitted to OCSD on **April 28, 2020**, indicated that the type of meters utilized at Aseptic are not recommended for wastewater applications.

January 1 – June 30, 2020

On **May 18, 2020**, OCSD issued a Compliance Requirements Letter directing Aseptic to immediately raise the setpoint of the pH adjustment system to achieve effective neutralization, disconnect the bypass piping around the effluent meters, remove excess water in the effluent meter boxes, and submit a proposal by **June 15, 2020** to address inaccurate meter readings and to implement the approved proposal by **June 30, 2020**. On **May 29, 2020**, Aseptic submitted a response letter listing the corrective measures implemented onsite, which included raising the low pH setpoint system to 7.0 S.U. and reconfiguring the effluent meters to be aboveground. Additionally, Aseptic proposed replacing the existing effluent meters with magnetic meters. These new meters were installed on **June 6, 2020**.

OCSD will continue to monitor Aseptic's discharge and compliance status on a quarterly basis.

Aseptic Technology, LLC (Permit No. 1-501002)

Aseptic Technology, LLC (Aseptic) is a beverage and dietary supplements manufacturer. Due to a delinquency in making timely payments for user charges, in January 2016, the OCSD Board of Directors approved a 12-month payment agreement with Aseptic in the amount of \$199,228.03. Aseptic made timely payments in accordance with the agreement and completed the 12-month schedule as of January 2017. However, Aseptic Technology failed to make payments against quarterly invoices after January 2017; thereby necessitating a second payment agreement request in July 2017 for delinquent amounts totaling \$451,161.54. The second payment agreement also required Aseptic to remit timely payments against new obligations occurring during the term of the agreement.

In January 2018, Aseptic requested a third payment agreement for delinquencies owed in the amount of \$252,315.72. This payment agreement request was authorized, and it required a letter of credit and a stipulation that current invoices were to be paid in a timely manner. As a result of the payment agreement, a typical two-year Class 1 permit was not issued to Aseptic, and the permit was renewed for only three months-at-a-time.

Due to Aseptic's repeated failure to make timely payments pursuant to the third payment agreement, OCSD did not renew the permit which was expiring end of March 2019. In April and May 2019, OCSD conducted Compliance Inspections during which OCSD noted that Aseptic continued to discharge industrial wastewater to the sewer. In April 2019, OCSD issued Aseptic an Order to Cease Discharge Without a Valid Permit. When a payment was finally received in May 2019, the then expired permit was renewed with a new expiration date set for the end of that month. This permit was not renewed again due to the facility's non-payment of user charges. In June 2019, OCSD issued another Order to Cease Discharge Without a Valid Permit and held a Compliance Meeting during which Aseptic agreed to settle the violations associated with discharging without a valid permit.

July 1 – December 31, 2019

On **July 11, 2019**, OCSD issued another Order to Cease Discharge Without a Valid Permit due to Aseptic's failure to make full payment of past due amounts. On **August 29, 2019**, OCSD issued a Settlement Agreement to Aseptic for a settlement of \$185,000.00 for discharging without a valid permit between April 1 and June 17, 2019. Aseptic has been making monthly payment towards these negotiated penalties, however, Aseptic has not paid the overdue user charges; hence, on **September 9, 2019**, OCSD issued another Order to Cease/Terminate Discharge Without a Valid Permit.

January 1 – June 30, 2020

Aseptic continued to discharge without a valid permit through the end of the reporting period. Therefore, OCSD will escalate enforcement to a civil judicial remedy during the next period.

Astech Engineered Products (Permit No. 1-571295)

Astech manufactures jet engine housings and exhaust nozzles, thrust reverser components, navy ship doors, light weight high-strength, and heat resistant and noise suppression structures. Wastewater generating operations include acid etching, alkaline cleaning, acid pickling, wet scrubbing, Ransohoff cleaning, waterjet saw cutting, seam welding, panel welding, penetrant dye testing, and associated rinses. Astech utilizes a pH neutralization and three-stage clarification system for the rinses and scrubber overflow. The waterjet cutting wastestream undergoes aboveground solids settling followed by underground three-stage clarification prior to discharge to the sample point.

January 1 – June 30, 2020

On **February 25, 2020**, Astech had a pH violation, for which a Notice of Violation was issued on **April 2, 2020**. On **April 29, 2020**, OCSD conducted a Compliance Inspection during which Astech attributed the violation to failure of the pH probe in their automated pH neutralization system. At the time of the inspection, the pH probe had already been replaced and the pH re-calibrated.

OCSD will continue to monitor Astech's discharge and compliance status on a quarterly basis.

Auto-Chlor System of Washington, Inc. (Permit No. 1-511384)

Auto-Chlor System of Washington, Inc. manufactures soaps and detergents through chemical blending operations, and conducts packaging and redistribution operations from bulk quantities to smaller containers. In addition, the company provides commercial dishwashing and laundering services. Auto-Chlor operates a batch pretreatment system.

In June 2019, OCSD conducted a Compliance Inspection and observed a hard-plumbed city water connection to Auto-Chlor's batch treatment tank. Auto-Chlor stated that city water was being added to the batch tank during treatment of wastewater generated onsite to make the water level high enough for treatment.

July 1 – December 31, 2019

On **September 24, 2019**, OCSD issued a Compliance Requirements Letter requiring Auto-Chlor to take corrective actions to change the treatment operations and procedures to preclude any dilution sources from affecting the quality of industrial wastewater discharged into the sewer. During routine inspection and sampling on **October 11, 2019**, OCSD observed that the hard-plumbed city water connection to the batch treatment tank had been removed.

January 1 – June 30, 2020

Auto-Chlor had no further noncompliance issues during this reporting period.

B. Braun Medical, Inc. (West/Lake) (Permit No. 1-541183)

B. Braun Medical, Inc. (West/Lake) (B. Braun West) manufactures pharmaceutical intravenous fluid and the packaging for the fluid. The manufacturing process includes mixing, filling, sterilization, and packaging of aqueous injectable and parenteral pharmaceutical products. The packages are sprayed and bath-sterilized before they are placed on pallets and collected for shipment. Waste from the sterilization process consists of condensate that accumulates on the packages during the cooling process, and the water drained weekly from the heat exchangers.

In October 2018, B. Braun West had a pH violation, and was issued a Notice of Violation. In December 2018, OCSD conducted a Compliance Inspection during which B. Braun West indicated that multiple sources could have contributed to the pH violation, including the shredding facility and the internal IV bag process. B. Braun West submitted a letter describing corrective actions, which included installation

of a new pH adjustment system.

OCSD directed B. Braun West to complete installation of the pH adjustment system by end of January 2019, which B. Braun West failed to comply with. In April 2019, OCSD issued a Compliance Requirement Letter directing B. Braun to submit an interim compliance proposal by the end of the month and to install a temporary pH adjustment system by the end of May 2019, both of which B. Braun completed.

July 1 – December 31, 2019

OCSD directed B. Braun to submit the proposal for the permanent pretreatment system by the end of June 2019, and to complete installation by end of November 2019, both of which B. Braun had complied with. During previous compliance inspections at B. Braun, OCSD observed discharge of stormwater into the sewer system, which is prohibited by OCSD's Ordinance. On **July 24, 2019**, OCSD issued a Compliance Requirement Letter directing B. Braun West to submit a stormwater mitigation plan by **August 31, 2019** to prevent further discharge of stormwater to the sewer system and install the proposed solution by **October 15, 2019**. B. Braun proposed to install a diverter valve that would be actuated prior to a rain event and divert stormwater to an above ground holding tank. The contents of the tank would either be waste-hauled or discharged to the sewer system after receiving authorization from OCSD. B. Braun completed these requirements by the specified due dates. On **December 3, 2019**, OCSD conducted a follow-up Compliance Inspection and confirmed that the stormwater mitigation system and the new permanent pretreatment system were operational and appeared to be properly maintained.

January 1 – June 30, 2020

B. Braun had no further non-compliance issues during this reporting period. OCSD will continue to monitor B. Braun's discharge and compliance status on a quarterly basis.

Bimbo Bakeries USA, Inc. (Permit No. 1-521838)

Bimbo Bakeries, USA, Inc. (Bimbo) manufactures baked products. The general operations include mixing, proofing, baking, cooling, and packaging.

All wastewater gravity flows through floor drains into a three-stage underground clarifier. The clarifier is equipped with an automated pH adjustment system.

January 1 – June 30, 2020

On **April 22, 2020**, Bimbo had a pH violation, for which a Notice of Violation was issued on **May 7, 2020**. On **May 11, 2020**, OCSD conducted resampling and the results showed compliant pH. On **June 17, 2020**, OCSD conducted a Compliance Inspection during which Bimbo attributed the pH violation to a pH probe failure in the pH adjustment system. The pH probe failed due to excessive solids accumulation in the three-stage underground clarifier. The corrective measures that Bimbo started instituting immediately after the violation included daily pH probe checks, weekly pH meter calibration check, and increased frequency of solids removal from the clarifier.

OCSD will issue a Compliance Requirements Letter during the next quarter requiring Bimbo to submit a corrective action report documenting the aforementioned measures. OCSD will continue to monitor Bimbo's discharge and compliance status on a quarterly basis.

Bodycote Thermal Processing (permit No. 1-031120)

Bodycote Thermal Processing (Bodycote) performs oven and furnace operation, metal brazing, quenching, freezing, and metal heat treating. The parts are either placed in the ovens to be aged, or treated with sodium nitrate, glycol, and hot/cold water. Afterwards, parts are either placed in the freezer

(for customer pickup) or straightened/folded in the shop area. Wastewater is generated from the treatment rinse tank line, or the quench tank overflow. Bodycote has large quench tanks or sumps where the parts are submerged to be quenched. Any overflow from these quench tanks is routed to the water/glycol separation tanks where glycol is separated from water to be recycled back into the tanks. After the separation process, wastewater is routed through a settling box to remove solids before being discharged to the sewer.

June 1 – December 31, 2019

On **October 30, 2019**, Bodycote had a molybdenum violation, for which a Notice of Violation was issued on **November 22, 2019**. On **December 10, 2019**, OCSD conducted a Compliance Inspection during which Bodycote indicated that they could not identify the source of the violation. Bodycote was directed to conduct informational sampling on their rinses and quench tanks to find the source of the violation. The results showed low concentrations of molybdenum in the tanks. Thus, the violation appeared to have been due to carryover of excessive solids buildup into the settling and sample boxes. Bodycote corrected the issue and subsequent sampling by both Bodycote and OCSD yielded compliant results.

January 1 – June 30, 2020

OCSD amended Bodycote's permit, effective **February 1, 2020**, to add quarterly molybdenum self-monitoring and a requirement to clean out both settling and sample boxes on a weekly basis.

Bodycote had no further violations during this reporting period. OCSD will continue to monitor Bodycote's discharge and compliance status on a quarterly basis.

Brea Power II, LLC (Permit No. 1-521837)

Brea Power II, LLC (Brea Power) produces electricity from landfill gas extracted from the adjacent landfill, firing the gas in boilers to produce steam for use in turbines and the production of electricity. Wastewater is generated from a combination of cooling tower blow down, boiler blow down, and landfill gas condensate (LFG). Pretreatment on site includes a caustic dosage to the LFG to raise the pH within the range of 6.0-12.0 S.U. Hydrogen Peroxide is also injected downstream at the oily water separator on-site to minimize sulfide generation. A chemical mix is also injected downstream of the sample point to control hydrogen sulfide generation in OCSD's sewer system.

July 1 – December 31, 2019

On **July 31, 2019**, Brea Power had a pH violation, for which a Notice of Violation was issued on **August 12, 2019**. On **August 27, 2019**, OCSD conducted a Compliance Inspection during which Brea Power indicated that the source of the pH violation was due to a pH electrode failure. On **August 28, 2019**, Brea Power submitted a corrective action report stating that the pH electrode had been replaced. The resampling result showed compliance.

January 1 – June 30, 2020

Brea Power had no further violations during this reporting period. OCSD will continue to monitor Brea Power's discharge and compliance status on a quarterly basis.

Bristol Industries (Permit No. 1-021226)

Bristol Industries (Bristol) manufactures military specification fasteners, including nuts, bolts, washers, and rivets, as well as airplane window channels. Wastewater is generated from the metal finishing and aluminum forming operations, which include acid/alkaline cleaning, plating (silver, copper, nickel, chromium, and cadmium), anodizing, deburring, and associated rinses. Bristol operates a batch and a continuous pretreatment system. The continuous pretreatment system consists of an equalization tank, chrome reduction, cyanide destruction, hydroxide precipitation, pH adjustment, an effluent pH controller

and recorder, final polishing filter, filter press, Lamella clarifier, and an electrowinning system. The batch treatment system is used to treat spent process solutions.

Through 2017, 2018, and early 2019, Bristol discharged industrial wastewater which was non-compliant with cyanide (amenable and total), cadmium, nickel, silver, and pH effluent discharge limits. OCSD issued numerous Notices of Violations, Compliance Requirement Letters and Orders to Bristol – conducted multiple Compliance Inspection, and Bristol completed several corrective actions to resolve the root cause behind the violations; however, systemic operational issues and inadequate pretreatment equipment prevented Bristol from achieving consistent compliance.

In April 2019, OCSD held another Compliance Meeting with Bristol during which OCSD informed Bristol of the agency's determination that the recent compliance issues were caused by inadequate hydraulic capacity of Bristol's existing pretreatment system, lack of process control of the pretreatment equipment, disconnect between the upstream production processes and the pretreatment system processes, and the lack of a complete facility wastewater process review to correct the earlier violations. OCSD also informed Bristol of its intention to issue an Administrative Complaint and provided Bristol the option to enter into a Settlement Agreement and an Enforcement and Compliance Schedule Agreement with OCSD, in lieu of an Administrative Complaint, to settle the violations that occurred from June 2017 through March 2019.

In June 2019, Bristol had further cyanide (total), cadmium, silver, and pH violations. That month, OCSD issued a Notice of Violation for the March 2019 cadmium and silver monthly mass limit violations.

In general, OCSD had conducted multiple inspections at the facility during previous reporting periods and found that Bristol continued to experience pretreatment system failure and operational control issues onsite. Additionally, OCSD found that Bristol continued to make several process modifications onsite without prior notification to OCSD.

July 1 – December 31, 2019

On **July 1, 2019**, OCSD issued a Notice of Violation for the April 2019 silver monthly mass limit violation. On **July 11, 2019**, Bristol had further cadmium, nickel, and silver violations. On **July 17, 2019**, OCSD issued a Third Order to Cease Noncompliant Discharges in response to the continued pretreatment system failure, operational issues, and recurring violations. On **August 12, 2019**, OCSD issued Notices of Violation for the June 2019 cyanide, cadmium, pH, and silver violations, as well as for the July 2019 cadmium, nickel, and silver violations.

On **August 13, 2019**, OCSD held a third Compliance Meeting during which OCSD instructed Bristol to conduct a complete process study to evaluate the adequacy of the existing pretreatment system and then develop a plan to ensure compliance with the permit limits. OCSD informed Bristol that the company has repeatedly approached corrective actions in a piece-meal fashion which has caused additional permit violations and equipment issues. OCSD reiterated that a comprehensive evaluation of the facility is required to prevent continued non-compliance.

The Settlement Agreement was issued on **May 29, 2019** and became effective on **August 8, 2019**. On **September 12, 2019**, OCSD issued the Enforcement and Compliance Schedule Agreement (ECSA) to Bristol. As required in the Settlement Agreement, Bristol continued to complete the ECSA requirements in a timely manner. Where more time was needed to complete further analysis, OCSD provided extensions to the schedule. However, during this ECSA period, Bristol continued to experience violations of mass emission rate limits. On **September 6, 2019**, Bristol had a silver mass violation. On **October 29, 2019**, Bristol had cyanide (amenable and total) mass limit violations. On **November 14, 2019**, and **November 20, 2019**, Bristol had cadmium mass violations, and on **November 27, 2019**, Bristol had another cadmium violation.

On **November 30, 2019**, Bristol submitted their pretreatment system modification proposal. OCSD had concerns with the proposal pertaining to the volume of wastewater discharged to the cyanide system,

segregation of the cyanide-related backwashes, and failure mode analysis of the new system. On **December 4, 2019**, Bristol had another cadmium violation. On **December 12, 2019**, Bristol had further cadmium violation plus a cyanide (amenable) violation. On **December 27, 2019**, Bristol had a cyanide (total) violation. These daily limit exceedances also resulted in monthly average discharge limits violations for the three substances. On **December 30, 2019**, OCSD issued a Notice of Violation for the November 2019 cadmium mass violations.

On **October 21, 2019** Bristol was published as significantly non-compliant for the 2018-2019 reporting period due to acute Cadmium discharge violations on **December 6, 2018, January 8, 2019, February 5, 2019, and March 26, 2019**, as well as an acute CN discharge violation on **August 3, 2018**.

January 1 – June 30, 2020

On **January 13, 2020**, OCSD issued a Notice of Violation for the November 2019 cadmium violation. On **January 4 and January 5, 2020**, Bristol had silver violations, for which two Notices of Violation were issued on **February 18, 2020**.

On **January 20, 2020**, OCSD held a Compliance Meeting to discuss Bristol's continued cadmium, cyanide (Total), cyanide (Amenable), and silver discharge non-compliances as well as to discuss Bristol's pretreatment system modification proposal. During the meeting, Bristol described that the December 2019 violations were due to a mechanical issue with mixers and a gap in the measurement of pollutant concentrations. Bristol stated that, along with implementing administrative controls, the company had made a significant change to data logs and added more cycles of regeneration on the post-cyanide ion-exchange system. Additionally, Bristol procured an Inductive Coupled Plasma (ICP) analysis machine and TruChem Software to improve operational performance and prevent future failures on site. At the meeting, OCSD required Bristol to revise the proposal to include evaluation of rinsing practices, implementing water conservation measures, segregation of cyanide related backwashes, failure mode and effects analysis with the proposed system. OCSD issued a summary of these requirements in a compliance requirements letter to Bristol on **February 6, 2020**.

On **January 22, 2020**, Bristol had a cyanide (amenable) mass limit violation, for which a Notice of Violation was issued on **February 19, 2020**. On **February 10, 2020**, OCSD issued a Notice of Violation for December 2019 cadmium, cyanide (amenable), and cyanide violations. On **March 4, 2020**, OCSD issued a Notice of Violation for the November 2019 cyanide (Amenable) mass violation. On **March 9, 2020**, OCSD issued a Notice of Violation for the December 2019 cadmium, cyanide (amenable) and cyanide (total) mass violations.

As a result of the requirements to revise the initial pretreatment modification proposal, on **March 26, 2020**, Bristol requested time extension for completion construction and implementation of the new treatment system. On **April 9, 2020**, OCSD granted Bristol time extension until **May 11, 2020** to complete the requirements. The new deadline was extended two more times to **June 15, 2020** then to **July 20, 2020** at Bristol's request due to delay in delivery associated with major equipment required for the new pretreatment system.

OCSD will conduct a follow-up compliance inspection in the next reporting period to follow up on the completed implementation of Bristol's new pretreatment system.

Brothers International Desserts (North) (Permit No. 1-600583)

Brothers International Desserts (Brothers North) is an ice-cream and frozen novelty manufacturer. Most of the wastewater at Brothers is generated by the cleaning and sanitizing of equipment used for the manufacturing processes.

July 1 – December 31, 2019

On **September 9, 2019**, Brothers North had a pH violation, for which a Notice of Violation was issued

on **October 14, 2019**. Prior to this violation, Brothers North had already informed OCSD of their intention to install a new pH adjustment system on-site due to another pH violation for their other clarifier (issued under separate Permit No. 1-600582 for Brothers West).

January 1 – June 30, 2020

On **January 22, 2020**, OCSD conducted a Compliance Inspection and confirmed that the pH adjustment system was operational and appeared to be properly maintained.

OCSD will continue to monitor Brothers North's discharge and compliance status on a quarterly basis.

Brothers International Desserts (West) (Permit No. 1-600582)

Brothers International Desserts (Brothers West) is an ice-cream and frozen novelty manufacturer. Most of the wastewater is generated by the cleaning and sanitizing of equipment used for the manufacturing processes.

In June 2019, Brothers had pH violations.

July 1 – December 31, 2019

On **July 10, 2019**, OCSD issued a Notice of Violation for the June 2019 pH violations. On **August 5, 2019**, OCSD conducted a Compliance Inspection during which Brothers West indicated that the clarifier was not pumped out according to the company's planned schedule, and the long retention and ensuing fermentation of accumulated solids in the clarifier caused the pH violations. On **August 13, 2019**, Brothers West submitted their corrective action report to address the pH violation. Corrective actions included maintaining the clarifier frequently and the installation of a pH adjustment system on-site.

January 1 – June 30, 2020

On **January 22, 2020**, OCSD conducted a follow-up Compliance Inspection and confirmed that the pH adjustment system was operational and appeared to be properly maintained.

OCSD will continue to monitor Brothers West's discharge and compliance status on a quarterly basis.

Cadillac Plating, Inc. (Permit No. 1-021062)

Cadillac Plating, Inc. (Cadillac) is a job shop metal finishing facility. Wastewater-generating processes include alkaline and acid chloride zinc plating, bright tin plating, bright nickel plating, sulfuric anodizing, alkaline cleaning, acid activation, chromate conversion coating, chemfilm, and associated rinses. The facility engages in rack plating only. The facility operates a continuous hydroxide pretreatment system that consists of pH adjustment, chrome reduction, flocculent addition, clarification, and sludge dewatering with a filter press. Spent solutions are treated in a batch pretreatment system, with the effluent routed through the continuous pretreatment system for further treatment.

In 2017, OCSD issued Cadillac multiple enforcement actions including a Probation Order to correct multiple pretreatment system deficiencies and violations observed at the facility – which were completed in 2018. After a zinc discharge violation in late 2018, OCSD found additional deficiencies at the facility, including an addition of process lines that had not been characterized in the former action.

In April 2019, OCSD issued a Compliance Requirements Letter to address the deficiencies noted during the previous months' inspections. Shortly thereafter, OCSD conducted a follow-up Compliance Inspection and observed further noncompliance issues including pH probes out of calibration; lack of an automated pH adjustment system and final pH chart recorder; prohibited use of flexible hosing; and process line modifications implemented without written notification to OCSD. In mid-April 2019, OCSD issued an Order to Cease Noncompliant Discharges directing Cadillac to attend a Compliance Meeting

later that month. In May 2019, OCSD issued a second Compliance Requirements Letter requiring Cadillac to correct the noncompliance issues and deficiencies by the end of the month, as discussed during the compliance meeting. In early June 2019, OCSD conducted another Compliance Inspection and found remaining deficiencies. During a follow-up inspection later that month, OCSD confirmed that Cadillac had finally completed all requirements. However, OCSD routine sampling in June 2019 detected a nickel violation.

July 1 – December 31, 2019

On **August 12, 2019**, a Notice of Violation was issued for the June 2019 nickel violation. On **August 29, 2019**, OCSD conducted a Compliance Inspection during which multiple deficiencies were noted including an uncalibrated pH meter, unqualified operators operating the pretreatment system, process changes without written notification to OCSD, and a loss of process control due to pretreatment system capacity issues. As a result of these pretreatment deficiencies, on **September 24, 2019**, OCSD issued a letter directing Cadillac to attend a Compliance Meeting on **October 15, 2019**. On **October 18, 2019**, as a follow-up to the compliance meeting, OCSD issued a Compliance Requirements Letter requiring Cadillac to maintain a certified wastewater treatment operator at all times during wastewater discharge, conduct testing on all treated batches of wastewater and maintain a log of those batches, maintain the pH chart recorder, and record maintenance activities related to the excessive build-up of flocculant in pretreatment system lines. On **November 21, 2019**, OCSD conducted another Compliance Inspection during which OCSD confirmed completion of the compliance requirements.

January 1 – June 30, 2020

Cadillac had no further violations during this reporting period. OCSD will continue to monitor Cadillac's discharge and compliance status on a quarterly basis.

Cargill, Inc. (Permit No.1-031060)

Cargill, Inc. (Cargill) is a bulk loading station with facilities for storage and packaging of vegetable-based and animal-based oils. Wastewater is generated by steam cleaning of packaging equipment and washdown of loading, processing, and packaging areas (with some boiler blowdown). Pretreatment at the facility consists of a skim basin followed by clarification for the removal of oil and fat.

July 1 – December 31, 2019

On **September 24, 2019**, OCSD issued an Order to Cease Noncompliant Discharges to Cargill for discharging wastewater which caused blockages downstream of the facility in the City of Fullerton. The Order required Cargill to attend a Compliance Meeting to resolve the matter on **October 24, 2019**. During the meeting, the excessive discharge of oil and grease was discussed along with Cargill's prohibited sewer discharge of surface runoff. On **October 31, 2019**, OCSD issued a Compliance Requirements Letter requiring Cargill to conduct monthly self-monitoring for oil & grease, re-evaluate the pretreatment system at the facility, propose improvements to ensure adequate oil & grease removal, and develop a stormwater mitigation plan to divert stormwater from sewer discharge.

On **November 27, 2019**, with the assistance of their consultant, Cargill submitted their response to the Compliance Requirements Letter. OCSD reviewed the submittal and considered it to have adequately addressed the issues. No further line blockages have been reported since the compliance meeting.

January 1 – June 30, 2020

Cargill had no further non-compliances during this reporting period. OCSD will continue to monitor Cargill's discharge and compliance status on a quarterly basis.

Catalina Cylinders (Permit No. 1-031021)

Catalina Cylinders, a Div. of APP (Catalina Cylinders) manufactures high pressure gas cylinders from 6061 aluminum alloy material. The cylinders are produced in various sizes for the beverage, medical, and SCUBA diving industries. Wastewater is generated from the alkaline cleaning, hydrostatic pressure testing, and the iron phosphate conversion coating operations. Pretreatment at Catalina Cylinders is limited to a three-stage underground clarifier.

In January 2019 Catalina Cylinders had an oil & grease of mineral or petroleum origin mass violation, for which a Notice of Violation was issued in March 2019. In March 2019, OCSD conducted a Compliance Inspection during which OCSD explained to Catalina Cylinders that based on the manufacturing operations conducted onsite, the company's wastewater discharge is subject to the Aluminum Forming federal categorical pretreatment standards and, as a result, the oil & grease mass limits are production-based. OCSD explained further that to comply with the stringent production-based mass limits, the oil & grease concentration must be kept below approximately 15 mg/L during an average day's flow, which would likely require pretreatment beyond the clarifier they presently operate.

In April 2019, Catalina Cylinders had another oil & grease mass violation. In May 2019, OCSD issued a Notice of Violation and conducted another Compliance Inspection to reiterate concerns about Catalina Cylinders' noncompliance with the oil & grease mass emission limits.

July 1 – December 31, 2019

On **October 10, 2019**, OCSD issued a Compliance Summary Letter requiring Catalina Cylinders to conduct multi-day self-monitoring in October 2019. The multi-day self-monitoring was performed on **October 22 - 24, 2019** and the results showed in compliance with their oil & grease mass emission limits.

On **October 21, 2019**, Catalina Cylinders was published as significantly non-compliant for the 2018-2019 reporting period due to acute oil & grease of mineral or petroleum origin discharge violations on **January 4, 2019** and **April 1, 2019**.

January 1 – June 30, 2020

Catalina Cylinders had no further violations during this reporting period. OCSD will continue to monitor Catalina Cylinders' discharge and compliance status on a quarterly basis.

City of Huntington Beach Fire Department (Permit No. 1-111015)

City of Huntington Beach Fire Department (HB Fire) operates three oil extraction wells. The extracted crude oil and groundwater mixture is routed to an oil/water separation tank. Crude oil is shipped offsite while the separated wastewater is routed through an aboveground clarifier prior to discharge to the sewer.

In April 2019, HB Fire had an oil & grease of mineral or petroleum origin violation and was issued a Notice of Violation. In May 2019, HB Fire reported that the violation was due to a build-up of oil and grease in the sample port and failure of the operator to flush the port prior to sampling. In June 2019, HB Fire informed OCSD through an email that they had installed a third stage for the clarifier and a separate sample box as a corrective measure.

July 1 – December 31, 2019

On **July 1, 2019**, OCSD conducted a Compliance Inspection to confirm completion of corrective actions as a result of the violation that occurred in the prior quarter.

January 1 – June 30, 2020

HB Fire had no further violations during this reporting period. OCSD will continue to monitor HB Fire's discharge and compliance status on a quarterly basis.

City of Newport Beach, General Services

The City of Newport Beach operates a general services yard, which contains several areas for various municipal operations and vehicle maintenance. This yard also serves as a location where vacuum-truck vehicles can unload decant wastewater generated during the cleaning of both city sewer and stormwater piping.

During an inspection in February 2017, OCSD discovered that several areas within the yard which receive stormwater flow had a direct connection to OCSD's Sewer Trunkline. The discharge of stormwater to the sewer is prohibited by OCSD's Wastewater Discharge Regulations Ordinance. Therefore, OCSD issued a Compliance Requirements Letter directing the City of Newport Beach to divert stormwater away from OCSD's sewerage facilities. Following a series of correspondence and inspections, the City of Newport Beach plugged and rerouted several areas to prevent stormwater from entering the sewer system. Additionally, the City of Newport Beach installed a rainwater diversion valve to divert stormwater from the upper areas, and a Fresno Sluice Gate in the sewer/stormwater decanting area, which would remain closed during the winter wet-season months.

July 1 – December 31, 2019

On **November 27, 2019**, OCSD conducted a Compliance Inspection during a storm event and observed that the rainwater diversion switch that redirects stormwater from the upper yard was not set properly, as it did not remain in the "ON" mode after the rain subsided – which allowed additional runoff 'sheet' flow to discharge to the sewer. In addition, OCSD observed City yard workers opening the sluice gate in the decanting area, allowing the collected stormwater and vacuum truck water to be released to the sewer during the storm event.

January 1 – June 30, 2020

On **January 23, 2020**, OCSD issued a Compliance Inspection Summary and Requirements Letter addressing concerns regarding the rainwater diversion switch and the sluice gate. On **February 28, 2020**, the City of Newport Beach responded via an email stating that the rainwater diversion valve had been adjusted to activate at 1/8" of rainfall, which is the lowest setting. In addition, a second underground clarifier was installed downstream of the wastewater decanting area with a valve downstream of the clarifier to ensure no stormwater is released during rain events.

OCSD will perform an inspection of the second clarifier and the rain diversion valve and switch during the next reporting period (during a rain event) to evaluate the effectiveness of the solution.

City of Newport Beach (West Coast Hwy - Oil Extraction) (Permit No. 1-600584)

The City of Newport Beach operates a crude oil extraction facility near West Coast Highway in Newport Beach. Crude oil and produced water are pumped directly from 16 oil wells to a separation tank. From the separation tank, the produced water is pumped to a machine where additional oil, grease, and solids are removed. The produced water is pumped through a filter system where it is further polished before reinjection back into the aquifer. In the case of a scheduled or unscheduled shutdown (power outage or injection pump maintenance), where the produced water could not be reinjected, the produced water would be diverted from the injection system to the sewer system.

January 1 – June 30, 2020

On **June 10, 2020**, the City of Newport Beach had an oil and grease violation, for which a Notice of

Violation will be issued during the next quarter.

OCSD will continue to monitor the City of Newport Beach's discharge and compliance status on a quarterly basis.

City of Tustin – Maintenance Yard (Permit No. 1-071058)

The City of Tustin – Maintenance Yard (Tustin Maintenance Yard) conducts fleet maintenance for city automobiles, trucks, and street sweepers, including steam cleaning and pressure washing. The wastewater is routed through a two-stage clarifier through a vault to the sewer system. Clarifier and vault maintenance include regular skimming and a set frequency of sludge buildup pump-out.

January 1 – June 30, 2020

On **June 3, 2020**, Tustin Maintenance Yard had a zinc violation, for which a Notice of Violation was issued on **June 18, 2020**. On **June 29, 2020**, OCSD conducted a Compliance Inspection during which City of Tustin indicated that the most likely cause of the exceedance was the altered truck routes that may have higher contents of heavy metals. During the inspection, OCSD also informed Tustin Maintenance Yard of the access issues with the currently configured sampling point.

Tustin Maintenance Yard will submit a corrective action report addressing the violation and sampling point in the next reporting period. Additionally, OCSD will revise the currently issued permit during the next reporting period to increase the self-monitoring frequency for zinc.

Coast to Coast Circuits, Inc. (Permit No. 1-111129)

Coast to Coast Circuits, Inc. (Coast) is a medium size facility that specializes in quick-turn and semi-production orders for aerospace, commercial, medical, military/defense, and telecommunication applications. The circuit manufacturing processes include cutting the copper clad or unclad materials, photoresist application, inner-layer circuit imaging, resist developing, ammonium etching, and alkaline resist stripping. For multilayer boards, this is followed by brown oxide or plasma surface preparation, lamination, drilling, and plasma or high-pressure de-smear.

The pretreatment system consists of a general heavy metals ion exchange system, a tin lead ion exchange system, an evaporator with pH adjustment, and a clarifier with pH adjustment. Dilute tin lead rinse waters are treated and recycled in the tin lead ion exchange system. All other dilute metal bearing rinse waters are treated and recycled in the general heavy metals ion exchange system. Concentrated acidic and alkaline waste waters are pH adjusted and sent to the evaporator. Condensate from the evaporator is recycled back to the general heavy metals ion exchange system and concentrated liquid from the evaporator is waste hauled. Nonmetal-bearing wastewaters are routed to the three stage above ground clarifier for pH adjustment and discharge to the sewer.

July 1 – December 31, 2019

On **October 2, 2019**, Coast had a pH violation, for which a Notice of Violation was issued on **October 21, 2019**. In a previous inspection, OCSD noted additional compliance issues including incomplete facility drawings, missing or illegible labels, failure to separate cyanide bearing waste streams from non-cyanide bearing waste streams, ineffective pH adjustment system, and the use of non-regulated waste streams as dilution flows. On **October 28, 2019**, OCSD issued a Compliance Requirements Letter requiring Coast to address the compliance deficiencies by **November 30, 2019**. On **November 12, 2019**, OCSD conducted a Compliance Inspection to verify the status of compliance requirements. Coast requested and was granted an extension to complete the compliance requirements during the next quarter.

January 1 – June 30, 2020

On **January 13, 2020**, Coast submitted a compliance schedule in response to the Compliance Requirements Letter. On **February 5** and **February 6, 2020**, OCSD staff conducted Compliance Inspections and resampling during which OCSD noted that while Coast had increased the caustic pump size in an attempt to enhance the pH adjustment system in the neutralization tank, the pH in some of the aliquots of the 24-hour composite resample were noncompliant. Coast stated that they were unaware of the source of the low pH and were working with their consultant to put corrective actions in place.

On **February 24** and **May 1, 2020**, OCSD issued Compliance Requirements Letters directing Coast to attend a compliance meeting. The Compliance Meeting was held on **May 19, 2020**, to discuss the multiple deficiencies found at the facility. On **June 17, 2020**, OCSD issued a Probation Order to address untreated ion exchange regenerant being discharged to the sewer, sample point dilution with non-regulated wastewater, inadequate pH control, lack of cyanide segregation, and inadequate tank and piping labeling. All requirements of the Probation Order were to be completed by **August 31, 2020**.

OCSD staff will continue to monitor Coast's compliance status and verify completion of the Probation Order during the next reporting period.

Corru-Kraft Buena Park (Permit No. 1-600806)

Corru-Kraft Buena Park (Corru-Kraft) manufactures corrugated sheets by combining paper using starch-based adhesive, steam, and hydraulic pressure. The starch adhesive is prepared onsite and pumped to the processing equipment. Wastewater is generated from the washing of the starch mixing tank and several corrugating equipment lines following production. Wastewater passes through a four-stage underground clarifier prior to discharge to the sewer system.

July 1 – December 31, 2019

On **September 12, 2019**, Corru-Kraft had a pH violation, for which a Notice of Violation was issued on **October 28, 2019**. On **November 14, 2019**, OCSD conducted a Compliance Inspection and resampling, during which OCSD identified that pH treatment may be required to ensure consistent compliance. OCSD noted that the wastewater enters the clarifier with a pH of approximately 11.5 S.U. at a high temperature, which creates a reaction resulting in solids formation in the first two stages of the clarifier, and a significant drop in pH in the final stage of the clarifier. Corru-Kraft planned to determine if more frequent clarifier cleaning will maintain pH compliance or if a pretreatment system will be required.

January 1 – June 30, 2020

In January of 2020, Corru-Kraft began utilizing chlorine tablets in various stages of the clarifier to lower the pH. However, this modification was implemented without prior notification to and acceptance by OCSD.

On **January 21, 2020**, Corru-Kraft had another pH violation, for which a Notice of Violation was issued on **February 18, 2020**. During the routine sampling on the day of the violation, OCSD noted that the chlorine tablets had been completely dissolved, hence no adjustment was taking place.

On **April 13** and **14, 2020**, Corru-Kraft had further pH violations, for which a Notice of Violation was issued on **April 30, 2020**. On **April 15, 2020**, OCSD issued Corru-Kraft a Compliance Requirements Letter directing the company to submit a pretreatment proposal following several pH violations where Corru-Kraft took no significant corrective action.

On **May 15, 2020**, OCSD received an initial proposal for a pH adjustment system; however, the proposal listed two different options. Corru-Kraft requested a one-month extension, needing to provide specific

information on which system would be proposed and implemented. OCSD accepted the extension request on **May 20, 2020**. OCSD received the final proposal from Corru-Kraft on **June 15, 2020**. OCSD submitted follow-up questions regarding the proposal on **June 22, 2020**.

OCSD will continue its enforcement response during the next reporting period, and monitor Corru-Kraft's discharge and compliance status on a quarterly basis.

CP-Carrillo, Inc. (Armstrong) (Permit No. 1-600920)

CP-Carrillo, Inc. (Armstrong) (CP Armstrong) manufactures aluminum pistons for the automotive industry, mainly conducting aluminum anodizing and graphite skirt coating. CP Armstrong anodizes the ring groove on aluminum pistons using an electrolysis process with sulfuric acid. Additionally, there is a post anodizing washing machine which washes out the residual acid left in the ring groove of the piston. There are two additional washing machines that activate the aluminum material through mechanical impingement and heat into a porous finish with an alkaline wash and soap. Currently, the wastewater generated on site is collected in a 500-gallon batch tank and the company mostly relies on wastewater equalization to achieve a neutral pH.

July 1 – December 31, 2019

On **October 25, 2019**, CP Armstrong had a pH violation, for which a Notice of Violation was issued on **December 10, 2019**.

January 1 – June 30, 2020

On **January 9, 2020**, OCSD conducted a Compliance Inspection during which CP Armstrong submitted their corrective action letter. CP Armstrong indicated that at the time of the violation, the facility was only running post-anodize wash solution, which is a low pH solution, and the batch was not pre-tested for pH before discharge to the sewer system. Corrective actions included: (1) simultaneously running all operations such that the combined wastestream would self-neutralize itself within the compliant range, (2) pre-testing the batch before discharge to the sewer system, and (3) neutralizing the batch if pre-test shows noncompliance with the pH limits.

CP Armstrong had no further violations during this reporting period. OCSD will continue to monitor CP Armstrong's discharge and compliance status on a quarterly basis.

Darling International, Inc (Permit No. 1-511378)

Darling International, Inc. (Darling) collects and treats waste from interceptors, clarifiers, and grease traps of food service establishments within the Southern California Region. Hauled waste is transported to the facility yard, unloaded to a large underground sump, then pumped to aboveground batch treatment tanks where it is treated with lime and polymer to enhance separation of solids and liquids. The sludge is dewatered and allowed to air dry in large rectangular vessels. The treated wastewater is collected and discharged to the sewer. The wastewater discharge permit authorizes Darling to discharge wastewater from the treatment of grease trap waste from restaurants, cafeterias, or other similar facilities, but not yellow grease or cooking oil. In addition, processing of grease from industrial kitchens, car washing facilities, metal recycling yards, or other sources of industrial or hazardous wastes is prohibited; and any generator sources outside of OCSD's service area must have a profile submitted in advance to OCSD for review and acceptance.

In August 2018, Darling had a pH violation. In November 2018, OCSD conducted a Compliance Inspection during which Darling stated that pH monitoring is achieved using pH strips at various points in the process including the wastewater collection sump. However, no pH logs were kept. OCSD attributed the pH violation to the inconsistent and unreliable manual pH adjustment process and inadequate monitoring utilizing pH strips. In addition, some pH fluctuation is attributable to the organic nature of the waste. OCSD required installation of a pH meter and a pH recorder, as well as operator

training.

In June 2019, Darling had another pH violation.

July 1 – December 31, 2019

On **July 9, 2019**, a Notice of Violation was issued for the June 2019 noncompliance. On **July 18, 2019**, OCSD conducted a Compliance Inspection to follow up on the ongoing pH violations. As a result of the recurring noncompliance with pH limits due to the lack of an effective pH adjustment and control system at Darling's facility, OCSD issued a Compliance Requirements Letter on **August 12, 2019**, requiring the submittal of a waste management proposal by **September 15, 2019**, and after acceptance by OCSD, for Darling to complete installation of the proposed pretreatment system by **October 31, 2019**. On **September 13, 2019**, Darling submitted a proposal to install a pH adjustment system in an existing tank upstream of the clarifying tanks. On **October 2, 2019**, OCSD accepted the proposal with revisions, which included the installation of a pH adjustment system, pH monitoring system, and a rain diversion sensor to prevent the discharge of storm water into the sewer. Darling completed installation of the pH adjustment system on **October 30, 2019**.

January 1 – June 30, 2020

Darling had no further violations during this reporting period. OCSD will continue to monitor Darling's discharge and compliance status on a quarterly basis.

Data Aire, Inc. #2 (Permit No. 1-021379)

Data Aire, Inc. #2 (Data Aire) receives cold rolled steel and manufactures frames to house cooling equipment. Steel is sheared, bent, punched, welded, and assembled into frames. An iron phosphate conversion coating is applied to the frame prior to powder-coating and baking. Some parts may alternately undergo painting in a spray booth. The components for the cooling systems, which include electrical equipment and heat exchanging coils, are purchased from other companies, and not manufactured on site. Approximately 300-400 parts are cleaned per day. The heat exchange coils are made of copper tubing and aluminum fins and undergo hydrostatic leak testing as part of the production process. Wastewater is generated from the rinsing of frames during the application of iron phosphate conversion coating. The wastewater is pH adjusted based on the iron phosphate conversion floating flow rate and then discharged through a clarifier to the sewer.

July 1 – December 31, 2019

On **July 25** and **July 26, 2019**, Data-Aire had pH violations for which a Notice of Violation was issued on **August 8, 2019**. On **September 9, 2019**, OCSD conducted a Compliance Inspection to investigate the violations. In previous inspections, OCSD noted that the treatment system lacked pH monitoring and only relied on a controller that doses caustic to the wastewater based on the flow of iron phosphate (ratio control). During the inspection, OCSD reminded Data Aire of its responsibility to maintain compliance at all times of wastewater discharge, indicating that pH must be monitored continuously. As a corrective action, on **September 29, 2019**, Data Aire submitted a proposal to install a pH monitoring system with high and low alarms and digital data logging. OCSD accepted the proposal with an expected work completion date of **October 31, 2019**. On **November 18, 2019**, OCSD conducted a follow-up inspection and verified installation of the pH monitoring system.

January 1 – June 30, 2020

Data-Aire had no further violations during this reporting period. OCSD will continue to monitor Data-Aire's discharge and compliance status on a quarterly basis.

DCOR, LLC (Permit No. 1-111013)

DCOR, LLC (DCOR) is a facility that receives and separates crude oil and water from offshore drilling platforms. Crude oil is stored and shipped to other facilities while the separated water is discharged to the sewer.

July 1 – December 31, 2019

On **November 6, 2019**, OCSD conducted a Compliance Inspection to determine if stormwater was being discharged to the sewer from the DCOR facility. During the inspection, the site contact stated that stormwater is collected, treated, and discharged to the sewer. OCSD informed DCOR that stormwater is prohibited from being discharged to the sewer in accordance with OCSD's Wastewater Discharge Regulations Ordinance. On **December 30, 2019**, OCSD issued a Compliance Requirements Letter requiring DCOR to develop a proposal to cease the discharge of any stormwater, surface runoff, or subsurface drainage to the sewer, and submit the proposal to OCSD and after acceptance, complete implementation of the accepted proposal by next quarter.

January 1 – June 30, 2020

On **February 28, 2020**, DCOR submitted a proposal to cease discharge of stormwater to the sewer and re-route the collected stormwater to a storm drain after testing and complying with applicable regulations. Due to the recent pandemic and work slowdown, DCOR requested and was granted an extension to complete the project by **September 30, 2020**.

OCSD will continue to monitor DCOR's progress and compliance status during the next reporting period.

Derm Cosmetic Labs, Inc. (Permit No. Z-600455)

Derm Cosmetic Labs, Inc. (Derm), also known as LA's Totally Awesome Products, manufactures various cleaning and disinfectant products. Products manufactured include laundry detergent, bleach, chlorine, fabric softener, liquid dish detergent, all-purpose cleaner, degreaser, liquid hand soap, drain cleaner, fabric refresher, floor cleaner, odor eliminator, pet shampoo/stain remover/odor eliminator, and various automotive wash and cleaners. Derm's process involves receiving bulk or raw product that has either not passed name-brand manufacturer inspection or has been damaged during shipment, and re-bottling, remixing, or blending/diluting prior to shipping and receiving to various discount supply stores. All tanks are dedicated to a specific product. If a tank is required to be cleaned, the wastewater generated is run through an above-ground clarifier and reused to produce liquid and gel drain opener.

January 1 – June 30, 2020

On **February 20, 2020**, OCSD conducted a Compliance Inspection to verify Derm's compliance with its Zero Discharge Certification. During the inspection, OCSD observed wastewater from the chlorine manufacturing and washing operations flowing into the floor drains which lead to an underground sump with connections to the local sewer. This discharge is in violation of Derm's Zero Discharge Certification. Wastewater flowing to the sump from the chlorine manufacturing and bottling area was highly concentrated, creating a potential for discharge violations prohibited by OCSD's Wastewater Discharge Regulations Ordinance.

On **February 21, 2020**, OCSD issued Derm an Order to Cease Non-Compliant Discharge and Cease Discharge without a Valid Permit. In the letter, OCSD listed several specific discharge prohibitions related to the concentrated chlorine product and directed Derm to attend a Compliance Meeting on **March 17, 2020**. However due to state and local guidance's resulting from the COVID-19 pandemic, the Compliance Meeting was postponed to a later date.

OCSD will conduct a Compliance Meeting with Derm during the next reporting period and will continue to monitor Derm's compliance status on a quarterly basis.

Dr. Smoothie Enterprises - DBA Bevolution Group (Permit No. 1-600131)

Dr. Smoothie Enterprises – DBA Bevolution Group (Dr. Smoothie) processes, packages, and distributes fruit beverage concentrates. The operations performed include mixing of concentrates manufactured offsite, packaging, and distribution.

In November 2018, Dr. Smoothie had a minor pH violation. In December 2018, OCSD conducted a Compliance Inspection and resampling during which OCSD indicated that pH treatment may be necessary to ensure consistent compliance, particularly since the pH levels of some of the fruit concentrate products they process are below the local limit of 6.0 S.U. The resampling result showed another pH violation.

In March 2019, OCSD held a Compliance Meeting with Dr. Smoothie during which the company reported that they have implemented manual pH adjustment on all wastestreams that are found to be acidic, with future plans to install a large (500 gallon) collection tank where the acidic wastestreams can be collected and treated with an automated pH adjust system.

July 1 – December 31, 2019

On **August 21, 2019**, Dr. Smoothie had another pH violation, for which a Notice of Violation was issued on **September 12, 2019**. On **October 7, 2019**, OCSD issued a Compliance Requirements Letter to Dr. Smoothie requiring them to attend a Compliance Meeting on **October 30, 2019**. During the meeting, Dr. Smoothie indicated that they are continuing manual pH adjustment; however, with the ongoing pH violations, Dr. Smoothie proposed installation of an automated pH adjustment system.

January 1 - June 30, 2020

On **April 15, 2020**, Dr. Smoothie had another pH violation, for which a Notice of Violation was issued on **April 30, 2020**. On **May 26, 2020**, following Dr. Smoothie's continued pH noncompliance, OCSD issued a Compliance Requirements Letter requiring installation of the automated pH adjustment system by **July 31, 2020**. The proposal for the system was received on **June 18, 2020**.

OCSD will conduct a Compliance Inspection during the next quarter to verify progress of the pH adjustment system installation.

Electrolurgy, Inc. (Permit No. 1-071162)

Electrolurgy, Inc. (Electrolurgy) is a large job shop specializing in metal finishing services for aerospace, electronics, industrial, medical, and military/defense applications. The wet processing of a typical aluminum part begins with alkaline cleaning/etching followed by deoxidation and anodizing, or by activation (zincate, copper strike, or nickel strike) and the specified surface finish (electroless nickel, cadmium, or tin plate). The processing of a typical steel part proceeds by alkaline cleaning, hydrochloric activation/descale followed by the specified surface finish (bright nickel, cadmium, copper, electroless nickel). Stainless steel parts generally receive alkaline cleaning followed by passivation or electropolishing. The processing of a typical copper part begins with alkaline and ultrasonic cleaning followed by sulfuric activation, copper strike, and nickel plate. All wet operations are conducted manually using basket, barrel, rack, or wire process techniques. Wastewater is generated from the various spent process solutions and associated rinses.

July 1 – December 31, 2019

On **August 28, 2019**, Electrolurgy had a silver violation. This daily limit exceedance also resulted in a monthly average discharge limit violation for silver in the month of August 2019. On **October 9, 2019**, OCSD conducted a Compliance Inspection during which OCSD informed Electrolurgy of the silver violation that was being processed by OCSD for issuance. On **October 14, 2019**, OCSD issued a

Notice of Violation for the August 2019 silver daily limit violation. **October 17, 2019**, OCSD issued a Compliance Requirements Letter requiring Electrolurgy to implement corrective solutions to address the observed non-compliance issues at the facility by **November 30, 2019**. On **November 7, 2019**, OCSD issued a Notice of Violation for the August 2019 silver monthly limit violation. On **November 14, 2019**, OCSD received Electrolurgy's response to the silver violation, which failed to identify the source of the non-compliance. On **December 2, 2019**, OCSD received Electrolurgy's response to OCSD's October 2019 Compliance Requirements Letter, which also failed to satisfy OCSD's requirements.

January 1 – June 30, 2020

On **January 23, 2020**, OCSD issued a Compliance Requirement Letter requiring Electrolurgy to attend a compliance meeting. On **February 11, 2020**, OCSD held the Compliance Meeting with Electrolurgy during which OCSD attributed the compliance issues to an overall lack of control at the facility as demonstrated by the excessive hosing/piping, improper waste segregation, and changes to process without proper notification to OCSD. On **March 12, 2020**, OCSD issued another Compliance Requirements Letter directing Electrolurgy to remove all excessive flex hosing, satisfy a qualified operator requirement, conduct a waste characterization and a water balance study, and submit monthly waste manifests and onsite chrome reduction procedure. On **April 16, 2020**, OCSD received Electrolurgy's initial response to the Compliance Requirements Letter. This response letter addressed some flexible hosing changes, waste manifest record-keeping practices, and a chrome treatment procedure. Electrolurgy also cited various sources of leaks/wasteful water use and requested an extension on the water balance submission to **May 30, 2020**. After reviewing the justification for the request made by Electrolurgy, OCSD approved the request and granted the extension. On **May 1, 2020**, OCSD received Electrolurgy's water balance which failed to identify observed discrepancies in water use at the facility. OCSD requested Electrolurgy to conduct two additional months of water balance study.

In **May 2020**, Electrolurgy had a zinc monthly average discharge limit violation, for which a Notice of Violation will be issued during the next quarter. OCSD will also issue another Compliance Requirements Letter in the next reporting period.

Electron Plating Inc. (Permit No. 1-021336)

Electron Plating Inc. (Electron Plating) takes in metal parts from various customers and surface finishes them with chromate-based chemfilming, dye coloring, zinc plating, and aluminum anodizing. The parts come primarily from the automotive, home improvement (bathroom fixtures), and construction industries. Alkaline and acidic pre-cleaners are used, along with drag-out tanks after most process solutions, followed with running rinses. A standard continuous hydroxide-based pretreatment system is used for heavy metals removal, along with a hexavalent chrome reduction module with automated pH and ORP controls. A large lamella-type clarifier is used for solids settling, and a filter press is used for solids dewatering.

July 1 – December 31, 2019

In **November 2019**, Electron Plating had a cadmium monthly average discharge limit violation.

January 1 – June 30, 2020

On **February 4, 2020**, OCSD issued a Notice of Violation for the November 2019 cadmium monthly limit violation. Samples collected since the violation have been compliant. OCSD will continue to monitor Electron Plating's discharge to determine if additional enforcement is necessary.

Excello Circuits Manufacturing Corporation (Permit No. 1-521855)

Excello Circuits Manufacturing Corp (Excello) fabricates printed circuit boards. The production of printed circuit boards includes copper foil lamination onto glass, epoxy, or plastic surfaces, as well as drilling,

deburring, and sanding, Wet processes include electroplating (copper and tin), electroless copper plating, brown oxide, resist strip, etching, desmear, soldermask cleaning, alkaline cleaning, acidic cleaning, and associate rinsing. Excello utilizes both continuous and batch pretreatment systems. Treatment is completed using hydroxide precipitation in two mix tanks, clarification, and solids processing by a filter press.

January 1 – June 30, 2020

On **February 4, 2020**, Excello had a copper mass violation, for which a Notice of Violation was issued on **March 12, 2020**. The copper mass violation resulted from the discharge of three times the normal flow with three times the normal level of copper, which strongly indicates use of dilution to meet compliance with concentration limits. On **March 11, 2020**, Excello had a pH violation, for which a Notice of Violation was issued on **April 2, 2020**. On **April 8, 2020**, OCSD conducted pH resampling and the results showed compliance. On **May 20, 2020**, OCSD conducted a Compliance Inspection to investigate the root cause of the copper and pH violations. Excello did not provide an adequate explanation for the unusually high flow (over 18,000 gallons) during the day of the copper mass violation. Excello attributed the pH violation to operator error. Excello reported that a new operator allowed overflow of acidic rinses, which slugged the treatment system, resulting in discharge of untreated flow into the sample point. To prevent future pH violations, Excello had already installed a pH sensor and alarm to notify operators of any pH fluctuations.

OCSD will continue to monitor Excello's discharge and compliance status during the next report period.

Fabrication Concepts Corporation Permit No. 1-011068)

Fabrication Concepts Corporation (Fabcon) is a job shop powder coating and fabrication facility broken into three divisions: creative, procession, and systems. Fabcon manufactures signage, shelving, and display units for various industries. Operations include washing, powder coating, painting, drying, machining, tumbling, and assembly. Wastewater is mostly generated from the powdercoating pre-wash and tumbling/deburring operations. Pretreatment consists of a continuous flow pH neutralization system and clarification for solids removal.

January 1 – June 30, 2020

Fabcon had a pH violation on **April 13, 2020**, and a pH and a zinc violation on **April 14, 2020**, for which a Notice of Violation was issued on **April 30, 2020**. The zinc daily limit exceedance also resulted in a zinc month average discharge limit violation in the month of April 2020. On **May 11, 2020**, OCSD conducted a Compliance Inspection during which Fabcon attributed the pH violations to faulty pH meters in the first and third chambers of the three-stage aboveground clarifier, resulting in a failure in the automated pH neutralization system. Fabcon indicated that they have not been able to identify the cause of the zinc violation. OCSD informed Fabcon that zinc violations at powdercoating industries normally come from the discharge of spent iron phosphate solution to the sewer. Fabcon claimed that they wastehaul their spent phosphate solution every six to eight months. On **June 10, 2020**, OCSD issued a Compliance Inspection Summary and Requirements Letter requiring Fabcon to submit a corrective action report identifying the cause of the zinc violation and the efforts for achieving long-term compliance. On **June 29, 2020**, Fabcon submitted the required corrective action report, which identified carryover of excessive solids accumulation in the iron phosphate tank and clarifier into the sample point as the root cause of the zinc violation. To maintain compliance with the discharge requirements, Fabcon committed to increasing the frequency of the pump out of the iron phosphate tank and clarifier from annually to semi-annually and performing a thorough pressure wash after emptying.

OCSD will issue a Notice of Violation for the April 2020 zinc monthly limit violation during the next quarter, and OCSD will continue to monitor Fabcon's discharge and compliance status on a quarterly basis.

Gemini Industries, Inc. (Permit No. 1-071172)

Gemini Industries, Inc. (Gemini) provides precious metals recovery and refining services for the petrochemical and petroleum refining industries. The facility is a large wet processing operation that specializes in the recovery of platinum, palladium, rhenium, germanium, and gold from spent chemical catalysts. Gemini's wet processes yield purified precious metals, refinable metal residue, and aluminum sulfate solution, sold as alum for municipal water and wastewater treatment.

The recovery of precious metals at Gemini begins with spent catalyst from various customers which arrive in 55-gallon steel drums or flow bins. The catalyst is fed to a sampling system to determine specific constituent concentrations as well as the potential precious metals yield. Processing the spent catalyst begins with sulfuric acid digestion, generating a hot slurry which is pumped to mixing and settling tanks. The liquid decant is filtered through various filtration devices while the solids are wasted, dewatered, and dried. Pure palladium or other precious metals are recovered from the solids while the liquid undergoes further precious metals recovery. Spent rhenium catalyst processing follows a similar procedure aimed at the recovery of rhenium as ammonium perrhenate salts. The effluent discharge at Gemini is generated by decant liquids from the final metal precipitation and recovery process.

July 1 – December 31, 2019

On **November 6, 2019**, Gemini had a molybdenum violation, for which a Notice of Violation was issued on **December 12, 2019**.

January 1 – June 30, 2020

On **February 3, 2020**, OCSD conducted a Compliance Inspection and resampling, during which OCSD reviewed various material safety data sheets but could not identify the source of the molybdenum violation. Gemini stated that no molybdenum is used in their metal recovery process. Gemini stated it would closely monitor their discharge molybdenum to determine if any process contributed to the violation.

OCSD will continue to monitor Gemini's discharge and compliance status on a quarterly basis.

Golden State Pumping LLC (Permit No. 1-600975)

Golden State Pumping LLC (Golden State) receives, treats, and disposes of grease from food service interceptors, clarifiers, and grease traps within the Southern California Region. Wastes from food service establishments are hauled to the facility yard and treated with caustic and polymer to enhance separation. The solids are wastehauled and the separated water is discharged to the sewer. No yellow grease rendering operations are conducted onsite. The permit prohibits receipt of waste from industrial kitchens, car washing facilities, metal recycling yards, or other sources of industrial or hazardous wastes; and any generator sources outside of OCSD's service area must have a profile submitted in advance to OCSD for review and acceptance.

January 1 – June 30, 2020

On **March 4, 2020**, OCSD staff conducted a joint inspection with the Anaheim Fire Department, Orange County Health Care Agency, and City of Anaheim Code Enforcement. During the inspection, OCSD determined that Golden State had made modifications without written notification, including the addition of a boiler and grey water tank. The Anaheim Fire Department and Anaheim Code Enforcement staff also found violations related to building code and permitting. On **May 21, 2020**, Golden State had a pH violation, for which a Notice of Violation was issued on **June 4, 2020**. On **June 16, 2020**, OCSD conducted a Compliance Inspection and detected another pH violation, for which a Notice of Violation was issued on **June 30, 2020**. During the inspection, OCSD observed that Golden State lacked the ability to adjust or monitor the pH of the discharged wastewater. OCSD also determined that Golden State had implemented additional process modifications including installation of a filter press and re-

routing of process flows, without prior notification to and acceptance by OCSD. As a result, on **June 30, 2020**, OCSD issued a Compliance Requirements Letter to Golden State to address the aforementioned compliance deficiencies.

OCSD will continue to monitor Golden State's discharge and verify Golden State's compliance with the Compliance Requirements Letter during the next quarter.

Graphic Packaging International, Inc. (Permit No. 1-571314)

Graphic Packaging International, Inc. (Graphic Packaging) performs lithographic printing, cutting, folding, and gluing of paperboard. Industrial wastewater is generated from water used to rinse baking compounds from lithographic plates, water used to wash and rinse glue pots with citrus-based cleaner, and water used at each printing press.

January 1 – June 30, 2020

On **April 27, 2020**, Graphic Packaging had a pH violation, for which a Notice of Violation was issued on **May 14, 2020**. On **June 3, 2020**, Graphic Packaging submitted their corrective action report to address the pH violation. Graphic Packaging attributed the violation to the use of citrus-based cleaner to rinse glue pots. Under normal facility conditions, the various combined wastestreams neutralize to the compliant pH range upon commingling. Graphic Packaging reported that the low flow conditions during the time of the violation due to a scheduled maintenance of the printing process while the Finishing Department was cleaning the glue pots resulted in a pH imbalance in the wastestream. To prevent future violations, the company will ensure that discharge will be stopped if all sources of wastewater are not simultaneously discharging to the sewer system.

OCSD will continue to monitor Graphic Packaging's discharge and compliance status on a quarterly basis.

Harbor Truck Bodies, Inc. (Permit No. 1-021286)

Harbor Truck Bodies, Inc. (Harbor Truck) manufactures utility bodies, platform beds, toolboxes, and rear step-bumpers. Wastewater is generated from the soap cleaning and phosphate washing processes as well as rinsing in the spray booth. Wash water is collected in a large trench and sump system installed in the wash chamber floor. From the sump, the wash water is pumped by liquid level control to a three-stage pretreatment system on the west side of the facility, where pH is adjusted in the first stage using caustic, followed by polymer/floc addition for solids precipitation in the second stage, and then overflow into a collection/solids settling tank. Wastewater is discharged by gravity out of the building to a three-stage underground clarifier. Harbor Truck uses a filter press for dewatering of solids from the settling tank.

In April 2019, Harbor Truck had a zinc monthly average discharge limit violation. In June 2019, OCSD conducted a pre-permit inspection during which OCSD informed Harbor Truck of the zinc monthly limit violation. During the inspection, Harbor Truck stated that the root cause of the zinc exceedance was a lack of regular maintenance of the clarifier.

July 1 – December 31, 2019

On **July 1, 2019**, OCSD issued a Notice of Violation for the April 2019 zinc monthly limit violation. On **August 2, 2019**, Harbor Truck submitted a corrective action report indicating that the clarifier will be maintained on a quarterly basis. This corrective action was also added as a requirement on Harbor's permit as a special condition.

January 1 – June 30, 2020

Harbor Truck had no further violations during this reporting period. OCSD will continue to monitor Harbor

Truck's discharge and compliance status on a quarterly basis.

Hi Tech Solder (Permit No. 1-521790)

Hi Tech Solder is a specialty processing shop performing hot air solder leveling of printed circuit boards. Wastewater is generated from the pre-cleaning and micro-etching processes and their associated rinses. Hi Tech Solder utilizes a batch and a continuous hydroxide precipitation pretreatment system.

January 1 – June 30, 2020

On **January 17, 2020**, Hi Tech Solder had a copper violation, for which a Notice of Violation was issued on **February 18, 2020**. On **March 11, 2020**, OCSD conducted a Compliance Inspection and resampling during which Hi Tech Solder reported that the copper violation was due to excessive solids buildup in the pretreatment system resulting in carryover of solids into the sample point. As a corrective action, Hi Tech emptied and cleaned all the vessels in the pretreatment system and installed cloth filters in the effluent holding tank discharge pipe and in the second stage of the downstream clarifier to prevent any suspended solids from getting into the third stage, which acts as the sample box. The resampling results showed another copper violation and a lead violation, for which a Notice of Violation was issued on **April 2, 2020**. These daily limits exceedances also resulted in copper and lead monthly average discharge limits violations in the month of March 2020, for which a Notice of Violation was issued on **June 4, 2020**. On **April 7, 2020**, Hi Tech Solder had another copper violation, for which a Notice of Violation was issued on **April 16, 2020**. This copper daily limit exceedance also resulted in a copper monthly average discharge limit violation in the month of April 2020.

On **May 6, 2020**, OCSD conducted a follow-up Compliance Inspection and resampling to investigate the source of the new lead violation and the recurrence of the copper violation. The resampling results showed further copper and lead violations, for which a Notice of Violation was issued on **May 21, 2020**. These daily limits exceedances also resulted in copper and lead monthly average discharge limits violations in the month of May 2020. On **May 18, 2020**, OCSD issued a Compliance Requirements Letter requiring Hi Tech Solder to conduct a multi-day compliance verification sampling from **June 1 to June 4, 2020** to verify effectiveness of corrective measures implemented onsite. The results of the multi-day sampling showed compliance. However, OCSD noted an increasing trend in the copper concentrations indicating inadequate control of the pretreatment system.

OCSD will issue a Notice of Violation for the April 2020 and May 2020 copper and lead monthly limit violations, and will issue a Compliance Requirements Letter in the next reporting period requiring Hi Tech to submit a proposal to implement Best Available Technology to treat copper slug concentrations from the spent microetch solution. Additionally, OCSD will revise the permit in the next reporting period to increase the copper and lead self-monitoring frequency from quarterly to weekly.

Hightower Plating & Manufacturing Co. (Permit No. 1-021185)

Hightower Plating & Manufacturing Co. (Hightower) manufactures aerospace-quality washers by stamping steel, stainless steel, and aluminum coils. The parts are deburred and then processed through a variety of metal finishing steps depending on the material, to achieve the desired finish. Hightower's metal finishing operations include alkaline cleaning, acid activation, chromic and sulfuric anodizing, cadmium plating, acid zinc plating, nickel plating, caustic etching, deoxidation, chem film, dichromate sealing, and passivation.

Low concentration waste streams are treated using two ion exchange systems - one for cyanide bearing waste streams and one for non-cyanide bearing waste streams. The treated water is returned to the process tanks for reuse. The regenerant wastes from both ion exchange systems are processed through an evaporator. Concentrated wastes (including but not limited to chromic acid from the anodizing tanks) are wastehailed off-site. A small number of waste streams from the sulfuric anodize and chem film lines are sent to a chromium collection tank and then treated using the chromium reduction system.

In May 2019, Hightower had cadmium concentration and mass violations. In a response letter submitted in June 2019, Hightower stated that its investigation failed to identify a root cause, as no changes to its wastewater generating and treatment activities have occurred, and confirmation sampling conducted by Hightower in May and June 2019 showed compliance with the cadmium limits. Hightower had their split sample analyzed, which yielded a lower result but still in exceedance of the cadmium limit.

July 1 – December 31, 2019

On **July 11, 2019**, OCSD conducted a Compliance Inspection to investigate the cadmium violations that occurred in May 2019. Hightower has been in the process of transitioning from using cyanide destruct and chromium reductions systems to treating ion exchange regenerant with an evaporator. During this transition, some of the cadmium bearing regenerant may not have been treated completely using the cyanide destruct system.

In a follow-up letter submitted in July 2019, Hightower stated that the site would be sending cadmium ion exchange regenerant to the wastewater evaporator under normal conditions to eliminate the reoccurrence of a cadmium violation.

OCSD required Hightower to develop and submit updated site drawings and reminded Hightower that the permittee is required to provide advance written notification to OCSD of any changes to the manufacturing process or pretreatment system that affects the quantity or quality of the wastewater discharged to the sewer. Hightower submitted updated facility drawings on **October 1, 2019**.

January 1 – June 30, 2020

Hightower had no further violations during this reporting period. OCSD will continue to monitor Hightower's discharge and compliance status on a quarterly basis.

Hixson Metal Finishing (Permit No. 1-061115)

Hixson Metal Finishing (Hixson) is a large metal finishing job shop. Various metallic parts from the aviation, automotive, and electronics industries are received for surface finishing through aluminum chemfilm and dyeing, cadmium, copper, and nickel electroplating, stainless-steel passivation, as well as a multitude of chemical precleaning and surface activation processes. Wastewater is generated from the rinses used in the various surface finish processes and fume hood wash water. Pretreatment consists of cyanide destruction and chrome reduction followed by heavy metals precipitation using caustic soda for pH adjustment, coagulant injection, polymer/flocculation and solids settling in a lamella clarifier, and removal to a sludge thickening tank. Overflow from the clarifier is discharged to the sample box. The sludge from the clarifier is dewatered with a filter press. Filtrate from the filter press is plumbed to the heavy metals precipitation module for further treatment.

In December 2017 and through 2018, OCSD issued Hixson multiple enforcement actions including Notices of Violation, compliance meetings, an Order to Cease Noncompliant Discharges, and a Settlement Agreement. The Settlement Agreement included administrative penalties for multiple discharge violations of cadmium, copper, chromium, nickel, as well as requirements to address pretreatment deficiencies identified by OCSD in the facility including lack of operating procedures and lack of pretreatment system control and maintenance. In addition to the Settlement Agreement requirements, installation of an ion exchange system was necessary as a result Hixson's limits changing from Pretreatment Standards of Existing Sources (PSES) designation to Pretreatment Standards of New Sources (PSNS). In March 2019, Hixson's new permit limits under the Pretreatment Standards for New Sources (PSNS) became effective. In May and June 2019, Hixson had cadmium daily and monthly average discharge limit violations.

July 1 – December 31, 2019

On **July 8** and **July 22, 2019**, OCSD issued Notices of Violation for the May and June 2019 cadmium violations, respectively. On **July 31, 2019**, OCSD conducted a Compliance Inspection and resampling during which Hixson mentioned that the company was still fine-tuning various components of a new closed-loop ion-exchange (IX) system. The Hixson representative believed that production employees were generating carry-over from cadmium process tanks to rinse tanks not piped through the IX system, and therefore discharging to the continuous treatment system. Hixson informed OCSD that they would alert and train production staff on proper BMP's as they pertain to cadmium plated parts, allowing for proper rinsing in the closed-loop IX system before moving to a different rinse tank. The resampling results showed compliance.

On **August 23, 2019**, OCSD issued a Notice of Violation for the June 2019 cadmium violation. On **August 30, 2019**, OCSD issued a Notice of Violation for the May 2019 cadmium monthly limit violation. Hixson noted that the company was unable to determine the source of the violation, and it was noted that most sampling results prior had been well below monthly average limits and daily average limits, as were the following samples.

On **November 19, 2019**, Hixson had another cadmium violation. On **November 26, 2019**, OCSD issued a Notice of Violation for the June 2019 cadmium monthly limit violation. On **December 30, 2019**, OCSD issued a Notice of Violation for the November 2019 cadmium violation.

January 1 – June 30, 2020

On **January 13, 2020**, OCSD conducted a Compliance Inspection and resampling during which Hixson reported that they had installed cameras in the processing areas where cadmium plating tanks are present. Following installation of the cameras, Hixson was able to closely monitor plating employees and verify proper rinsing times. Hixson also held training with plating employees to discuss and reiterate proper rinsing protocols and required rinsing times; the resampling results showed compliance. On **January 15, 2020**, OCSD issued a Notice of Violation for the November 2019 cadmium violation.

On **April 8, 2020**, Hixson had a silver violation, for which a Notice of Violation was issued on **May 28, 2020**. On **June 9, 2020**, Hixson had another silver violation, for which a Notice of Violation will be issued in the next quarter. After reviewing video footage of the precious metals plating room for each violation date, Hixson had determined that a recently hired employee was improperly bypassing the required dragout tank following the silver strike processing tank and placing parts directly to a running rinse. Hixson re-trained the employee in correct rinsing protocols.

OCSD will continue to monitor Hixson's discharge and compliance status on a quarterly basis.

Howmet Global Fastening Systems Inc. (Permit No. 1-021081), formerly listed as Arconic Global Fasteners & Rings, Inc.

Howmet Global Fastening Systems Inc. (Howmet) manufactures aluminum, titanium, and steel fasteners. Wastewater-generating processes include cadmium, copper, silver, nickel and zinc plating, potassium permanganate treatment, cyanide stripping, glycol lubricant coating, acid stripping, chromate conversion coating, deburring, quenching, miscellaneous cleaning (mop water), acid/alkaline cleaning, and air scrubbing. Howmet's continuous pretreatment system consists of pH adjustment, cyanide destruction, chromium reduction, clarification, and sludge dewatering using a filter press. Separate, dedicated pretreatment systems are used including electrowinning (for silver plating) and oil/water separation.

In September 2017, Howmet had a cyanide (amenable) violation. In December 2017, OCSD conducted a compliance inspection and routine sampling during which the sampling method/location for cyanide sampling was discussed and the cyanide treatment system was found to be adequately working. The sampling results showed compliance. In February 2018, Howmet sent OCSD a letter contesting the

cyanide violation. After a comprehensive review, OCSD concluded that the sample result was valid, and therefore the violation was upheld.

In February 2019, Howmet had cadmium and molybdenum violations. In June 2019, OCSD conducted a Compliance Inspection and resampling, during which Howmet identified a lubricant product in use at the facility as the likely source of the molybdenum violation. The resampling results showed compliance. However, routine sampling conducted later that month showed another molybdenum violation. Howmet also exceeded its cyanide (amenable) monthly average discharge limit in June 2019.

July 1 – December 31, 2019

On **August 12, 2019**, OCSD issued a Notice of Violation for the June 2019 molybdenum noncompliance. On **August 29, 2019**, OCSD conducted a Compliance Inspection during which Howmet detailed another operation that is a possible source of molybdenum, which was the cleaning of dip baskets with dry-film lubricant (containing molybdenum) in one of the rinses. Howmet had trained its staff to clean the baskets in the molten salt bath specifically designed for that purpose.

On **September 3, 2019**, OCSD issued a Notice of Violation for the June 2019 cyanide (amenable) monthly limit violation. On **September 18, 2019**, Howmet forwarded a corrective action report, which stated that the company had re-evaluated the cyanide treatment equipment and replaced the ORP and pH measurement equipment to improve performance.

Howmet performed voluntary multi-day self-monitoring on **September 17 - 19, 2019**. The sampling showed molybdenum violations on the 17th and 19th, for which a Notice of Violation was issued on **October 3, 2019**. On **October 21, 2019**, Howmet was published as significantly non-compliant for the 2018-2019 reporting period due to chronic and acute molybdenum discharge violations that occurred on **February 20, 2019** and **June 19, 2019**. On **November 7, 2019**, OCSD issued a Compliance Requirements Letter requiring Howmet to attend a Compliance Meeting on **December 3, 2019**. During the meeting, Howmet detailed efforts taken to date intended to improve compliance including employee training, replaced control and treatment equipment (ORP, pH and new microfiltration media), substitution of cooling tower additive to a non-molybdenum chemical, and the implementation of on-site laboratory molybdenum testing of the suspect solutions prior to discharge. On **December 12, 2019**, Howmet submitted a letter summarizing the afore-mentioned corrective actions.

January 1 – June 30, 2020

On **February 26, 2020**, Howmet had another cyanide (amenable) violation, for which a Notice of Violation was issued on **March 30, 2020**. This cyanide (amenable) daily limit exceedance also resulted in a cyanide (amenable) monthly average discharge limit violation. In **February** and **April 2020**, Howmet had cyanide (amenable) and cyanide (total) monthly average discharge limit violations, for which Notices of Violation will be issued during the next quarter. On **April 8, 2020**, OCSD conducted a compliance inspection and resampling during which Howmet attributed the violation to a probe that failed, but which had since been replaced; the resampling results showed compliance.

OCSD will continue to monitor Howmet's discharge and compliance status on a quarterly basis.

Independent Forge Company (Permit No. 1-021401)

Independent Forge Company (Independent Forge) forges parts for commercial aviation, military specific applications, and other market sectors including bicycles, archery, jet ski, and motorcycle parts. Wastewater is generated from the deburring, caustic etching, acid cleaning, and dye penetrant testing operations and associated rinses. Independent Forge uses a batch treatment system to treat the waste streams from the caustic etching and acid cleaning operations.

In February 2019, Independent Forge had zinc daily and monthly average discharge limit violations. Independent Forge claimed that the root cause of the violation was the filter press, citing the age of the

mesh material on the plates, which caused a loss of removal efficiency. However, Independent Forge was unable to explain the increase of zinc from 12.4 mg/L to 36.6 mg/L between the two sample dates, despite Independent Forge's claim that it was the same batch of treated wastewater. In April 2019, OCSD conducted a Compliance Inspection during which several deficiencies were noted including the lack of a functioning pH meter in the batch treatment system, excessive accumulation of metal-bearing solids in the batch treatment tank, the use of the batch treatment tank as the final holding tank prior to discharge, and the lack of an effective batch treatment procedure.

In May 2019, Independent Forge had another zinc monthly average discharge limit violation. OCSD issued a Compliance Requirements Letter directing Independent Forge to attend a Compliance Meeting later that month to discuss multiple noncompliance issues. In June 2019, OCSD issued a Probation Order requiring Independent Forge to rectify the compliance issues noted above.

July 1 – December 31, 2019

On **August 15, 2019**, Independent Forge submitted a wastewater characterization and waste management plan; however, the waste management plan was incomplete and missing the proposal for batch treatment system modifications. After hiring a third-party consultant, Independent Forge re-submitted the waste management plan with a proposal for batch treatment system modifications. The proposal was not accepted since the planned modifications would not provide Independent Forge the means to maintain long term compliance. On **August 29, 2019**, OCSD issued a Notice of Violation for the May 2019 zinc monthly limit violation. In **September 2019**, Independent Forge indicated they would no longer renew their Class I Wastewater Discharge Permit, which was about to expire at the end of that month, as they intended to pursue a Zero Discharge Certification instead. On **September 18, 2019**, OCSD issued an Order to Cease Discharge, directing Independent Forge to cease all industrial wastewater discharge on **September 30, 2019**, as a result of permit expiration.

On **October 21, 2019**, Independent Forge was published as significantly non-compliant for the 2018-2019 reporting period due to acute zinc discharge violations on **February 7, 2019** and **February 27, 2019**. On **October 23, 2019**, Independent Forge submitted their application for a Zero Discharge Certification. On **December 12, 2019**, OCSD conducted a Compliance Inspection and verified that all sewer connections had been sealed to prevent further industrial wastewater discharge.

January 1 – June 30, 2020

On **February 1, 2020**, Independent Forge was issued a Zero Discharge Certification. OCSD staff will continue to conduct inspections to verify Independent Forge's compliance with its Zero Discharge Certification in the next reporting period.

J&J Marine Acquisitions, LLC (Permit No. 1-551152)

J&J Marine Acquisitions, LLC (J&J Marine) performs boat maintenance and repair work, including hull repairs and recoating, plus interior remodeling. Wastewater is generated from the boat washing and cleaning process. Pretreatment consists of bag filtration followed by electrocoagulation and final pH adjustment. J&J Marine also has the capability to collect, treat, store and reuse stormwater as industrial process water in the boat washing and cleaning process throughout the facility, rather than discharging to the Newport Beach Harbor.

In April 2019, J&J Marine had a copper violation. J&J Marine filed an appeal of the Notice of Violation based on the analytical result of their split sample, which yielded a significantly lower result than OCSD's, below the copper discharge limit.

July 1 – December 31, 2019

On **July 22, 2019**, OCSD conducted a compliance inspection during which J&J Marine reported that while cleaning one of the holding tanks for the treated effluent, a piece of copper scrap metal was found

inside, which was most likely the cause of the April 2019 copper violation. OCSD intended to conduct resampling but no wastewater was available to collect a sample. During the inspection, J&J Marine noted that the facility was discharging treated stormwater to the sewer during storm events when the stormwater volume exceeded the facility's containment volume. OCSD reminded J&J Marine that discharge of stormwater to OCSD's sewerage facilities is prohibited by OCSD's Wastewater Discharge Regulations Ordinance.

On **July 23, 2019**, OCSD issued a letter to J&J Marine stating that the result of OCSD's split sample analysis confirmed exceedance of the copper discharge limit; therefore, J&J's appeal of the Notice of Violation was denied.

On **August 12, 2019**, OCSD issued a letter arranging a compliance meeting at the request of J&J Marine and their environmental consultant to discuss J&J Marine's permissible discharges as it pertains to sanitary and industrial wastewater. On **August 27, 2019**, OCSD held a Compliance Meeting with J&J Marine during which J&J Marine confirmed the practice of discharging treated stormwater and runoff to OCSD's sewer when the volume exceeds the facility's storage capacity. OCSD reiterated the prohibition on stormwater discharges to OCSD's sewerage facilities.

On **November 21, 2019**, OCSD issued a Compliance Requirements Letter directing J&J Marine to submit a proposal to mitigate the discharge of stormwater and runoff to the sewer. On **November 26, 2019**, J&J Marine submitted the required proposal. J&J Marine opted to install an ion exchange treatment system to treat stormwater for discharge to the Newport Beach Harbor during rain events. J&J Marine also planned to continue collecting stormwater for reuse in washing operations, and discharge treated wastewater to OCSD.

January 1 – June 30, 2020

On **April 22, 2020**, OCSD conducted a Pre-Permit Renewal Inspection and verified the installation of the ion exchange system and the new discharge location to the Newport Beach Harbor.

J&J had no further noncompliance issues during this reporting period. OCSD will continue to monitor J&J Marine's discharge and compliance status on a quarterly basis.

Kenlen Specialties, Inc. (Permit No. 1-021171)

Kenlen Specialties, Inc. (Kenlen) is a job shop powdercoater. The company works on aluminum and steel parts, which undergo a washing step prior to painting or powder coating. Washing is done through a three-stage conveyorized automated washing machine with iron phosphate solution to remove any oil or other contaminants on the parts, followed by a dragout rinse and final rinsing with deionized water. The rinsewater is discharged directly from the machine to the sewer through the above ground sample box.

On October 2, 2018, Kenlen had molybdenum and zinc violations, for which a Notice of Violation was issued on October 11, 2018. On October 30, 2018, OCSD conducted a Compliance Inspection during which it was determined that the iron phosphate solution used by Kenlen contained molybdenum and that the violations were a result of dragout entering the rinsewater. Kenlen stated they would instruct their employees to use the dragout to replenish the process bath instead of emptying collected dragout into the rinse tank. OCSD directed Kenlen to not dispose of remaining molybdenum-based solution to the sewer without treatment. Kenlen is considering replacing their existing iron phosphate solution with a non-molybdate formulation.

July 1 – December 31, 2019

On **October 21, 2019**, Kenlen was published as significantly non-compliant for the 2018-2019 reporting period due to an acute molybdenum discharge violation on **October 2, 2018**.

January 1 – June 30, 2020

Kenlen had no further violations during this reporting period. OCSD will continue to monitor Kenlen's discharge and compliance status on a quarterly basis.

La Habra Bakery (Permit No. 1-031029)

La Habra Bakery is a highly automated bakery that mixes dough, bakes, packages, and ships baked goods to retail outlets. Products include bread, buns, English muffins, and doughnuts. Wastewater is generated from washing, rinsing, and sterilization of the mixing tanks and associated cookware with alkaline soaps, detergents, and cleaners. Wastewater pretreatment includes an in-ground clarifier, continuous pH control system and effluent flow monitoring system.

January 1 – June 30, 2020

On **June 11** and **June 12, 2020**, La Habra Bakery had pH violations. OCSD will issue a Notice of Violation and conduct a Compliance Inspection during the next reporting period.

Linco Industries Permit No. (1-021253)

Linco Industries, Inc. (Linco) is a small metal parts stripping and cleaning facility. Parts are mostly automotive and motorcycle wheel rims and other accessories. Paint and other non-metallic coatings are stripped in a high temperature (550°F) salt bath (blend of sodium hydroxide and sodium nitrate), or in cold (160°F) strip tanks (blend of ethanolamine, n-methylpyrrolidone and dibasic ester). Parts from the salt stripping process are rinsed in low volume overflow rinse, controlled and treated with a pH monitor and sulfuric acid solution to reduce the pH down to the 9.0 – 10.0 S.U. range, then pumped to an aboveground clarifier. Parts from the cold stripping process are rinsed by a manual high-pressure spray and wastewater from the wash pad area is collected and pumped into a tank for minimal solids settling and oil separation before pumping to the aboveground clarifier. The first stage of the clarifier is used for final pH adjustment with sulfuric acid and caustic. Water from the final stage of clarifier flows over a weir and into a drum where sampling is conducted. Absorbent pads are used in the drum to remove any excess oil.

In January 2019, Linco had an oil & grease violation. In March 2019, OCSD conducted a Compliance Inspection during which Linco attributed the violation to insufficient changing of the oil & grease absorbent pads that are placed on top of the tanks. OCSD directed Linco to maintain a log sheet to record the frequency of replacing the absorbent pads. Linco indicated the possibility of installing an oil skimmer in the future if necessary.

June 1 – December 31, 2019

On **October 15, 2019**, Linco had a zinc violation, for which a Notice of Violation was issued on **November 26, 2019**. On **November 19, 2019**, OCSD conducted a Compliance Inspection during which Linco attributed the violation to operator error. Linco explained that one of their operators opened a wrong valve by mistake, which allowed unfiltered wastewater to bypass part of treatment and be discharged directly to the sewer. Linco reported that the company had made modifications to the pretreatment system in response to previous oil and grease violations. These modifications included installation of two new tanks for pH adjustment and solid settling and an oil skimmer. OCSD directed Linco to disconnect the identified bypass piping immediately and reviewed the new arrangement. On **December 12, 2019**, Linco submitted a corrective action letter which indicated that the bypass had been removed.

January 1 – June 30, 2020

Linco had no further violations during this reporting period. OCSD will continue to monitor Linco's discharge and compliance status on a quarterly basis.

LM Chrome Corporation (Permit No. 1-511361)

LM Chrome Corporation (LM Chrome) is an automotive wheel plating facility. Wastewater-generating operations include alkaline cleaning, zincate stripping, zincating, acid activation, copper plating, electrocleaning, anti-tarnish, nickel plating, and chrome plating, and associated rinses. LM Chrome utilizes both batch and continuous pretreatment systems (PTS). The continuous PTS consists of cyanide destruction (stage 1 and 2), chromium reduction, neutralization, flocculation/settling, sludge holding, filter pressing, and final clarification. The batch treatment tank is used for manually treating spent cleaners.

January 1 – June 30, 2020

On **January 10, 2020**, LM Chrome had a lead violation, for which a Notice of Violation was issued on **February 6, 2020**. This daily limit exceedance also resulted in a lead monthly average discharge limit violation in **January 2020**, for which a Notice of Violation was issued on **April 9, 2020**.

On **March 6, 2020**, LM Chrome submitted a response to the Notice of Violation stating the source of the lead violation was most likely the residual lead on a wheel received for plating. LM Chrome stated they would closely monitor lead concentrations.

On **June 8, 2020**, OCSD conducted a Pre-Permit Renewal inspection during which OCSD noted that during storm events, stormwater pooling in an uncovered portion of the pretreatment system area was being pumped to the pretreatment system, which is in violation of OCSD's Ordinance. In addition, the lamella clarifier, located outside and uncovered, was also susceptible to stormwater intrusion and was noted to have severe deterioration and rusting.

On **June 17, 2020**, OCSD issued a Pre-Permit Renewal Inspection Summary and Requirements letter directing LM Chrome to submit a proposal to mitigate stormwater discharge to the sewer, and a corrective action report to repair the lamella clarifier.

On **June 25, 2020**, LM Chrome submitted the required stormwater mitigation proposal and clarifier corrective action plan, in which LM Chrome proposed to install a roof over the uncovered pretreatment system area and repair the lamella clarifier by removing all corroded areas and polish/treat it with an anticorrosive coating with epoxy fiberglass.

OCSD will review LM Chrome's stormwater mitigation proposal and clarifier corrective action plan in the next quarter and will continue to monitor LM Chrome's discharge and compliance status on a quarterly basis.

Logi Graphics, Inc. (Permit No. 1-031049)

Logi Graphics, Inc. (Logi) produces circuit boards to customer specifications and specializes in prototype and small volume orders. The manufacturing typically begins with cutting the copper clad materials, drilling, photoresist application, inner-layer circuit imaging, resist developing, sulfuric peroxide etching, and alkaline resist stripping. This is followed by brown oxide surface preparation and lamination. The holes are de-smearred with sulfuric acid and made conductive through electroless copper plating. Outer-layer circuit development is conducted by either panel plate or pattern plate processes. Panel plate proceeds with copper plating followed by photoresist application, circuit imaging, resist developing, tin/lead (resist) plating, sulfuric peroxide etching, and tin/lead stripping. Solder mask application and final surface finishing, such as hot air solder leveling and/or electrolytic nickel/gold plating, complete the wet processing.

In June 2019, Logi had a copper monthly average discharge limit violation.

July 1 – December 31, 2019

On **September 3, 2019**, OCSD issued a Notice of Violation for the June 2019 copper monthly limit violation. Logi was unable to identify a root cause for the violation and determined that it was not a recurring event as multiple samples in subsequent months showed copper concentrations below the monthly limit.

January 1 – June 30, 2020

In **January 2020**, Logi had another copper monthly average discharge limit violation, for which a Notice of Violation was issued on **April 9, 2020**. Logi has experienced a gradual slowdown in production and has been adjusting its pretreatment system to accommodate.

Logi had no further violations during this reporting period. OCSD will continue to monitor Logi's discharge and compliance status during the next quarter.

Manufactured Packaging Products (Permit No. 1-521793)

Manufactured Packaging Products (MPP) manufactures corrugated containers, primarily cardboard boxes for grocery, electronics, and retail industry packaging needs. Corrugated sheet stock is purchased from offsite vendors, and then run through flexographic printers using food grade inks of various colors. Finished containers are packaged for shipment to customers on pallets or stacked and shrink wrapped for shipment. Wastewater is generated from the washdown of the printer plates and ink containers on the printers during ink color changeouts. The water is collected in trenches to a sump and then pumped out to MPP's wastewater treatment system.

January 1 – June 30, 2020

On **April 9, 2020**, MPP had a copper violation, for which a Notice of Violation was issued on **April 30, 2020**. On **May 13, 2020**, OCSD conducted a compliance inspection during which MPP submitted their corrective action report attributing the violation to a faulty pH probe causing the pretreatment system to operate at a pH that was not optimal or correct for copper precipitation. MPP's corrective action consisted of replacing the defective probe, maintaining additional pH probes on site, and re-training the staff on proper operation of the treatment system. The resampling results showed compliance.

OCSD will continue to monitor MPP's discharge and compliance status on a quarterly basis.

Maruchan, Inc. – Deere-South (Permit No. 1-601021)

Maruchan, Inc. – Deere-South (Maruchan Deere) manufactures dried Japanese ramen noodle food products and packages them into plastic wrapping or polystyrene foam cups. Wastewater is generated by the drained condensation of the dried steamed noodles, and the cleaning of the equipment used in the production operation. Cleaning occurs at least once a day and includes the food processing equipment as well as the surrounding areas. Wastewater is discharged through collection components along the production lines, which are also cleaned daily. Pretreatment system at Maruchan Deere consists of a five-stage clarifier, located underground in front of the facility.

January 1 – June 30, 2020

On **April 29** and **April 30, 2020**, Maruchan Deere had pH violations, for which a Notice of Violation was issued on **May 21, 2020**. On **June 3, 2020**, Maruchan Deere submitted a corrective action letter attributing the violation to the fermentation of food particles in the wastewater, resulting in an acidic wastestream with low pH. Maruchan Deere installed a pH adjustment system with data-logging capabilities as a corrective action to address the violation. On **June 17, 2020**, OCSD conducted a Compliance Inspection and confirmed that the pH adjustment system was operational and appeared to be properly maintained.

OCSD will continue to monitor Maruchan Deere's discharge and compliance status on a quarterly basis.

Maruchan, Inc. – Laguna Canyon (Permit No. 1-141015)

Maruchan, Inc. – Laguna Cyn (Maruchan Laguna) manufactures dried Japanese ramen noodle food products and packages them into plastic wrapping or polystyrene foam cups. Wastewater is generated by the drained condensation of the dried steamed noodles, and the cleaning of the equipment used in the production operation. Cleaning occurs at least once a day and includes the food processing equipment as well as the surrounding areas. Wastewater is discharged through collection components along the production lines, which are also cleaned daily.

The pretreatment system at Maruchan Laguna consists of a clarifier, in the basement of a wastewater collection building located to the northwest of the manufacturing facility. The clarifier is equipped with a surface skimmer and collector to remove separated oil. A pH adjustment system continuously controls the acidity of wastewater discharge via an automated caustic chemical feed pump. A 10,000-gallon underground grease interceptor captures grease waste not removed in the clarification process, to prevent fats, oils, and grease discharge and buildup in the sanitary sewer system. The interceptor is regularly cleaned at least every two weeks.

July 1 – December 31, 2019

On **July 24, 2019**, OCSD issued a Compliance Requirements Letter to Maruchan Laguna to address the compliance issues relating to stormwater management and pH adjustment system. The proposal for pH adjustment system was due by **September 15, 2019** and the installation for stormwater solution was due by **October 31, 2019**. Maruchan Laguna implemented both solutions on time and no other non-compliance issues have been observed at the facility.

January 1 – June 30, 2020

Maruchan Laguna had no further noncompliance issues during this reporting period. OCSD will continue to monitor Maruchan Laguna's discharge and compliance status on a quarterly basis.

McKenna Labs, Inc. (Permit No. 1-021422)

McKenna Labs, Inc. (McKenna) produces & packages various personal care products (lotions, gels, creams, liquids, scrubs, serums, oils & pastes). These products are blended on site according to specified recipes and packaged for sale to end users. The blending and packaging equipment is washed & sanitized using sodium hypochlorite.

January 1 - June 1, 2020

On **January 21, 2020**, McKenna had a zinc violation, for which a Notice of Violation was issued on **February 18, 2020**. On **March 4, 2020**, OCSD conducted a Compliance Inspection and resampling during which McKenna reported that they had been processing and packaging sunblock which contained zinc oxide. As a corrective measure, McKenna has evaluated their waste management practices and made changes to minimize the discharge of zinc oxide to the sewer. The resampling results showed compliance.

OCSD will continue to monitor McKenna's discharge and compliance status on a quarterly basis.

Meggitt, Inc. (Permit No. 1-600006)

Meggitt, Inc. (Meggitt) produces sensing and monitoring systems that measure physical parameters in the extreme environments of aircraft, space vehicles, power generators, nuclear, oil and gas installations, and test laboratories. Processes used in manufacturing operations include, but are not

limited to, machining, sawing, coating, sandblasting, welding, brazing, and metal finishing. Parts worked on are made of Inconel, stainless steel, and tungsten. Wastewater-generating processes include electro-polishing, passivation, etching, filament cleaning, ceramic dicing, ceramic dimensional polishing, ceramic tumbling, nickel bath plating, parts washing, and emergency only discharge of non-contact cooling water from the annealing furnace operations. Wastewater generated from the ceramic dimensional polishing operation, as well as the spent silver nitrate solution from the ceramic tumbling are wastehauled offsite. Rinses from these and the other wastewater generating operations discharge to a three-stage polypropylene aboveground tank, in which sodium hydroxide is added in the first and third compartments for pH adjustment, as most of the wastestreams are acidic in nature. pH-adjusted effluent is collected in a 750-gallon holding tank to facilitate batch discharge sampling.

In March 2019, Meggitt had lead and silver monthly average discharge limit violations. In June 2019, Meggitt had another lead monthly average discharge limit violation. OCSD conducted a Compliance Inspection during which Meggitt specified that the only two possible sources for the exceedances are the rinse associated with the silver plating and ceramic dicing machine. OCSD directed Meggitt to implement an additional pre-cleaning step at the rinse associated with silver and the ceramic dicing machine. The permittee is currently in the process of buying a filtration system for the dicing machine to further reduce the lead concentration in the wastewater.

July 1 – December 31, 2019

On **August 2, 2019**, Meggitt had another lead violation, for which a Notice of Violation was issued on **August 20, 2019**. This daily limit exceedance also resulted in a monthly average discharge limit violation for lead for the month of August 2019. The cause of these violations is attributable to the dicing saw and lapping processes. On **August 30, 2019**, Meggitt submitted a corrective action report indicating that the filtration system for the dicing saw was already added. OCSD directed Meggitt to conduct pilot testing before discharging the waste stream directly to the sample point to ensure the filtration system will adequately remove lead from the waste stream. On **September 3, 2019**, OCSD issued a Notice of Violation for the June 2019 lead monthly limit violation. On **September 11, 2019**, Meggitt updated the corrective action report indicating that the company will add a mixed bed resin system in addition to the filtration system to further remove lead from the wastewater. During routine inspection visits, OCSD has confirmed that the pretreatment system is operational and stable. Meggitt had no further violations after the installation of the system. On **November 7, 2019**, OCSD issued a Notice of Violation for the August 2019 lead monthly limit violation.

January 1 – June 30, 2020

Meggitt had no further violations during this reporting period. OCSD will continue to monitor Meggitt's discharge and compliance status on a quarterly basis.

National Construction Rentals (Permit No. 1-600652)

National Construction Rentals (National) is a supplier of temporary fencing, barricades, portable toilets, restroom trailers, mobile storage containers, and temporary power poles. Wastewater is generated from the washing and cleaning of portable toilets and restroom trailers. The wastewater is routed to a three-stage underground clarifier before discharge to the sewer.

In February and March 2019, National had pH violations, and was issued Notices of Violation. In May 2019, OCSD issued a Compliance Requirement Letter directing National to attend a Compliance Meeting to discuss the non-compliant pH discharges, as well as National's failure to submit several proposals and deliverables between December 2018 and February 2019. In June 2019, OCSD held a Compliance Meeting with National during which the company indicated that the source of the pH violations was a chemical containing hydrochloric acid used in the portable toilet washing process. National had since discontinued the use of the chemical from the washing process. Following the Compliance Meeting, OCSD issued a second Compliance Requirements Letter directing National to install an automated pH adjustment system, propose a stormwater mitigation plan to prevent stormwater

from entering the three-stage clarifier as prohibited by OCSD's Ordinance, and submit a Slug Discharge Control Plan.

July 1 – December 31, 2019

On **July 24, 2019**, OCSD issued another Compliance Requirements Letter for National's failure to submit all of the information required in the previous Compliance Requirements Letter.

On **September 18, 2019**, as no proposals or plans had still been received, OCSD issued an Order to Cease Non-Compliance. In this letter, National was directed to attend a Compliance Meeting.

On **October 2, 2019**, OCSD held a Compliance Meeting, during which National stated that there had been a disconnect between staff and their two consultants as to who was responsible for various submittals. OCSD reiterated the need for a stormwater mitigation plan and the required pH equipment. During the Compliance Meeting, OCSD informed National of its intent to issue an Administrative Complaint but gave National the option to enter into a Settlement Agreement to settle the administrative fines related to the non-compliances. National agreed to settle the matter with OCSD.

On **November 4 and 5, 2019**, National had two additional pH violations, for which a Notice of Violation was issued on **November 14, 2019**. On **November 18, 2019**, an Order to Cease Non-Compliant Discharges was issued along with a requirement to attend another Compliance Meeting.

On **November 25, 2019**, OCSD held the Compliance Meeting with National to discuss the two most recent pH violations, one of which had a pH below the State hazardous limit of 2.0 S.U. Although National had previously informed OCSD that they would no longer use chemicals that caused the pH to fall below 6.0 S.U., it was determined that an employee had used one of these chemicals during toilet cleaning operations. National mentioned that the employee attempted to manually raise the pH by adding chemicals directly to the clarifier, however added a chemical which caused the pH to fall below hazardous waste levels. OCSD explained that since National's cleaning operations are not adequately controlled to achieve compliance with discharge limits, an automatic pH adjustment system would be required. OCSD and National negotiated a revised settlement in the amount of **\$22,000.00**.

On **December 26, 2019**, OCSD issued a Compliance Requirements Letter directing National to install an automatic pH adjustment system.

January 1 – June 30, 2020

On **January 31, 2020**, National submitted an incomplete proposal to OCSD, to which OCSD requested a completed proposal on **February 3, 2020**. On **February 28, 2020**, National submitted an updated proposal to OCSD, to which OCSD requested additional information and clarification on **March 5, 2020**. No additional information or communication was made to OCSD regarding the pretreatment system proposal. On **April 8, 2020**, OCSD entered into a **Settlement Agreement** with National. In the Settlement Agreement, National was required to submit a pretreatment system proposal no later than March 31, 2020, with a pretreatment system installation date of April 30, 2020. National failed to meet both deadlines. On **May 21, 2020**, OCSD issued an Order to Cease Non-Compliance with the reporting requirements, and to attend a Compliance Meeting. On **May 26, 2020**, OCSD conducted a Compliance Inspection and National submitted a new pretreatment system proposal.

On **June 10, 2020**, OCSD held a Compliance Meeting with National to discuss the Non-Compliant reporting issues and the inadequate pretreatment system proposal. During the meeting, National clarified the proposal, and explained the reason for installing a mixed media filter and a calcite media filter after a 4,000-gallon batch tank. OCSD suggested an automatic dosing pH adjustment system which limits the possibility of operational error.

On **June 22, 2020**, National submitted the required final pH adjustment system proposal. OCSD will review the proposal in the next reporting period and will continue to monitor National's discharge and

compliance status on a quarterly basis.

Nor-Cal Beverage Co., Inc (Main) (Permit No. 1-021284)

Nor-Cal Beverages Co. Inc - Main (Nor-Cal Main) manufactures fruit juices, juice drinks, sports drinks, sparkling flavored water, and ready-to-drink teas. Fruit concentrates and other additives are blended in large tanks with demineralized / soft water, then dispensed into various size containers that are loaded onto high speed conveyor and packaging lines. Wastewater is generated from flow into the clarifier for Nor-Cal Main which collects water from production area and tank farm wash out, refrigerated units and blend system washout and CIP operations, boiler blowdown, RO reject, and water softener treatment system regeneration. Wastewater is routed to a three-stage underground clarifier for pH adjustment and solids settling prior to discharge to the sewer.

January 1 – June 30, 2020

On **June 2, 2020**, Nor-Cal Main had a pH violation for which a Notice of Violation was issued on **June 11, 2020**. On **June 18, 2020**, OCSD conducted a Compliance Inspection during which Nor-Cal reported that on the day of the violation, spilled product from containment area around product tanks in the basement was routed to the clarifier and the highly concentrated waste disturbed the pH adjustment system and caused the pH violation. OCSD directed Nor-Cal Main to: (1) immediately change the mode of operation of the sump pump in the containment area from automatic to manual, (2) develop a slug control plan to resolve spill control and containment issues, (3) evaluate neutralization capacity of the system to ensure adequately sized, and (4) raise low setpoint of the pH adjustment system to provide additional margin of compliance.

OCSD will issue Nor-Cal Main a Probation Order in the next reporting period to address the above-mentioned items in a timely manner.

Nor-Cal Beverage Co., Inc (NCB) (Permit No. 1-021283)

Nor-Cal Beverages Co. Inc - NCB (Nor-Cal NCB) manufactures fruit juices, juice drinks, sports drinks, sparkling flavored water and ready-to-drink teas. Fruit concentrates and other additives are blended in large tanks with demineralized / soft water, then dispensed into various size containers that are loaded onto high speed conveyor and packaging lines. Wastewater is generated from the hot-fill production and clean-in-place (CIP) operations, cooling tower bleed-off, water softener regeneration, defrost units and trash compactor cleanup. Wastewater is routed to a three-stage underground clarifier with a continuous automatic pH adjustment and recording system.

January 1 – June 30, 2020

On **June 1, 2020**, Nor-Cal NCB had a pH violation for which a Notice of Violation was issued on **June 11, 2020**. On **June 18, 2020**, OCSD conducted a Compliance Inspection to investigate the cause of violation and collect a resample which detected another pH violation. A Notice of Violation will be issued for the later pH violation in the next reporting period. During the inspection, OCSD determined that product changeovers and associated CIP operations introduced highly concentrated waste into the clarifier that exceed the capacity of the pH adjustment system, thus resulting in a pH violation. OCSD directed Nor-Cal NCB to: (1) monitor the clarifier during all product change-overs and manually adjust the pH as needed, (2) develop a slug control plan to resolve spill control and containment issues, (3) evaluate the neutralization system capacity and upgrade the system, and (4) raise the low setpoint of the pH adjustment system to provide additional margin of compliance.

OCSD will issue Nor-Cal NCB a Probation Order in the next reporting period to address the above-mentioned items in a timely manner.

Only Cremations for Pets (Newport Beach) (Permit No. 1-601084)

Only Cremations for Pets (Only Cremations) is a pet crematorium. Along with standard cremation, Only Cremations performs aquamation of pets. Aquamation is a pet aftercare process which uses water in an alkaline hydrolysis process instead of flames. Sodium hydroxide and potassium hydroxide is injected with hot water for a 24-hour period to dissolve the pet remains. Once complete, a sand-like material is recovered, and the remaining liquid is discharged to the sewer. Carbon dioxide is injected in the event the pH reads above 12.0 S.U. on the aquamation unit interface.

January 1 – June 30, 2020

On **January 22, 2020**, Only Cremations had a pH violation, for which a Notice of Violation was issued on **February 18, 2020**. Only Cremations attributed the pH violation to operator error. Only Cremations reported that an insufficient amount of carbon dioxide was injected thus failing to reduce the pH to below 12.0 S.U., and the wastewater was discharged to the sewer before the pH was verified. Only Cremations instituted additional mandatory verifications for all staff to perform prior to wastewater discharge. Only Cremations also programmed an alert on the aquamation unit interface to prevent a forced discharge if the pH is above 12.0 S.U.

OCSD will continue to monitor Only Cremation's discharge and compliance status on a quarterly basis.

Patio and Door Outlet, Inc. (Permit No. 1-521783)

Patio and Door Outlet, Inc. (Patio) manufactures and sells high-end patio furniture. Aluminum tubing and sheeting are cut, bent, formed, and welded in the manufacture of the framing for chairs and tables. After assembly, frames are washed, iron-phosphated, sealed, and powder-coated in various colors and textures. Patio also manufactures padding and furniture coverings from foam sheets and fabric covers. Wastewater from the iron-phosphate rinse is routed through a three-stage clarifier where it is pH adjusted prior to discharge to the sewer.

In February 2019, Patio had a molybdenum violation. In April 2019, OCSD conducted a Compliance Inspection during which Patio reported that their investigation found the iron-phosphate solution, which is used to prepare metal products for powder-coating, to contain molybdenum. Patio purchased a new non-molybdate metal preparation solution and waste-hauled the molybdenum-bearing wastewater prior to restarting the powder coating preparation system.

July 1 – December 31, 2019

On **October 21, 2019** Patio was published as significantly non-compliant for the 2018-2019 reporting period due to an acute molybdenum discharge violation on **February 21, 2019**.

January 1 – June 30, 2020

Patio had no further violations during this reporting period. OCSD will continue to monitor Patio's discharge and compliance status during the next report period.

Pioneer Circuits, Inc. (Permit No. 1-011262)

Pioneer Circuits, Inc. (Pioneer) is a manufacturer of multilayer rigid, rigid-flex, and flexible printed circuit boards and assemblies. The manufacturing of a multilayer board generally proceeds by cutting the copper clad materials, photoresist application, inner-layer circuit imaging, resist developing, cupric chloride etching, and alkaline resist stripping. This is followed by surface prep (Cobra Bond), lamination, and drilling. The holes are cleaned by either permanganate or plasma etching and made conductive through electroless copper plating. Outer-layer circuit development is conducted by pattern plate process steps including photoresist application, circuit imaging, resist developing, copper plating, tin/lead resist plating, ammonium etching, and solder stripping. Solder mask application and surface

finishing such as hot air levelling or fuse-oil reflow complete Pioneers' wet process operations. Nickel/gold plating, if required, is outsourced.

Wastewater is generated from the various spent process solutions and associated rinses, aqueous fume scrubbing, boiler blowdown, and reverse osmosis reject. Pretreatment consists of a continuous ion exchange system and a batch hydroxide precipitation pretreatment system.

In June 2019, Pioneer had a copper violation.

July 1 – December 31, 2019

On **July 9, 2019**, OCSD issued a Notice of Violation for the June 2019 copper violation. On **July 31, 2019**, OCSD conducted a Compliance Inspection and resampling, during which Pioneer attributed the violation to operator error. Pioneer explained that on the day the violation occurred, a batch of Cobra Bond, which is typically treated on its own, was combined with additional wastestreams resulting in improper batch treatment. Pioneer stated that measures have been taken to ensure that all Cobra Bond batches are treated separately from all other wastestreams. The resampling results showed compliance.

January 1 – June 30, 2020

Pioneer had no further violations during this reporting period. OCSD will continue to monitor Pioneer's discharge and compliance status on a quarterly basis.

Powdercoat Services, LLC (Bldg E / Plant 1) (Permit No. 1-600167)

Powdercoat Services, LLC (Powdercoat) performs surface prewash and conversion coating of aluminum and steel parts, prior to powder coat application per customer specifications. Building E houses the largest phosphate wash line for the company to process larger dimension parts. The line is automated with an overhead conveyor track and the process and rinse chambers are set up as recirculating spray. Powdercoat will continue to recycle the majority of wastewater generated and wastehaul the spent phosphate wash solution, with occasional discharges of DI rinse water from the last stage. Once the tank is ready for discharge, Powdercoat performs manual pH neutralization prior to discharging the wastewater.

January 1 – June 30, 2020

On **June 3, 2020**, Powdercoat (Plant E) had a pH violation for which a Notice of Violation was issued on **June 18, 2020**.

OCSD will conduct a Compliance Inspection and resampling during the next reporting period.

Primatex Industries, Inc. (Permit No. 1-031036)

Primatex Industries, Inc. (Primatex) performs rotary screen printing of fabrics. Water-based inks are applied to fabric by means of perforated print design screens using one of two rotary printers. The facility also has two Sanforizing machines (a method of stretching, shrinking, and fixing the woven cloth in both length and width, before cutting to reduce the shrinkage which would otherwise occur after washing), two drying machines to dry printed cloth, a sanding machine, a crinkling machine, and two industrial washing and drying machines. Wastewater is generated by the washing of the printers and the washing of cloth in the industrial washing machines. Wastewater is collected in an outside sump from where it is pumped through a lint removal unit then to the inside of a rotating drum filter constructed of screen material. The lint is trapped on the inside, while wastewater passes through the screen and is discharged to a three-stage underground clarifier with sample box. A timed spray rinse above the drum cleans the outside of debris, which falls to a screen located directly below the drum.

July 1 – December 31, 2019

On **October 21, 2019** Primatex was published as significantly non-compliant for the 2018-2019 reporting period due to an acute zinc discharge violation on **July 3, 2018**.

January 1 – June 30, 2020

Primatex had no further violations during this reporting period. OCSD will continue to monitor Primatex's discharge and compliance status on a quarterly basis.

Prudential Overall Supply (Permit No. 1-071235)

Prudential Overall Supply (Prudential) is in the business of garment rental and cleaning and operates a number of facilities throughout the United States. The facility in Irvine is equipped with automated laundering machinery and specializes in cleaning and redistribution of uniforms, mats, napkins, and aprons at an average rate of 24,800 pounds of laundry per day. Prudential does not operate a pretreatment system, but instead utilizes a collection basin used for suspended solids separation and a multi-stage underground clarifier. Wastewater from the facility is discharged into the open-topped-below-grade basin from which it is pumped through a screen shaker to remove lint and larger solids. After passing through the shaker, wastewater is discharged back into the basin where it flows by gravity through a multi-stage underground clarifier before discharging to the sewer system. The sample point is the final stage of the clarifier.

July 1, 2019 – December 31, 2019

On **July 24, 2019**, OCSD issued a Compliance Requirements Letter to address Prudential's compliance issues pertaining to stormwater management and potential discharge of solids to the sewer from the shaker screen system by **October 15, 2019**. Prudential requested an extension of the due date to determine the most appropriate path forward.

January 1 – June 30, 2020

On **January 24, 2020**, Prudential proposed to add a section of aluminum canopy to an existing structure to prevent rainwater from entering the process water pit and shaker screen. On **February 28, 2020**, Prudential informed OCSD of the completion of the stormwater mitigation project. In subsequent inspection visits, OCSD has confirmed that the stormwater mitigation system is in place and appeared to be in proper condition.

OCSD will continue to monitor Prudential's discharge and compliance status on a quarterly basis.

Quality Aluminum Forge, LLC (Cypress South) (Permit No. 1-600272)

Quality Aluminum Forge, LLC (Cypress South) (QAF-South) produces aluminum alloy aerospace forgings. The major manufacturing process equipment consists of forging units, ovens, a heat treat (quench) tank, and a surface preparation/etch line. The forging units are used to drop forge the aluminum parts. Various cycles of forging, heating, etching, and quenching are used to form the metal and obtain the desired metallurgical properties. The wastewater generated from the etch process consists primarily of the rinse waters. Wastewater is treated in a continuous treatment system with pH adjustment, solids settling, filter press, and a clarifier.

July 1 – December 31, 2019

On **August 26, 2019**, OCSD conducted a Compliance Inspection in conjunction with routine quarterly sampling. During the inspection, multiple compliance deficiencies were noted including incorrect tank labeling, the accumulation of excessive solids in the sample box, and slug loading of the continuous treatment system with concentrated wastewater. On **September 24, 2019**, OCSD issued a Compliance

Requirements Letter directing QAF-South to correct the deficiencies by **October 31, 2019**. On **November 18, 2019**, OCSD conducted a follow-up Compliance Inspection to verify QAF-South's compliance status and progress. While the tanks had been labeled and the solids were removed from the sample box, the remaining requirements had not been completed.

January 1 – June 30, 2020

On **March 3, 2020**, OCSD conducted another Compliance Inspection and noted that the process and pretreatment lines were still not labeled. QAF-South continues to develop the proposal and design for the installation of a control system for the concentrated waste injection into the continuous treatment system.

OCSD staff will continue to monitor QAF-South's compliance progress during the next reporting period.

Rainbow Disposal Co., Inc. (Building A) (Permit No. 2-600238)

Rainbow Disposal Co., Inc. (Building A) (Rainbow-A) operates a municipal waste transfer station that collects residential and commercial refuse. Wastewater is generated from the washing of flatbed trucks in a covered bay. The wastewater is routed to an underground three-stage clarifier before discharging to the sewer.

January 1 – June 30, 2020

On **December 9** and **December 10, 2019**, Rainbow-A had pH violations, for which a Notice of Violation was issued on **January 15, 2020**. On **February 10, 2020**, OCSD conducted a Compliance Inspection and resampling. The resampling detected another pH violation, for which a Notice of Violation was issued on **July 14, 2020**. Rainbow-A responded with corrective actions including clarifier clean-outs on a quarterly basis, pH monitoring and adjustment, and a pH logging.

As a result of these violations, Rainbow-A has been designated a significant industrial user on the basis that it has the reasonable potential to violate pretreatment standards or requirements. Therefore, the Class II Permit was voided and a Class I Permit (1-601086) was issued to Rainbow-A on **June 1, 2020**.

OCSD will continue to monitor Rainbow-A's discharge and compliance status under the new Class 1 Permit No. 1-601086.

Rainbow Disposal Co., Inc. (Building F) (Permit No. 2-600239)

Rainbow Disposal Co., Inc. (Building F) (Rainbow-F) operates a municipal waste transfer station that collects residential and commercial refuse. Wastewater is generated during the washing of various metal bins and plastic carts with a high-pressure hose and multi-purpose cleaner at the facility's bin and cart shop in Building F. Wastewater is collected from this operation in an in-ground three-stage clarifier before discharging to the sewer.

January 1 – June 30, 2020

On **February 11, 2020**, Rainbow-F had copper, lead, and zinc violations, for which a Notice of Violation was issued on **March 9, 2020**. As a result of these violations, Rainbow has been designated a significant industrial user on the basis that it has the reasonable potential to violate any pretreatment standard or requirement; therefore, the Class II Permit was voided and a Class I Permit (1-601087) was issued to Rainbow-F on **June 1, 2020**.

OCSD staff will conduct compliance inspections to verify the installation of pretreatment equipment to address Rainbow-F's compliance issues during the next reporting period.

Reid Metal Finishing (Permit No. 1-511376)

Reid Metal Finishing (Reid) is a metal finisher providing chromic anodizing, passivation, hard anodizing, sulfuric anodizing, chem film, and plating services of stainless steel, aluminum, copper, brass, bronze, and zinc die castings. Reid processes products for the aerospace, military, medical, and commercial industries. Wastewater is generated from the rinses used in the various surface finish processes and air scrubber wash water. Reid's pretreatment system consists of chrome reduction, cyanide destruction, hydroxide precipitation and sludge filtration.

In September 2019, Reid had a cadmium monthly average discharge limit violation.

July 1 – December 31, 2019

On **December 10, 2019**, OCSD issued a Notice of Violation for the September 2019 cadmium monthly limit violation. Reid could not determine the source of the violation, and it was noted that previous and post-violation sampling results had been well below monthly and daily limits.

January 1 – June 30, 2020

In **January 2020**, Reid had another cadmium monthly average discharge limit violation, for which a Notice of Violation was issued on **April 9, 2020**. As a result of these violations, Reid evaluated their cadmium treatment procedures, and conducted a 30-day pilot test utilizing a plate-out system for additional cadmium treatment.

Reid will submit the pilot test results during the next reporting period, and OCSD will continue to monitor Reid's discharge and compliance status on a quarterly basis.

Republic Waste Services (Permit No. 1-521827)

Republic Waste Services (Republic) washes the inside and outside of trash bins in a contained and partially covered area in the facility. Washwater is routed through a three-stage clarifier before discharge to the sewer. Clarifier maintenance includes regular skimming and annual pump out of the sludge buildup.

In October 2018, Republic had cadmium, copper, lead, and zinc violations. In November 2018, OCSD conducted a Compliance Inspection and resampling during which Republic indicated that no operational changes had been made onsite and, therefore, they were not able to identify any internal source for the violations. The company indicated that the only possible source would be from illicit materials disposed of in trash bins prior to washout, such as sand blasting dust or batteries. Republic pumped out the clarifier as part of their corrective action. The resampling results showed compliance.

July 1 – December 31, 2019

On **July 18, 2019**, Republic had chromium, copper, lead, nickel, and zinc violations again, for which a Notice of Violation was issued on **August 20, 2019**. On **August 28, 2019**, OCSD conducted a Compliance Inspection during which Republic attributed the violations to excessive solids buildup in the clarifier and carry over of the solids to the sample point. As a corrective action, Republic increased frequency of their clarifier pump-out from quarterly to monthly. OCSD increased frequency of Republic's heavy metals self-monitoring to monthly effective **December 1, 2019**.

On **October 21, 2019**, Republic was published as significantly non-compliant for the 2018-2019 reporting period due to acute cadmium, copper, lead, and zinc discharge violations on **October 3, 2018**.

On **November 7, 2019**, Republic had another copper violation, for which a Notice of Violation was issued on **December 3, 2019**. On **December 16, 2019**, OCSD conducted a Compliance Inspection during which Republic attributed the violation to degradation of copper tubing attached to the heated pressure

washer used in washing the trash bins; Republic had since replaced the deteriorated tubing. On **December 30, 2019**, OCSD issued an Order to Cease Non-Compliant Discharges and directed Republic to attend a Compliance Meeting scheduled for the following month to discuss Republic's recurring violations.

January 1 – June 30, 2020

On **January 14, 2020**, OCSD held a Compliance Meeting with Republic during which Republic stated that it will increase the frequency of clarifier pump-out from quarterly to monthly to resolve the non-compliances. On **January 24, 2020**, OCSD issued a Compliance Requirements Letter as a follow-up to the meeting, requiring Republic to increase the frequency of heavy metal self-monitoring from monthly to weekly to evaluate the effect of more frequent clarifier cleaning, starting **January 15, 2020** through **March 31, 2020**. The results of the weekly sampling showed compliance.

Republic had no further violations during this reporting period. OCSD will continue to monitor Republic's discharge and compliance status on a quarterly basis.

Simply Fresh, LLC (Permit No. 1-600709)

Simply Fresh, LLC (Simply Fresh) produces various refrigerated packaged foods including salsa, layered dip, hummus, and salad. Wastewater is generated from the cleaning, sanitizing, and processing of fresh vegetables and other ingredients, as well as general equipment, surface, and floors. All wastewater generated in the production area flows from floor drains to a four-stage underground clarifier.

January 1 – June 30, 2020

On **March 4, 2020**, Simply Fresh had a pH Violation, for which a Notice of Violation was issued on **April 2, 2020**. OCSD had determined that at an above average amount of acidic foods, such as tomatoes, were being processed on the day of the violation and the waste was improperly disposed of through the floor drains to the four-stage clarifier. OCSD also noted that the four-stage clarifier was past due for pumpout and cleaning based on Simply Fresh's internal clarifier cleaning schedule.

On **June 10, 2020**, OCSD requested that Simply Fresh submit a proposal for a continuous pH monitoring system located at the sample point to verify compliance during all hours of operation as Simply Fresh discharges wastewater over a 24-hour period.

OCSD will review the pH monitoring proposal upon submittal and continue to monitor Simply Fresh's discharge and compliance status on a quarterly basis.

Soldermask, Inc. (Permit No. 1-031341)

Soldermask, Inc. (Soldermask) is a printed circuit board job shop specializing in solder mask services and making stainless steel stencils used for solder paste application or component verification. Wastewater is generated by manual pumice scrubbing, photoresist developing, screen cleaning, and associated rinses. Soldermask does not have a pretreatment system apart from a four-stage aboveground clarifier. The spent ferric etch solution, electropolishing solution, and subsequent static rinses are wastehailed.

January 1 – June 30, 2020

In **March 2020**, Soldermask had a nickel monthly average discharge limit violation. On **June 3, 2020**, OCSD staff conducted a compliance inspection during which it was determined that the source of nickel was from a rinse tank connected to an etcher process. On **June 4, 2020**, OCSD issued a Notice of Violation for the March 2020 nickel monthly limit violation. OCSD informational sampling conducted on **June 15, 2020** revealed that the nickel concentration was elevated and necessitated the permittee to install pretreatment equipment to properly treat the wastewater to ensure long-term compliance.

Soldermask elected to modify the process and disconnect the nickel rinse from the sample point in lieu of installing additional pretreatment equipment.

OCSD staff will continue to monitor Soldermask's discharge and compliance status during the next reporting period.

South Coast Baking, LLC (Permit No. 1-600565)

South Coast Baking, LLC (South Coast Baking) is a frozen cookie dough manufacturer. The manufacturing process uses ingredients such as flour, sugar, chocolate, butter, and flavors. The facility also uses fruits such as raisins and cranberries. The manufacturing of frozen cookie dough occurs via 3 production lines. The raw materials are combined to make a dough which then heads to another "cookie former" line where the shape of the dough is defined in a cookie shape. This cookie-shaped dough is sent to a freezer where the dough is frozen. The end-product is frozen cookie dough inside master cases. Wastewater is generated during cleaning/sanitation activities. During cleaning/sanitation, equipment is scraped to remove heavy soils and then cleaned using soap and water.

January 1 – June 30, 2020

On **April 29, 2020**, South Coast Baking had a pH violation, for which a Notice of Violation was issued on **May 7, 2020**. On **May 19, 2020**, OCSD conducted a Compliance Inspection during which South Coast Baking indicated that excessive sanitation with low pH chemicals was the source of the violation. On **May 28, 2020**, South Coast Baking submitted a corrective action report to address the pH violation. Corrective action included installation of a pH adjustment system. On **June 4, 2020**, South Coast Baking had another pH violation, for which a Notice of Violation will be issued in the next reporting period.

OCSD will conduct a follow-up Compliance Inspection during the next reporting period to determine South Coast Baking's progress and compliance status.

South Coast Circuits, Inc. (Bldg 3500 A) (Permit No. 1-011069)

South Coast Circuits, Inc. (SCCI) manufactures rigid double-sided and multilayer printed circuit boards to customers' specifications from copper clad and pre-preg materials. SSCI perform their operations in four buildings all located within the same industrial complex (Bldg 3506 A, Bldg 3524 A, Bldg 3500 A, and Bldg 3512 A). Discharges from all buildings are regulated by separate permits.

The effluent discharge at Bldg 3500A under this permit is generated by the photoresist and solder mask developing solutions, and the rinses following the acid cleaning, aluminum oxide surface preparation, photo-film developing, photoresist developing, solder mask developing, and screen cleaning. Pretreatment consists of an automatic pH adjustment system. Spent process chemicals are transported to Bldg 3512A for batch treatment.

January 1 – June 30, 2020

In **May 2020**, SSCI (Bldg 3500 A) had a silver monthly average discharge limit violation, for which a Notice of Violation will be issued during the next reporting period.

OCSD will continue to monitor SSCI's discharge and compliance status on a quarterly basis.

SPS Technologies LLC, DBA Cherry Aerospace (Permit No. 1-511381)

Cherry Aerospace (Cherry) manufactures blind rivets for aerospace applications. Wastewater generating operations include plating, anodizing, washing and other metal finishing processes. Cherry also discharges aqueous fume scrubbing, cooling tower bleed, and boiler blow down. Cherry operates a continuous pretreatment system, which consists of flow equalization, chemical precipitation, clarification, coagulation, and dewatering.

June 1 – December 31, 2019

During a Compliance Inspection on **October 2, 2019**, OCSD had noted several areas onsite where stormwater commingles with regulated wastestreams or bulk chemicals and/or accumulates in the outdoor secondary containment structures. Once conveyed to the containment structures, stormwater is pumped to Cherry's pretreatment system, then ultimately discharged to the sewer. This practice is in violation of OCSD's Wastewater Discharge Regulations Ordinance prohibition on stormwater discharges to the sewer.

January 1 – June 30, 2020

On **May 1, 2020**, Cherry had a copper mass violation, for which a Notice of Violation was issued on **May 14, 2020**. This copper daily limit exceedance also resulted in a copper monthly average discharge limit violation in the month of May 2020. On **June 3, 2020**, OCSD conducted a Compliance Inspection to investigate the source of the copper violation and discuss Cherry's unauthorized discharges of storm water to the sewer. At the time of the inspection, Cherry had not been able to identify the cause of the copper violation. On **June 24, 2020**, OCSD issued a Compliance Requirements Letter directing Cherry to submit a corrective action report identifying the root cause of the copper violation and the efforts for achieving long-term compliance by **June 30, 2020**. Cherry was also directed to submit a proposal to mitigate stormwater discharge to the sewer, along with the corrective action report.

OCSD will review Cherry's corrective action report and stormwater mitigation proposal upon submittal by Cherry. OCSD will issue a Notice of Violation for the May 2020 copper monthly limit violation during the next reporting period and will continue to monitor Cherry's discharge and compliance status on a quarterly basis.

Star Manufacturing LLC, dba Commercial Metal Forming (Permit No. 1-600653)

Star Manufacturing LLC, dba Commercial Metal Forming (Star) is a metal forming shop that specializes in stamping and forming metal tank heads on mechanical and hydraulic presses for use in the manufacture of vessels. Star's ancillary operations include plasma cutting metal blanks, plasma and oxyacetylene trimming, metal heat treating, pressure washing finished tank heads, welding, steam cleaning, and part washing. Wastewater is generated from the steam cleaning and washing of production pieces, which are typically coated with lubricant. Wastewater is collected in an underground sump and then pumped to an equalization tank from which the wastewater is gravity-fed through bag filters before discharge to the sewer.

In February and March 2019, Star had oil & grease violations. In March 2019, OCSD conducted a Compliance Inspection to determine if Star had made any improvements to its existing treatment system. Star personnel stated that they were continuing to research various technologies to ensure long term compliance with their permit limits and requirements. Star was aware that the use of bag filters was inadequate as primary treatment to remove oil and grease. In April 2019, OCSD issued a Compliance Requirements Letter requiring the submittal of a waste management proposal by May 2019, and installation of the proposed pretreatment system by June 2019 after acceptance by OCSD. While Star met the deadline for submitting the proposal, they installed the system without prior acceptance from OCSD. Star installed a zeolite multimedia filter tank equipped with a control valve that accommodates a backwash cycle to remove accumulated contaminants from the zeolite. However, the effectiveness of the backwash cycle using untreated gravity-fed water was unclear. In June 2019, Star had another oil & grease violation.

July 1 – December 31, 2019

On **July 10, 2019**, OCSD conducted a Compliance Inspection and resampling during which OCSD noted that Star had not made any further improvements to the treatment system using the zeolite filter media and lacked understanding of an appropriate preventative maintenance schedule to maintain compliance.

The resampling detected an oil & grease violation.

On **August 12, 2019**, OCSD issued a Notice of Violation for the June 2019 oil & grease noncompliance and issued a Compliance Requirements Letter directing Star to attend a Compliance Meeting to discuss implementation of corrective actions to develop and maintain an effective treatment system. The Compliance Meeting was held on **August 21, 2019**. On **September 24, 2019**, following the Compliance Meeting, OCSD issued another Compliance Requirements Letter requiring Star to complete the installation of the proposed treatment system by **October 30, 2019**. Star had since completed installation of the treatment system, improved the operation of the zeolite filter tanks, and added a treated wastewater holding tank.

On **October 21, 2019**, Star was published as significantly non-compliant for the FY2018-2019 reporting period due to chronic and acute oil & grease of mineral or petroleum discharge violations on **February 15, 2019** and **March 21, 2019**.

January 1 – June 30, 2020

On **March 23, 2020**, Star had another oil & grease violation, for which a Notice of Violation was issued on **April 9, 2020**. On **May 6** and **June 16, 2020**, OCSD conducted Compliance Inspections during which OCSD has determined that the influent holding tank was structurally compromised and that Star was not testing every batch of treated wastewater prior to discharge. Between May and June, Star installed a second zeolite column to increase oil & grease removal efficiency and installed a new influent holding tank. Initial results from the second zeolite column have demonstrated improved removal efficiency. Star's permit was also revised to include weekly oil & grease monitoring and require Star to test every treated batch of wastewater for oil & grease prior to discharge.

OCSD staff will continue to monitor Star's discharge and compliance status during the next reporting period.

Stepan Company (Permit No. 1-021674)

Stepan Company (Stepan) manufactures surfactants used in various consumer detergents, soaps, and other specialty blends. Stepan manufactures surfactants utilizing three processes: continuous falling film sulfonation, detergent blending by batch processing of alkanolamides, and detergent blending by batch processing of betaine. Pretreatment at the facility includes pH adjustment and batch oxidization of 1,4- dioxane.

January 1 - June 1, 2020

On **March 5, 2020**, Stepan had a 1,4-dioxane violation, for which a Notice of Violation was issued on **April 2, 2020**. On **April 9, 2020**, OCSD conducted a Compliance Inspection and resampling during which Stepan attributed the violation to inadequate residence time during pretreatment to fully oxidize the wastestream before release to the sewer. Stepan stated that it will ensure adequate residence time during pretreatment before discharge in the future. The resampling results showed compliance.

OCSD staff will continue to monitor Stepan's discharge and compliance status on a quarterly basis.

Stremicks Heritage Foods, LLC (Permit No. 1-021028)

Stremick's Heritage Foods, LLC (Stremick's) produces milk and water-based beverages and milk-based products. Products include homogenized whole milk, 2%, 1%, nonfat, cream, half-and-half, chocolate and other flavored drinks, almond milk, soy milk, rice milk, almond and coconut creamer, various flavors of nectar, and soft serve ice-cream mixes. Inside the facility production areas, wastewater is generated from the washing of equipment and floors. Stremicks has removed three production lines to add four new production lines that utilize purified water from a reverse osmosis system that also contribute to the wastewater discharge. The wastewater passes through one or two four-stage underground clarifiers

(depending on the location in the plant) prior to the sample point.

Additional wastewater is generated downstream of the clarifiers from washing the inside of tanker trucks after unloading bulk liquid ingredients and products. The wash pad is located outside in a bermed and roofed area. Other sources of wastewater that discharge through the sample point include boiler blowdown, cooling tower bleed-off, and water softener regeneration waste. The total flow from all industrial wastewater is captured by the open channel meter outside the facility gate.

July 1 – December 31, 2019

Due to a pH issue in OCSD's sewer system in the area downstream of Stremick's facility, OCSD conducted 24-hour monitoring of Stremick's discharge from **November 18 to November 19, 2019**. The pH results indicated that the pH fell below 6.0 and above 12.0 S.U. on numerous occasions. On **November 20, 2019**, Stremicks had another pH violation, for which a Notice of Violation was issued on **December 30, 2019**.

January 1 – June 30, 2020

On **January 16, 2020**, OCSD conducted a Compliance Inspection during which Stremicks reported that equipment, floors, trucks, and piping throughout the facility are washed and cleaned with acids and/or bases to achieve proper disinfection. Stremicks stated that no treatment or equipment is used to achieve compliant pH levels and ensure long term compliance with OCSD's pH discharge limits. OCSD informed Stremicks that a pretreatment system would be required to maintain compliance with the pH discharge limits.

On **January 27, 2020**, OCSD issued a Compliance Inspection Summary and Requirements Letter requiring Stremicks to submit a proposal for an automatically controlled pH adjustment system by **February 29, 2020**, with an installation date, following OCSD's review and acceptance, of no later than **May 31, 2020**.

On **February 20, 2020**, OCSD received a response letter and proposal from Stremicks. In the letter, Stremicks identified several systems throughout the facility in which cleaning and washing operations contribute to the large swings in pH. Stremicks proposed to install a diversion valve on each system to divert non-compliant wastewater to one of two holding tanks. As additional non-compliant wastewater is collected in each tank, the pH would be adjusted, either by manual addition of chemicals or by mixing from other waste streams, and would be discharged to the sample point once the tank was full and pH has been verified to be in compliance. Stremicks also outlined a long-term proposal of an underground automatic pH adjustment system, which would require one to two years of planning, acquiring building permits, and construction.

On **March 24, 2020**, OCSD held a teleconference to discuss the pretreatment system proposal. During the teleconference, Stremicks discussed their proposal, and how the planned diversion valves would capture all non-compliant wastewater prior to being introduced to the waste stream. Stremicks also mentioned that a 24-hour continuous pH monitor was installed at the sample point to collect data and determine the time and location of additional non-compliant pH discharges. During the meeting, OCSD agreed that the diversion of non-compliant wastewater to holding tanks for adjustment might be acceptable as a short-term solution; however, a continuous automatic adjustment system would be preferred for long-term compliance. On **April 7 and 8, 2020**, Stremicks had two additional pH violations, for which a Notice of Violation was issued on **April 23, 2020**. On **April 28, 2020**, OCSD issued a Requirement to attend a Compliance Meeting based on the recent pH violations, and to discuss the pH adjustment pretreatment proposal.

On **May 13, 2020**, OCSD held the Compliance Meeting with Stremicks, during which Stremicks discussed their short-term pretreatment proposal, and how it would be sufficient to maintain compliance with OCSD's pH discharge limits. On **May 21, 2020**, OCSD issued a Compliance Meeting Summary and Requirements letter. In the letter, OCSD summarized the compliance meeting discussions, and

requested clarification regarding certain aspects of the proposal such as wastewater flowrates, chemicals used in treatment, and how Stremicks planned to maintain interim compliance during system installation, as recent pH monitoring data still exhibited non-compliant discharges.

On **June 8, 2020**, OCSD received a letter from Stremicks, in which the company included all systems to be diverted to the holding/treatment tanks and corresponding flowrates, a revised floor plan, information on the computer programming system which would monitor and divert the non-compliant discharges, and confirmation of spare parts in case of equipment failure. The letter did not fully address how Stremicks would maintain interim compliance during system installation.

On **June 22, 2020**, OCSD issued a Revised Pretreatment System Proposal Response Letter, in which OCSD accepted the pH treatment system proposal with certain conditions. OCSD required that Stremicks address the interim compliance during system installation, identify all waste streams that discharge to the sample point without pH adjustment, provide flowrates for those waste streams, and provide a revised facility plot plan. OCSD reminded Stremicks that proper notification to OCSD is required in advance of modifications to processes that affect the nature of discharged waste streams.

OCSD will verify the pH adjustment system installation during the next reporting period and will continue to monitor Stremicks' discharge and compliance status on a quarterly basis.

Superior Plating (Permit No. 1-021090)

Superior Plating is a medium-sized plating shop serving both aerospace (95%) and commercial (5%) customers. Wastewater generating operations include acid activation, alkaline cleaning, alkaline tin plating, black chromate, bright dip, bright nickel plating, bright silver plating, bright tin plating, cadmium plating, chem film, clear chromate, copper plate, copper strike, electroless nickel plating, fuse oil, gold plating, hot D.I. rinsing, liquid water displacement, matte silver plating, nickel plating, nickel strike, nitric dip, olive drab, passivation, permanganate (descale), rinsing (countercurrent, running, & static), silver strike, tin / lead plating, yellow chromate, and zincate.

Superior operates a batch pretreatment system, which consists of pH adjustment, cyanide destruct, chemical precipitation, clarification, coagulation, filter press and final effluent filtration. The non-metal bearing wastestreams undergo pH adjustment only.

From January 2019 through February 2019, OCSD conducted downstream monitoring of Superior's discharge during which cadmium, copper, lead, nickel, zinc, and pH violations were detected. In March 2019, OCSD issued an Order to Cease Noncompliant Discharges informing Superior of OCSD's intention to initiate administrative proceedings against Superior based on the discharge violations detected during the downstream monitoring. In April 2019, OCSD held a Compliance Meeting with Superior during which the company chose to enter into a Settlement Agreement with OCSD to settle the violations and avoid administrative proceedings. The Settlement Agreement was issued in May 2019 and included a negotiated \$50,000 administrative penalty.

July 1 – December 31, 2019

On **July 1, 2019**, OCSD issued a Probation Order requiring Superior to conduct a proper evaluation of its pretreatment system and to make any necessary improvements to achieve consistent compliance. The final compliance date for the Probation Order schedule was **September 15, 2019**. On **August 15, 2019**, OCSD conducted a Compliance Inspection and found that Superior, with the aid of their consultant, had made adequate progress in complying with their Probation Order requirements. The company also submitted all required self-monitoring & biweekly reports in a timely manner.

On **August 14, 2019**, Superior had a cyanide (total) violation, for which issued a Notice of Violation was issued on **September 12, 2019**. This daily limit exceedance also resulted in a monthly average discharge limit violation for cyanide (total) in the month of August 2019. On **September 23, 2019**, OCSD conducted another Compliance Inspection to verify compliance with Probation Order and inquire about

the cause of the recent cyanide violation. Superior's efforts to improve compliance included installation of new measurement equipment (ORP & pH measurement, new pumps & piping), training for treatment operators in the use of new bench test kits for metals & improved control equipment, and an updated pretreatment system schematic and an updated Operations & Maintenance manual. On **October 3, 2019**, OCSD conducted a follow-up inspection and resampling and found that Superior's consultant had evaluated the cyanide destruct system and concluded that the control equipment (pH & ORP) was faulty and needed replacement. The pH and ORP controller had already been completed by the time of the inspection. The resampling results showed compliance. On **November 7, 2019**, OCSD issued a Notice of Violation for the August 2019 cyanide (total) monthly limit violation.

January 1 - June 1, 2020

On **January 3, 2020**, Superior had a zinc violation, for which a Notice of Violation was issued on **March 4, 2020**. This zinc daily limit exceedance also resulted in a zinc monthly average discharge limit violation for the month of January 2020. On **February 20, 2020**, Superior had another cyanide (total) violation, for which a Notice of Violation was issued on **March 10, 2020**. This cyanide (total) daily limit exceedance also resulted in a cyanide (total) monthly average discharge limit violation in the month of February 2020. On **February 27, 2020**, OCSD conducted a Compliance Inspection; the resampling results showed compliance.

On **April 2, 2020**, OCSD issued a Notice of Violation for the January 2020 zinc monthly average limit violation. On **April 21, 2020**, Superior had another cyanide (total) violation, for which a Notice of Violation was issued on **May 7, 2020**. This cyanide (total) daily limit exceedance also resulted in a cyanide (total) monthly average discharge limit violation for the month of April 2020. As a result of the continued violations, on **May 18, 2020**, OCSD issued a Compliance Meeting Notification letter to Superior. The Compliance Meeting was held remotely on **June 9, 2020** with Superior detailing the measures they have taken through their consultant to improve compliance, which included obtaining test kits to use one each batch prior to discharge, re-evaluating their batch cyanide pretreatment system and performing additional cyanide monitoring. Also discussed was the handling of cyanide samples, for which Superior was not adding an appropriate preservative – the company later corrected this.

OCSD will issue a Notice of Violation for the February and April 2020 cyanide monthly limit violations during the next quarter. OCSD will continue to monitor Superior's discharge and compliance status during the next reporting period to determine if additional enforcement is necessary.

Superior Processing (Permit No. 1-021403)

Superior Processing is a metal plating job shop specializing in electroless nickel/immersion gold, electrolytic nickel/gold, electrolytic and immersion silver, and immersion tin plating on customer supplied printed circuit boards. Wastewater is generated from these wet operations and the associated rinses and segregated into two wastestreams. The metal-bearing waste is routed to a continuous ion exchange system and the cyanide-bearing waste is routed to the batch cyanide destruct system.

July 1 – December 31, 2019

On **July 30, 2019**, Superior Processing had a nickel concentration violation and a nickel mass violation, for which a Notice of Violation was issued on **August 21, 2019**. This daily limit exceedance also resulted in a monthly average discharge limit violation for nickel in the month of July 2019. On **October 3, 2019**, OCSD conducted a Compliance Inspection and resampling during which OCSD learned that the effluent from the cyanide destruct system is discharged directly to the sewer without going through the ion exchange system to remove any nickel that might be present in the cyanide-bearing wastestreams. It is likely that Superior Processing had not experienced nickel violations in the past because previous OCSD sampling had been conducted when there was no simultaneous discharge from the cyanide destruct system. Hence, OCSD directed Superior Processing to plumb the cyanide treatment effluent to the ion exchange system for metals removal prior to discharge to the sewer; the resampling results showed compliance.

On **October 14, 2019**, OCSD issued a Notice of Violation for the July 2019 nickel monthly limit violation. Though Superior Processing had already replumbed the cyanide treatment system effluent through the ion exchange system, on **December 3, 2019**, Superior Processing had another nickel concentration violation and another nickel mass violation which was issued on **January 15, 2020**.

January 1 – June 30, 2020

On **January 13, 2020**, OCSD conducted a follow-up Compliance Inspection during which OCSD determined that the first IX vessel was not being monitored for breakthrough. Hence the first vessel is not being replaced in a timely manner to prevent the second IX vessel in series from getting spent and causing discharge of noncompliant effluent. On the same day, Superior Processing submitted a Corrective Action Report detailing that the first vessel would be tested for breakthrough on a regular basis. This would ensure that Superior Processing could replace or rotate the IX vessels in a timely fashion and a back-up IX vessel would always be available.

On **April 29, 2020**, Superior Processing had another nickel concentration violation, along with a nickel mass violation, for which a Notice of Violation was issued on **May 14, 2020**. This nickel daily limit exceedance also resulted in a nickel monthly average discharge limit violation in the month of April 2020. On **May 20, 2020**, OCSD conducted a follow-up Compliance Inspection during which Superior Processing reported that, in consultation with their IX vendor, the resins used in the IX vessels were not suitable for removing complexed nickel present in the cyanide-destruct effluent. To prevent future nickel violations, Superior Processing has discontinued treating cyanide-bearing wastestreams treatment onsite and opted to wastehaul all cyanide-bearing wastewater offsite on a weekly or biweekly basis, not only to maintain compliance but also to recover gold present in the wastestream.

OCSD will issue a Notice of Violation for the April 2020 nickel monthly limit violation during the next reporting period. OCSD will continue to monitor Superior Processing's discharge and compliance status on a quarterly basis to determine if escalated enforcement is necessary.

Thompson Energy Resources, LLC (Permit No. 1-521773)

Thompson Energy Resources, LLC (Thompson Energy) produces crude oil by separating ground water from the oil/groundwater mixture extracted from multiple wells onsite through heating and chemical treatment; separated water is discharged to the sewer system.

In July 2018, Thompson Energy had an oil & grease violation. In September 2018, OCSD conducted a Compliance Inspection and resampling during which Thompson Energy attributed the source of the violation to a bad batch of chemicals coupled with high temperature processing. In mid-September 2018, Thompson Energy submitted a corrective action report indicating that the company had replaced its chemical vendor and implemented new chemicals at the facility. The resampling results showed compliance.

In June 2019, Thompson Energy had another oil & grease of mineral or petroleum origin violation.

July 1 – December 31, 2019

On **July 9, 2019**, OCSD issued a Notice of Violation for the June 2019 oil & grease violation. On **August 12, 2019**, OCSD conducted a Compliance Inspection, during which Thompson Energy indicated that the source of the violation was failure of chemical pumps on site. During the site inspection, Thompson Energy provided a corrective action report indicating that the dosing pumps and associated piping have been replaced. On **August 28, 2019**, Thompson Energy had another oil & grease violation, for which a Notice of Violation was issued on **October 28, 2019**.

On **November 12, 2019**, OCSD conducted a Compliance Inspection and resampling during which OCSD determined that Thompson Energy's ongoing oil & grease violations were being caused by

insufficient retention time due to one of the two clarification tanks being out of service, along with other multiple operational issues. The resampling detected another oil & grease violation.

January 1 – June 30, 2020

On **January 2, 2020**, OCSD issued a Notice of Violation for the November 2019 oil & grease violation. On **January 24, 2020**, OCSD issued a Compliance Requirements Letter directing Thompson Energy to attend a compliance meeting on **February 3, 2020**. During the Compliance Meeting, Thompson Energy described several operational issues including solidification of chemicals, failure of chemical dosing pumps, and a broken belt-skimmer that caused the oil & grease violations. OCSD discussed the issues regarding the frequent high temperature of the wastewater at the facility, as well as the possibility of installation of a new settling tank to increase retention time and further reduce the effluent temperature. On **February 24, 2020**, OCSD issued a Compliance Requirements Letter directing Thompson Energy to install a new belt skimmer by **March 15, 2020** and increase the frequency of oil & grease self-monitoring, effective **May 1, 2020**. OCSD revised Thompson Energy's permit to reflect this increased self-monitoring frequency for oil & grease. Prior to the belt-skimmer installation deadline, Thompson Energy informed OCSD that their waste stream is consistently in compliance with the oil & grease limits after implementing various process changes on site, and thereafter requested cancellation of the belt-skimmer installation requirement. On **April 17, 2020**, Thompson Energy informed OCSD that they will be temporarily shutting down operations due to economic constraints. OCSD instructed Thompson Energy to lock-close the gate valve on the effluent piping to prevent any inadvertent discharge to the sewer system.

OCSD will continue to monitor Thompson Energy's discharge and compliance status on a quarterly basis.

TTM Technologies North America, LLC (Coronado) (Permit No. 1-521859)

TTM Technologies North America, LLC (TTM Technologies) is a large scale, full-service printed circuit board shop. Wastewater is generated from the processing of copper laminates into printed circuit boards. Wet processes include copper plating, electroless copper plating, nickel/gold plating, solder mask, alkaline cleaning, acid cleaning, scrubbing, developing, resist stripping, tin stripping, etching, screen cleaning, oxide coating, and miscellaneous cleanup/mop water. Rinse schemes practiced at the facility include significant use of static rinses in addition to running rinses. TTM Technologies operates a continuous pretreatment system to treat low concentration wastestreams, consisting of pH adjustment and multiple ion exchange resin beds, with a large portion of the effluent reused onsite. Batch treatment is performed on spent solutions and ion exchange backflush and consists of pH adjustment, flocculation, and clarification followed by sludge dewatering with a filter press. Concentrated wastestreams (etchant, spent plating solutions) are wastehailed offsite.

In August and September 2018, TTM Technologies had copper violations. In October 2018, OCSD issued a Compliance Requirements Letter requiring TTM to implement corrective actions and attend a Compliance Meeting later that month. In the Compliance Meeting, TTM submitted information detailing their efforts to review the pretreatment system and explained the improvements that had been implemented prior to the meeting. OCSD required TTM Technologies to submit an updated pretreatment system diagram and operations and maintenance manual (O&M) by December 2018, which was extended to the following quarter due to delays. In January 2019, TTM submitted its O&M Manual which contained the updated pretreatment system schematics. In June 2019, TTM had another copper violation.

July 1 – December 31, 2019

On **July 18, 2019**, OCSD conducted a Compliance Inspection to investigate the copper violation. During the inspection, TTM stated that their review of their ion exchange regeneration schedule indicated that the final 'scavenger' stage required more frequent regeneration, which by that time had already been implemented. On **July 22, 2019**, OCSD issued the Notice of Violation for the copper violation.

January 1 – June 30, 2020

TTM had no further violations during this reporting period. OCSD will continue to monitor TTM's discharge and compliance status on a quarterly basis.

Ultra-Pure Metal Finishing, Inc. (Permit No. 1-021703)

Ultra-Pure Metal Finishing, Inc. (Ultra-Pure) is a metal finishing job shop. Customer-supplied parts made of aluminum and steel are received for anodizing or chemfilm application. Colored dyes are used on aluminum parts, while acid preclean and zinc plating are used on steel parts. Wastewater is generated from the rinse water tanks following the chemical process tanks. Pretreatment consists of hexavalent chrome reduction, hydroxide precipitation, coagulant addition, and polymer/flocculation for metals precipitation, and clarification. Solids from the clarifier are processed in a sludge thickening tank and filter press, with filtrate returns to the beginning of the pretreatment system.

In April 2019, Ultra-Pure had zinc daily and monthly average discharge limit violations. In May 2019, Ultra-Pure submitted a corrective action letter stating that the root cause of the violation was the processing of new parts that had trapped highly concentrated solutions. The high concentration drag-out was then carried to the rinses and caused the treatment system to be slug loaded. In June 2019, OCSD conducted a Compliance Inspection and noted additional pretreatment issues including slug loading of the continuous treatment system with concentrated floor waste and inadequate record keeping of daily maintenance.

July 1 – December 31, 2019

On **July 1, 2019**, OCSD issued a Notice of Violation for the April 2019 zinc monthly limit violation. On **July 25, 2019**, OCSD issued a Compliance Requirements Letter requiring Ultra-Pure to discontinue the practice of slug-loading the treatment system with concentrated floor waste, maintain a daily checklist of relevant pretreatment system parameters, and submit updated facility drawings to OCSD. On **September 12, 2019**, Ultra-Pure submitted the updated facility drawings. On **October 16, 2019**, OCSD conducted a Compliance Inspection during which OCSD verified completion of the compliance requirements.

January 1 – June 30, 2020

Ultra-Pure had no further violations during this reporting period. The facility was sold to Dunham Metal Processing and now operates as Dunham Metal Plating Inc. under Permit No. 1-601023.

Vit-Best Nutrition, Inc. (Permit No. 1-600010)

Vit-Best Nutrition, Inc. (Vit-Best) performs compounding of various vitamins and nutritional supplements from food grade components. The components for the vitamins are mixed in tanks and undergo further processing to create the final product. Wastewater discharge consists of unit washdowns and mop-water from general cleaning that occurs between product runs.

In June 2019, Vit-Best had a pH violation.

July 1 – December 31, 2019

On **July 9, 2019**, OCSD issued a Notice of Violation for the June 2019 pH violation. On **July 18, 2019**, OCSD conducted a Compliance Inspection during which Vit-Best indicated that the most likely source of low pH was due to production operations associated with citric acid. In a typical operation, citric acid powder is screened after blending through a shaker screen. On **July 23, 2019**, Vit-Best submitted their corrective action, which included vacuuming the shaker screen prior to washing operations. Vit-Best stated that this new procedure should further collect residual citric acid to prevent any future non-

compliant discharge.

January 1 – June 30, 2020

Vit-Best had no further violations during this reporting period. OCSD will continue to monitor Vit-Best's discharge and compliance status on a quarterly basis.

**PRETREATMENT PROGRAM STAFFING,
COSTS, AND FIELD EQUIPMENT**

Introduction

Staffing, Revenues, and Costs

Field Equipment

PRETREATMENT PROGRAM STAFFING, COSTS, AND FIELD EQUIPMENT**5.1 INTRODUCTION**

This chapter discusses the pretreatment program's staffing levels, program costs, payments to OCSD by permittees, and equipment used by the program.

5.2 STAFFING, REVENUES, AND COSTS**5.2.1 Staffing**

The Resource Protection Division, a part of OCSD's Environmental Services Department, includes all the pretreatment program staff. Dedicated pretreatment staff for FY 2019/20 consists of 1 Manager, 3 Supervisors, 9 Engineers, 4 Environmental Specialists, 10 Field Inspectors, 3 Field Technicians, and 7 Administrative Support Personnel for a total of 37 staff members.

5.2.2 Revenues

During FY 2019/20 a total of \$19,013,541 in revenue payments were made to OCSD by Class I, Class II, Wastehauler, Special Purpose, and FOG permittees. The following amounts were collected for the discharge of wastewater, Biochemical Oxygen Demand pollutants, and Suspended Solid pollutants: Operation and Maintenance (O&M) fees totaled \$12,781,778; Supplemental Capacity Facilities Capacity Charge (SCFCC) fees totaled \$4,711,028; and Wastehauler User Fees totaled \$1,111,428.32. Permit fees in the amount of \$409,307 were collected, which includes over \$97,781 in noncompliance fees and penalties were issued. Due to a change in the OCSD's Financial Management Division's accounting practices, the O&M and SCFCC fees represent the prior fiscal year, FY 2018/19 and an estimate of FY 2019/20

The revenue collected offsets a portion of OCSD's treatment costs and the \$7,206,630 needed to administer the pretreatment program, including labor, supplies, equipment, and other overhead. These costs are associated with issuing permits, sampling, inspections, and laboratory analyses.

5.2.3 Program Costs

Overall pretreatment program implementation costs (including overtime) during the fiscal year decreased 2.7% over the preceding year and show a 4.4% decrease from the program costs of five years ago. The cost per labor hour over the past five years has decreased 2.9%, which is an average 0.6% per year decrease. A comparison of pretreatment program costs for the past five years is shown in TABLE 5.1.

TABLE 5.1 Summary of Total Costs and Total Labor Hours for the Pretreatment Program, Fiscal Years 2016-20 Orange County Sanitation District, Resource Protection Division			
Fiscal Year	Total Cost	Labor Hours	Cost Per Labor Hour
2015-16	\$7,536,949	72,439	\$104.05
2016-17	\$6,488,868	69,046	\$93.98
2017-18	\$6,044,009	69,606	\$86.83
2018-19	\$7,406,407	72,646	\$101.95
2019-20	\$7,206,630	71,355	\$101.00

5.3 FIELD EQUIPMENT

5.3.1 Equipment Inventory

An inventory of major equipment used by the OCSD inspection staff for the Resource Protection Division is shown in TABLE 5.2. Thirteen field staff, each utilizing trucks and modern sampling equipment, maintain a high degree of visibility in the industrial community.

TABLE 5.2 Current Inventory of Major Equipment for the Pretreatment Program, Fiscal Year 2019-20 Orange County Sanitation District, Resource Protection Division	
Description	Quantity
<u>Vehicles</u>	12
<u>Equipment</u>	
Cellular Phones	13
Composite Samplers, General Use	43
Composite Samplers, Special Purpose	16
Portable Sample Pumps	9
pH Meters, Portable	16
Gas Meters	23

PRETREATMENT PROGRAM STATUS

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Wastehauler Program

Inspection and Sampling

Quality Assurance and Quality Control Activities

Total Toxic Organics Waiver Program

Special Purpose Discharge Permit Program

Self-Monitoring Program

Industrial Operations and Maintenance Improvement Program

Significant Changes in Operating the Pretreatment Program

6.1 INTRODUCTION

The Orange County Sanitation District (OCSD) administers several different program elements designed to meet the goal of controlling discharges from industrial and non-industrial sources. These have a direct influence on OCSD's ability to meet ocean discharge, biosolids reuse, and water reclamation requirements. This chapter outlines those program elements designed to enforce and enhance the federally approved Pretreatment Program, and include industrial discharger public participation, wastehauler monitoring, industrial inspection and sampling, quality assurance/quality control, total toxic organic (TTOs) waivers, special purpose discharge permits, self-monitoring, and industrial operations and maintenance improvement.

6.2 PUBLIC PARTICIPATION

A provision of 40 CFR 403.8 is to comply with the public participation requirements of 40 CFR Part 25 in the enforcement of National Pretreatment Standards. These procedures shall include provision for at least annual public notification in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by OCSD, of Industrial Users which, at any time during the previous 12 months, were in significant noncompliance with applicable pretreatment requirements. This public notice is shown in Appendix E.

6.3 WASTEHAULER PROGRAM

OCSD operates a dedicated discharge station at Reclamation Plant No. 1 for the disposal of septage, chemical toilets, brine, cesspool, and non-industrial Food Service Establishment grease (FSE) interceptor wastes collected by independent wastehaulers. The discharges are transferred via a major interplant sewer to Treatment Plant No. 2 for treatment. OCSD Treatment Plant No. 2 has a back-up discharge station used during Plant No. 1 service interruptions. The following sections provide the status of wastehauler permitting, discharges and monitoring conducted during FY 2019/20. Values provided in the tables are derived primarily from manifests provided by the wastehauler companies.

6.3.1 Wastehauler Permitting

Before a liquid waste pumper can obtain a Wastehauler Permit from OCSD, the wastehauling company must register with the Orange County Health Care Agency (OCHCA) and have all vehicles intended for discharge at OCSD inspected by OCSD staff. Numerical decals issued by both OCHCA and OCSD are affixed to all permitted vehicles. These decals aid in the identification of authorized dischargers. Permits include rules for use of the wastehauler station, with enforcement for violations. Wastehaulers must conduct their business using methods to reduce or eliminate odors. During FY 2019/20, 40 wastehauler companies were under permit with OCSD, with a total of 142 trucks.

6.3.2 Wastehauler Discharges

During the past fiscal year, 12.6 million gallons (MG) of waste was discharged by permitted wastehaulers at the OCSD Wastehauler Station. The volume of waste accepted at the station was 4.5% lower than the volume received during FY 2018/19. The number of loads received increased by 4.18% from FY 2018/19. As of January 18, 2016, OCSD started using a new pretreatment software and database (iPACS), which allows for more accurate tracking and calculation of discharged volumes. The reported volume for FY 2015/16 through FY 2019/20 considers the self-reported volumes, instead of the maximum capacity

volumes reported in previous years, which assumed all received tanks were full. Wastehauler discharge data for the last five years is summarized in TABLE 6.1.

TABLE 6.1 Summary of Wastehauler Loads and Volume Discharged into Plant No. 1 Disposal Station, Fiscal Years 2016-2020 Orange County Sanitation District, Resource Protection Division		
Fiscal Year	Loads Delivered	Volume Waste Received Millions of Gallons
2015-16	7,472	14.2 ¹
2016-17	8,465	18.1 ¹
2017-18	4,844	12.1 ¹
2018-19	8,127	13.2 ¹
2019-20	8,467	12.6 ¹

¹ Volume reported is based on Wastehauler self-reported volumes.

Wastehauler loads are classified into five types of waste: brine, cesspool, chemical toilets, non-industrial Food Service Establishment (FSE) grease interceptor waste (i.e. restaurant grease trap waste), and septic tanks. The total volumes and number of loads for each type of waste are summarized in TABLE 6.2.

TABLE 6.2 Summary of Wastehauler Load Types Discharged into Plant No. 1 Disposal Station, Fiscal Year 2019/2020 Orange County Sanitation District, Resource Protection Division			
Load Type	Loads Delivered	Waste Received in Millions of Gallons	Percent of Waste Received
Brine	0	0	0
Cesspool	88	0.15	1.2
Chemical Toilet	4,676	6.20	49.2
Food Service Establishment (FSE) Grease	2,672	4.65	36.9
Septic Tank	1,024	1.60	12.7
Other	7	<0.10	<1
Total All Types	8,467	12.60	100

During the past fiscal year, 4.65 million gallons of FSE grease was discharged by permitted wastehaulers at OCSD's Wastehauler Station. This represents a 13.9% decrease from the volume of grease discharged during FY 2018/19. The five-year trend for grease is presented in TABLE 6.3.

TABLE 6.3 Summary of Wastehauler Grease Wastewater Loads into OCSD's Disposal Station, Fiscal Years 2016-2020 Orange County Sanitation District, Resource Protection Division		
Fiscal Year	Loads Delivered	Millions of Gallons
2015-16	2,565	7.21
2016-17	3,668	9.33
2017-18	3,100	5.8
2018-19	2,939	5.4
2019-20	2,672	4.65

6.3.3 Wastehauler Monitoring

Random sampling of wastehauler loads is conducted to verify compliance with OCSD discharge limits. During FY 2019/20, the contents of 1358 wastehauler vehicles (16% of all loads received) were sampled and 8,148 metal analyses were performed. The results of the sampling included 139 metal violations in 110 loads that originated from either domestic sources or grease hauling. This represents a 1.72% violation rate of the total samples taken and analyzed. The violations included 1 Lead, 2 Cadmium, 69 Copper, and 67 Zinc concentration exceedances. Some of the actions taken by OCSD as a response to these violations included generator verifications and inspections, investigations, Notice of Violation letters, and compliance meetings.

6.4 INSPECTION AND SAMPLING

OCSD schedules sampling and inspection of each Class I industry quarterly, and samples select Class II industries periodically. Permittees are sampled for metals, cyanide, organics, pH, oil and grease, biochemical oxygen demand (BOD), and suspended solids (SS). Inspections are conducted before and/or after each 24-hour composite sampling event, at the time of collecting a grab sample, and to determine compliance with other provisions of the *Wastewater Discharge Regulations* (Ordinance).

6.5 QUALITY ASSURANCE AND QUALITY CONTROL ACTIVITIES

6.5.1 Quality Assurance and Quality Control (QA/QC) Program Tasks

The objective of the QA/QC program is to ensure that all field sampling and monitoring is accurate and performed in accordance with Resource Protection Division's adopted policies and procedures. The QA/QC program includes the following components:

Equipment Blank – Composite samples of deionized water are collected monthly to evaluate the cleaning procedures and storage of automatic sampling equipment.

Archive Sample Check – Archived heavy metal samples are analyzed monthly, several months after collection, to evaluate the effects of sample storage conditions and whether those conditions impose analyte degradation or contamination.

Sample Collection Check – Duplicate composite samples are collected quarterly to evaluate the precision of the sample collection and preservation methods.

Trip Blank Evaluation – Samples made up of reagent water are collected to measure the potential contamination of EPA Method 624 samples during transport and storage.

Sample Collection and Inspection Audit – Periodic reviews are conducted to assure that the Inspectors conform to existing guidelines for inspection and sample collection, and that existing procedures continue to ensure representative data. Document reviews are completed to assess Inspector overall performance.

During FY 2019/20, 72 composite samples were analyzed for equipment blank verification, 48 archived samples were analyzed for comparison against previous analytical results, 80 composite samples were analyzed from industrial discharges to audit collection methods, and 12 trip blank samples were analyzed to verify the effectiveness of the transportation and storage methods of volatile organic compound samples. The test results for QA/QC samples collected are detailed in Appendix I. The overall results show that the procedures and their implementation for the collection of field samples are adequate to assure sample quality and consistency.

Calculation Methods

Equipment blank sampling is performed to find any concentration above the reporting limit (RL). Any detectable amount is considered an indicator of possible contamination in the deionized water supply, detergent, containers, storage, or other sources. The number of times a metal is detected above the RL is tracked.

Methods for calculating deviations were refined beginning with data generated during 2005 to be more consistent with accepted laboratory standards for quality control. The prior use of Pretreatment Standards for Existing Sources (PSES) discharge limits to calculate percent deviations for duplicate samples has been replaced with the relative percent difference (RPD) formula found in Standard Methods for the Examination of Water and Wastewater (hereafter Standard Methods), 22nd Edition, Part 1020 B, Section 12, Subsection f, entitled “Duplicate sample” (pg. 1-11).

Precision among duplicate samples is important for the archive samples and sample collection checks. The following metrics were determined based on the nature of the samples normally collected and the variables with matrix effects anticipated. The precision of low-level duplicates, with concentrations less than 20 times the RL is $\pm 25\%$ RPD. The precision of high-level duplicates, with concentrations greater than 20 times the RL, is $\pm 20\%$ RPD. These guidelines are used to present and calculate the archive sample data in the tables below. If the average of the two duplicate samples is greater than 20 times the RL, then the more restrictive limit of 20% is used to evaluate precision. Additionally, per Standard Methods, 22nd Edition, Part 1020B, Section 8, values where the average is below five (5) times the RL are not used for RPD calculation.

A study conducted in 2009, including a review of relevant literature and OCSD data, has confirmed that silver is relatively unstable under standard preservation and storage conditions, and cannot be used to evaluate precision and accuracy with the other metals listed below in archive samples. Consequently, silver has been removed from the list of metals used to evaluate precision and accuracy.

The current reporting limits (RLs) used by OCSD’s laboratory during FY 2019/20 are listed below. These reporting limits are used in calculations in tables where RLs appear.

	Cadmium	Chromium	Copper	Nickel	Lead	Zinc
RL (mg/L)	0.02	0.02	0.02	0.02	0.02	0.02

6.5.2 QA/QC Sampling Results

Evaluation of Equipment Blank Sampling Results

To check for contamination of sampler and field equipment, two composite samples are collected each month using clean, randomly chosen automatic samplers. The two samplers are set at the Source Control Inspection Group's technician room to collect composite samples from a deionized water supply placed in the sampler's 24 bottles. The QA/QC samples are composited and preserved in the same manner as compliance samples collected at permitted facilities. Each composite is split into three equal volumes, preserved, submitted to, and analyzed individually by OCSD's laboratory for heavy metal constituents.

The results of this study are summarized in TABLE 6.4. The statistics presented below show that 89.81% of the analyses (388 of the 432 analyses) are at or below the heavy metal constituents RL.

Constituent	RL (mg/L)	Analyses at or Below Reporting Limit		Analyses Above Reporting Limits	Total Avg. Deviation
		No. of Analyses	Percentage	No. of Analyses	
Cadmium	0.02	72	100	0	0.00
Chromium	0.02	72	100	0	0.00
Copper	0.02	72	100	0	0.00
Nickel	0.02	72	100	0	0.00
Lead	0.02	72	100	0	0.00
Zinc	0.02	28	38.89	44	0.01
Summaries		388	89.81	44	0.00

44 of the Zinc samples had results above the RL. Of the results above the RL, all were just slightly above the RL. Zinc is common a contaminant and present in dust; OCSD continues to review equipment maintenance and storage procedures to try to minimize this low concentration contamination.

Evaluation of Archived Samples

Archived samples are submitted to OCSD's laboratory to evaluate the effects of sample splitting and storage techniques. The results of the archive sample analyses are compared with the original sample results and the relative percent difference (RPD) is calculated for each metal. Results at or below the RL are calculated as equal to the RL.

Statistics on the archived samples and relative percent differences (RPD) are summarized in TABLE 6.5. Of the 288 comparisons performed on 96 samples (48 archived samples and 48 original samples), 99.3% of the results were within the acceptable RPD.

TABLE 6.5 QA/QC Evaluation of Archived Samples, Fiscal Year 2019/20 Orange County Sanitation District, Resource Protection Division				
Constituent	Comparisons within Acceptable RPD	Comparisons outside Acceptable RPD	Percent within Acceptable RPD	Average RPD (%)
Cadmium	48		100	0
Chromium	48		100	0
Copper	48		100	0
Nickel	48		100	0
Lead	48		100	0
Zinc	46	2	95.8	15
Summaries	286	2	99.3	2.5

The incidents of comparisons outside acceptable RPDs are believed to originate from sample splitting and/or preservation errors.

A review of archive sample handling procedures took place during FY 2016/17, and a new procedure for storing sample archives was implemented on July 1, 2016. OCSD's Laboratory is planning to perform analysis to study sample preservation and potential degradation or leaching.

Sample Collection Checks

Two composite samplers collected 20 samples each quarter to verify the precision of the sample collection methods. In this study, two automatic samplers are installed adjacent to each other at a single industrial sample point to collect one composite sample from each sampler. Each composite sample is split into ten duplicate portions. Five duplicates from each sampler are analyzed by OCSD's laboratory for heavy metals and five are analyzed for total suspended solids (TSS).

The results for each constituent are evaluated by calculating the relative percent difference (RPD) for each group of metals. Values that exceed the accepted deviations for metals and TSS are investigated, and where causes are identified, corrective actions are taken. This comparison is used to confirm that the sample location is appropriate, that the samplers are maintained and are functioning properly, and that sample-splitting techniques are effective.

The statistics on the collection check samples and the sampler average deviations are summarized in TABLE 6.6. The comparisons show acceptable agreement both among the samples within the sampler and between samplers at the same site.

TABLE 6.6 QA/QC Collection Check Samples and Sampler Average Deviations, Fiscal Year 2019/20								
Orange County Sanitation District, Resource Protection Division								
Qtr.	Location	Average Deviations						
		Cadmium	Chromium	Copper	Nickel	Lead	Zinc	TSS
1	Sampler A	0.00	0.00	0.00	0.00	0.00	0.27	0.6
	Sampler B	0.00	0.00	0.00	0.00	0.00	0.20	0.7
	Site RPD (%)	0.00	0.00	0.00	0.00	0.00	6.40	0.0
2	Sampler A	0.00	0.00	0.00	0.00	0.00	1.02	0.3
	Sampler B	0.00	0.00	0.00	0.00	0.00	1.64	1.2
	Site RPD (%)	0.00	0.00	0.00	0.00	0.00	11.86	6.5
3	Sampler A	0.00	0.00	0.32	0.00	0.00	0.00	0.0
	Sampler B	0.00	0.00	0.31	0.00	0.00	0.00	0.8
	Site RPD (%)	0.00	0.00	4.42	0.00	0.00	0.00	37.8
4	Sampler A	0.00	0.00	0.01	0.00	0.00	0.00	1.0
	Sampler B	0.00	0.00	0.01	0.00	0.00	0.00	1.0
	Site RPD (%)	0.00	0.00	7.14	0.00	0.00	0.00	7.6
Avg.	Site RPD	0.00	0.00	2.89	0.00	0.00	4.56	12.97
All results are in units of sampler average deviation.							TSS = total suspended solid	

The variances between samples at the same site were all low and demonstrate good sample splitting. Third quarter TSS showed a high RPD between the two samplers collecting samples from the same site. Collection check procedures are currently being evaluated and staff will be notified of any changes if necessary.

Trip Blank Evaluation for EPA Method 624 Analysis

Inspectors perform this study monthly. Containers prepared with reagent water are obtained from OCSD's laboratory and carried by inspectors with other samples during their workday. The containers are returned to the lab and analyzed for volatile organics. Twelve trip blanks were analyzed for volatile organics using EPA Method 624. All twelve EPA Method 624 trip blanks were below reporting limits.

Sample Collection and Inspection Audit

During FY 2019/20, the source control supervisor audited the sample collection and inspection procedures of individual inspectors. The audit of each inspector was accomplished by document review during performance evaluations. Opportunities for improvement were discussed with individual inspectors during their mid-year and annual performance reviews.

6.5.3 QA/QC Conclusions

The following findings support the general conclusion that the sampling procedures are being followed and that the samples are representative and free of contamination:

- Results of the Equipment Blank Evaluation demonstrate that 89.81% of the equipment blank samples have concentrations at or below the heavy metal reporting limits. The remaining 10.19% contained low level Zinc contamination slightly above the RL.
- Results of the Archive Sample Evaluation demonstrate that 99.3% of the archive samples were within the acceptable percent deviation range.
- The Sample Collection Check results show good agreement for heavy metals among split samples for each sampler as well as between samplers at the same site. The sample locations and sample-splitting methods are adequate to provide representative samples for heavy metals.
- All twelve EPA Method 624 trip blanks were below reporting limits. Trip blanks were analyzed for volatile organics using EPA Method 624.

6.6 TOTAL TOXIC ORGANICS WAIVER PROGRAM

Permittees subject to Federal Categorical Standards were first notified of OCSD's Total Toxic Organics (TTOs) Control Program requirements on July 27, 1987. The current TTOs Program is summarized below:

- Categorical permittees who are required to conduct self-monitoring for Total Toxic Organics (TTOs) must collect composite samples at least twice a year. In accordance with OCSD's *Wastewater Discharge Regulations*, the composite sample typically consists of a minimum of four (4) grab samples where the concentration of a composite sample is obtained by analyzing the grab samples and compositing the results mathematically.
- Permittees who have not shown detectable levels of TTOs based on their wastewater discharge data for at least one year are eligible to waive the self-monitoring requirement if they can certify that TTOs are not used or present in the industrial wastewater discharge at their facility. The wastewater discharge data used in evaluating eligibility for this waiver includes data for samples obtained by OCSD during routine monitoring and the self-monitoring results obtained by the permittee. The evaluation of wastewater discharge to determine the permittees that are eligible for this waiver is conducted in December and June of each year. See TABLE 6.7 for those permittees that have successfully applied for a waiver. To be eligible for a waiver, the permittee must satisfy all the following:
 - Permittee must demonstrate sampling results with TTO concentrations less than or equal to 0.05 mg/L for the monitoring period being considered.
 - Permit must have an initial permit issue date that is prior to the start of the baseline monitoring being considered.
 - Submission of an acceptable Toxic Organic Management Plan (TOMP).
- Subsequently, permittees who have a TTOs self-monitoring waiver renew their Certification of Non-Use of TTOs semi-annually during this period; otherwise, the waiver is cancelled. Issuance of a waiver does not constitute elimination of the self-monitoring requirement from the permit but merely a temporary discontinuance or suspension of the requirement.

- The self-monitoring requirement waiver for any permittee is cancelled if sampling results from the permittee's self-monitoring or OCSD's sampling demonstrate TTO concentrations above the 0.05 mg/L threshold. For these cases, the requirement to conduct self-monitoring at least twice a year is immediately reinstated.
- Newly permitted categorical users required to self-monitor will not be allowed to waive the self-monitoring requirement until meeting TTO reporting and waiver requirements for at least a year.

TABLE 6.7 Permittees with TTOs Waivers, July 1, 2019 – June 30, 2020 Orange County Sanitation District, Resource Protection Division		
Permit No.	Facility Name	Federal Categories
1-531422	A & G Electropolish	Metal Finishing PSNS
1-021088	A & R Powder Coating, Inc.	Metal Finishing PSNS
1-011138	Accurate Circuit Engineering	Metal Finishing PSNS
1-011115	Active Plating, Inc.	Metal Finishing PSNS
1-021389	Advance Tech Plating, Inc.	Metal Finishing PSNS
1-531404	Air Industries Company, A PCC Company (Knott)	Metal Finishing PSES, Nonferrous Metals Forming And Metal Powders PSNS
1-031110	All Metals Processing of O.C., Inc.	Metal Finishing PSNS
1-011073	Allied Electronics Services, Inc.	Metal Finishing PSNS
1-011036	Alloy Tech Electropolishing, Inc.	Metal Finishing PSNS
1-021249	American Circuit Technology, Inc.	Metal Finishing PSNS
1-521798	Andres Technical Plating	Metal Finishing PSNS
1-600295	AnoChem Coatings	Metal Finishing PSNS
1-511389	Anodyne, Inc.	Metal Finishing PSNS
1-011155	Anomil Ent. Db a Danco Metal Surfacing	Metal Finishing PSNS
1-600689	APCT Anaheim	Metal Finishing PSNS
1-021192	ARO Service	Metal Finishing PSNS
1-571295	Astech Engineered Products, Inc.	Metal Finishing PSNS
1-071037	Aviation Equipment Processing	Metal Finishing PSNS
1-521824	Beckman Coulter, Inc.	Metal Finishing PSNS
1-511370	Beo-Mag Plating	Metal Finishing PSNS
1-021213	Black Oxide Industries, Inc.	Metal Finishing PSNS
1-111018	Boeing Company (Graham)	Metal Finishing PSNS
1-521770	Burlington Engineering, Inc.	Metal Finishing PSNS
1-021062	Cadillac Plating, Inc.	Metal Finishing PSNS
1-511076	CD Video, Inc.	Metal Finishing PSNS
1-021189	Central Powder Coating	Metal Finishing PSNS
1-511414	Chromadora, Inc.	Metal Finishing PSNS
1-521821	Circuit Technology, Inc.	Metal Finishing PSNS
1-111129	Coast to Coast Circuits, Inc.	Metal Finishing PSNS
1-600708	Coastline Metal Finishing Corp., A Division of Valence Surface Technologies	Metal Finishing PSNS

TABLE 6.7 Permitees with TTOs Waivers, July 1, 2019 – June 30, 2020
Orange County Sanitation District, Resource Protection Division

Permit No.	Facility Name	Federal Categories
1-021290	Continuous Coating Corporation	Coil Coating PSNS, Metal Finishing PSNS
1-021289	Crest Coating, Inc.	Metal Finishing PSNS
1-021297	Custom Enamellers, Inc.	Metal Finishing PSNS
1-021379	Data Aire, Inc. #2	Metal Finishing PSNS
1-011142	Data Electronic Services, Inc.	Metal Finishing PSNS
1-521761	Data Solder, Inc.	Metal Finishing PSNS
1-021325	Dunham Metal Processing	Metal Finishing PSNS
1-011064	EFT Fast Quality Service, Inc.	Metal Finishing PSNS
1-021158	Electro Metal Finishing Corporation	Metal Finishing PSNS
1-071162	Electrolurgy, Inc.	Metal Finishing PSNS
1-021336	Electron Plating Inc.	Metal Finishing PSNS
1-021337	Electronic Precision Specialties, Inc.	Metal Finishing PSNS
1-600456	Embee Processing (Anodize)	Electroplating PSES, Metal Finishing PSNS
1-600457	Embee Processing (Plate)	Electroplating PSES, Metal Finishing PSNS
1-521855	Excello Circuits Manufacturing Corp.	Metal Finishing PSNS
1-011068	Fabrication Concepts Corporation	Metal Finishing PSNS
1-021121	Fineline Circuits & Technology, Inc.	Metal Finishing PSNS
1-600585	FMH Aerospace Corp.	Aluminum Forming PSNS, Metal Finishing, Nonferrous Metals Forming And Metal Powders PSNS
1-021352	Gomtech Electronics, Inc.	Metal Finishing PSNS
1-021286	Harbor Truck Bodies, Inc.	Metal Finishing PSNS
1-521790	Hi Tech Solder	Metal Finishing PSNS
1-021185	Hightower Plating & Manufacturing Co.	Metal Finishing PSNS
1-061115	Hixson Metal Finishing	Electroplating PSES, Metal Finishing PSNS
1-021041	Ideal Anodizing, Inc.	Metal Finishing PSNS
1-521756	Ikon Powder Coating, Inc.	Metal Finishing PSNS
1-031106	Imperial Plating	Metal Finishing PSNS
1-600243	Integral Aerospace, LLC	Metal Finishing PSNS
1-511407	JD Processing, Inc. (East)	Metal Finishing PSNS
1-021171	Kenlen Specialties, Inc.	Metal Finishing PSNS
1-021428	Kryler Corporation	Electroplating PSES, Metal Finishing PSNS
1-600338	Lightning Diversion Systems LLC	Metal Finishing PSNS
1-511361	LM Chrome Corporation	Metal Finishing PSNS
1-031049	Logi Graphics, Inc.	Metal Finishing PSNS

TABLE 6.7 Permitees with TTOs Waivers, July 1, 2019 – June 30, 2020
 Orange County Sanitation District, Resource Protection Division

Permit No.	Facility Name	Federal Categories
1-111007	M.S. Bellows	Metal Finishing PSNS
1-531391	Magnetic Metals Corporation	Metal Finishing PSNS
1-600006	Meggitt, Inc.	Metal Finishing PSNS
1-021153	Micrometals, Inc.	Nonferrous Metals Forming And Metal Powders PSNS
1-521811	Murrietta Circuits	Metal Finishing PSNS
1-521772	Neutronic Stamping and Plating	Metal Finishing PSNS
1-571292	Newport Fab, LLC (dba TowerJazz Semiconductor)	Electrical And Electronic Components PSNS
1-521801	Nobel Biocare USA, LLC	Metal Finishing PSNS
1-021520	Omni Metal Finishing, Inc.	Metal Finishing PSNS
1-021070	Pacific Image Technology, Inc.	Metal Finishing PSNS
1-141002	Parker Hannifin Corporation	Metal Finishing PSNS
Z-600979	Parker Hannifin Corporation	Metal Finishing PSNS
1-521783	Patio and Door Outlet, Inc.	Metal Finishing PSNS
1-521805	Performance Powder, Inc.	Metal Finishing PSNS
1-011262	Pioneer Circuits, Inc.	Metal Finishing PSNS
1-521852	Platinum Surface Coating, Inc.	Metal Finishing PSNS
1-600167	Powdercoat Services, LLC (Bldg E / Plant 1)	Metal Finishing PSNS
1-600168	Powdercoat Services, LLC (Bldg J / Plant 3)	Metal Finishing PSNS
1-011265	Precious Metals Plating Co., Inc.	Metal Finishing PSNS
1-521809	Precision Anodizing & Plating, Inc.	Metal Finishing PSNS
1-011008	Precision Circuits West, Inc.	Metal Finishing PSNS
1-600337	Q-Flex Inc.	Metal Finishing PSNS
1-011013	RBC Transport Dynamics Corp.	Metal Finishing PSNS
1-511376	Reid Metal Finishing	Metal Finishing PSNS
1-021187	Rigiflex Technology, Inc.	Metal Finishing PSNS
1-021033	Roto-Die Company, Inc.	Metal Finishing PSNS
1-571304	Safran Electronics & Defense, Avionics USA, LLC.	Metal Finishing PSNS
1-061008	Sanmina Corporation (Airway)	Metal Finishing PSNS
1-061009	Sanmina Corporation (Redhill)	Metal Finishing PSNS
1-021016	Santana Services	Metal Finishing PSNS
1-031311	Scientific Spray Finishes, Inc.	Metal Finishing PSNS
1-600297	Shur-Lok Company	Metal Finishing PSNS
1-031341	Soldermask, Inc.	Metal Finishing PSNS
1-011069	South Coast Circuits, Inc. (Bldg 3500 A)	Metal Finishing PSNS
1-011030	South Coast Circuits, Inc. (Bldg 3506 A)	Metal Finishing PSNS
1-511365	South Coast Circuits, Inc. (Bldg 3512 A)	Metal Finishing PSNS
1-011054	South Coast Circuits, Inc. (Bldg 3524 A)	Metal Finishing PSNS

TABLE 6.7 Permitees with TTOs Waivers, July 1, 2019 – June 30, 2020
Orange County Sanitation District, Resource Protection Division

Permit No.	Facility Name	Federal Categories
1-011310	SPS Technologies	Metal Finishing PSES, Nonferrous Metals Forming And Metal Powders PSNS
1-511381	SPS Technologies LLC, DBA Cherry Aerospace	Aluminum Forming PSES, Metal Finishing, Nonferrous Metals Forming And Metal Powders PSNS
1-021672	Stainless Micro-Polish, Inc.	Metal Finishing PSNS
1-531425	Star Powder Coating, Inc.	Metal Finishing PSNS
1-021664	Statek Corporation (Main)	Electrical And Electronic Components PSES, Metal Finishing PSNS
1-521777	Statek Corporation (Orange Grove)	Electrical And Electronic Components PSNS
1-600012	Summit Interconnect, Inc.	Metal Finishing PSNS
1-600060	Summit Interconnect, Inc., Orange Division	Metal Finishing PSNS
1-021090	Superior Plating	Metal Finishing PSNS
1-021403	Superior Processing	Metal Finishing PSNS
1-031012	Tayco Engineering, Inc.	Metal Finishing PSNS
1-021123	Taylor-Dunn Manufacturing Company	Metal Finishing PSNS
1-021282	Thermal-Vac Technology, Inc.	Metal Finishing PSNS
1-111132	Tiodize Company, Inc.	Metal Finishing PSNS
1-021202	Transline Technology, Inc.	Metal Finishing PSNS
1-141163	Tropitone Furniture Co., Inc.	Metal Finishing PSNS
1-521859	TTM Technologies North America, LLC. (Coronado)	Metal Finishing PSNS
1-511366	TTM Technologies North America, LLC. (Croddy)	Metal Finishing PSNS
1-511359	TTM Technologies North America, LLC. (Harbor)	Metal Finishing PSNS
1-021703	Ultra-Pure Metal Finishing, Inc.	Metal Finishing PSNS
1-521836	Universal Molding Co.	Metal Finishing PSNS
1-031035	Winonics (Brea)	Metal Finishing PSNS
1-021735	Winonics, Inc.	Metal Finishing PSNS

6.7 SPECIAL PURPOSE DISCHARGE PERMIT PROGRAM

A Special Purpose Discharge Permit (SPDP) is issued by OCSD for water and wastewater discharges to the sewerage system when no alternative discharge point exists other than the sewer system and/or considered alternate discharge methods pose an environmental impact or threat.

Wastewater discharges may include: 1) temporary facilities and projects such as groundwater cleanup and construction dewatering; 2) short-term or one-time water and wastewater discharges; 3) emergency discharges from facilities that have no other industrial or permitted discharge point; or 4) surface run-off

from areas associated with an industrial or commercial facility.

6.7.1 Metrics and Trends

During FY 2019/20, thirteen (13) new SPDPs were issued, of which eight (8) were later voided; another seven (7) existing SPDPs were voided before expiration at the request of the permittees; and three (3) SPDPs that were not renewed by the permittee upon expiration. During the fiscal year, there were 60 active SPDPs, a decrease from the previous fiscal year, but with only 42 remaining active by the end of the fiscal year. Active SPDPs are renewed on a biannual basis.

The majority of the new SPDPs issued during FY 2019/20 were for short-term construction dewatering activities (i.e., typically less than a year). Formerly, the most common special purpose permitted facilities were gasoline service stations that required remediation of contaminated groundwater. Other dischargers affected include mobile cleaners, water features (e.g. pools), water-well purging disinfection, subsurface parking structure dewatering, etc.

OCSD staff continues to work with outside agencies such as the RWQCB-SAR8, OCHCA, and the cities within Orange County to both coordinate and offer guidance on the SPDP issuance process and OCSD's *Wastewater Discharge Regulations* (Ordinance).

6.7.2 SPDP Program Enforcement

For FY 2019/20, there have been no discharge violations and therefore no enforcement actions.

6.7.3 SPDP Regulatory Program

OCSD staff minimizes SPDP impacts to OCSD Reclamation Plant No. 1 and Treatment Plant No. 2. by diverting non-compatible discharges from Reclamation Plant 1 to Treatment Plant 2; coordinating more closely with Operations, Engineering and Safety on significant one-time discharges; requiring pretreatment for projects which may encounter known contaminated underground plumes; requiring best management practices for small nuisance dischargers; and requiring significant construction dewatering dischargers to stop discharging during a rain/storm event.

6.8 SELF-MONITORING PROGRAM

OCSD operates an extensive self-monitoring program, which is an integral part of the Resource Protection Division's monitoring and enforcement programs. OCSD's self-monitoring program exceeds the minimum requirements of 40 CFR 403. To obtain a broad perspective of a permittee's discharge quality and adequately determine their compliance status, OCSD takes a proactive approach to self-monitoring (per EPA recommendation) by requiring frequent sampling in most cases. OCSD determined that sampling quarterly or semi-annually is an effective method to generate sufficient data to make a fair determination of a permittee's compliance status; and balance the need for data against the related costs incurred by permittees. In addition, these sampling frequencies preclude permittees from being unduly classified as significantly non-complaint (SNC) for isolated process upsets.

OCSD's self-monitoring program is largely automated with self-monitoring results submitted on OCSD's standardized Self-Monitoring Report (SMR) forms. These forms are computer-generated with unique SMR numbers that allow tracking and automatic generation of reminders, late and incomplete notices, violation notices with resample forms, and SNC notices. This tracking system has enabled OCSD to ensure that permittees comply with self-monitoring requirements.

6.9 INDUSTRIAL OPERATIONS AND MAINTENANCE IMPROVEMENT PROGRAM

To remain a vital part of the community, help businesses and industries in OCSD's service area maintain compliance, and to enable OCSD to attain its environmental goals, OCSD established an Industrial Operations and Maintenance Improvement Program. The program serves as both a resource for industry and a forum for discussing methods to carry out environmental requirements. The program consists of outreach and education, which includes publications addressing pretreatment program elements such as permitting, compliance and pollution prevention; OCSD staff presence at educational events and fairs; and OCSD-sponsored training opportunities.

Industrial Operations and Maintenance Improvement Program

The ongoing trend in industrial permittee discharge violations have shown that most cases are due to inadequate operations and maintenance of industry's pretreatment systems as well as industrial operator error. This was recognized years ago, when the U.S. EPA audit findings of 1998 recommended that OCSD develop and implement an industrial operations and improvement program. In 1999/2000, OCSD developed a plan that included outreach and operator training, and enforcement of requirements for operator and operations and maintenance practices which is still in effect today.

In 2019, OCSD conducted a comprehensive training course for industrial wastewater treatment (pretreatment) operators currently employed by facilities holding a Class I Wastewater Discharge Permit. The course was conducted by an engineering services company (selected via bid process for a five-year contract in 2019). OCSD provided this training, free of charge, to assist permittees to obtain and retain a qualified pretreatment operator and to reduce or eliminate noncompliance due to operation and maintenance and/or operator problems. The training course consisted of five 4.5-hour classes and a follow-up wastewater audit at the operator facility to ensure proper implementation of operation and maintenance practices. Those that attended the classes, passed the exam and quizzes, and successfully fulfilled the audit requirements, received Certificates of Completion.

6.10 SIGNIFICANT CHANGES IN OPERATING THE PRETREATMENT PROGRAM

There were no significant changes to the OCSD Pretreatment Program during FY 2019/20.

INTERACTION WITH OTHER AGENCIES

Introduction

**Los Angeles Sanitation District Nos. 18 and 19 Flow Accommodation
Agreement**

Irvine Ranch Water District (IRWD)

Santa Ana Watershed Project Authority (SAWPA)

INTERACTION WITH OTHER AGENCIES

7.1 INTRODUCTION

The Orange County Sanitation District (OCSD) has entered into agreements and has developed Memorandums of Understanding (MOUs) with Los Angeles County Sanitation District (LACSD) Nos. 18 and 19, Irvine Ranch Water District (IRWD), and the Santa Ana Watershed Project Authority (SAWPA) for accepting their wastewater flows and implementing source control discharge, inspection, and enforcement requirements. Therefore, this chapter is divided into three sections below, the first section presents information on LACSD for FY 2019/20, the second section presents information on IRWD for FY 2019/20, and the third on SAWPA for FY 2019/20.

7.2 LOS ANGELES COUNTY SANITATION DISTRICT NOS. 18 AND 19 FLOW ACCOMMODATION AGREEMENT

In 1960, Los Angeles County Sanitation District Nos. 18 and 19 (LACSD) and County Sanitation District No. 3 of Orange County, predecessor to Orange County Sanitation District (OCSD), entered into a flow accommodation agreement by which each District agreed to receive wastewater from the other District, where the wastewater originated in one District's service area and discharged into the other District's sewerage system. The geographic areas subject to the agreement are located along the Los Angeles County/Orange County boundary and are characterized by the fact that they are physically isolated from the sewer system of their respective District's jurisdiction by Coyote Creek. The Districts entered into subsequent flow accommodation agreements for the 2010-11 and 2011-12 fiscal years. A current agreement was approved by the Board of Directors of both LACSD and OCSD on July 1, 2012.

The flow accommodation agreement is fee-based, focusing primarily on residential parcels and flows. For the few industrial dischargers, the fees are based on flow, biochemical oxygen demand, chemical oxygen demand and suspended solids. The originating District is responsible for administering and enforcing its industrial waste Pretreatment Program for industries in its service area, with terms and conditions of coordination and information exchange between the Districts.

For this fiscal year, OCSD has no industrial facilities discharging to LACSD. LACSD has four (4) non-categorical permittees discharging to OCSD:

- Chemetall Oakite Corp.
- Coyle Reproductions, Inc.
- RockTenn CP, LLC
- T. Hasegawa USA Inc.

7.3 IRVINE RANCH WATER DISTRICT (IRWD)

IRWD is a California Water District in central Orange County, California, which is served by several Revenue Zones within the jurisdiction of OCSD and other agencies. The northern and coastal parts of IRWD are served by OCSD. The pretreatment program in these sections is managed by OCSD. A small portion of the eastern part of IRWD, called Portola Hills, is currently sewered to Santa Margarita Water District, a member of the South Orange County Wastewater Authority (SOCWA). SOCWA administers the pretreatment program for its member agencies.

On January 1, 2001, the Los Alisos Water District (LAWD) consolidated with IRWD. LAWD owned and operated a 5.5-million-gallon-per-day (MGD) water recycling plant whose tertiary effluent is used under permits granted by both Region 8 and Region 9 Water Quality Control Boards. Secondary wastewater

effluent up to 7.5 MGD that is not recycled is discharged to the Aliso Creek Ocean Outfall in Laguna Beach. IRWD also uses its capacity in the Aliso Creek Ocean Outfall to dispose of brine from the Irvine Desalter and treated groundwater from its Shallow Groundwater Unit facility. SOCWA administers the pretreatment program for discharges to the ocean outfall.

Most of IRWD is in Orange County Sanitation Revenue Zone No. 14, which collects sewage for treatment at either IRWD's Michelson Water Recycling Plant (MWRP) or OCSD's Reclamation Plant No. 1. Currently, most of the sewage generated within Revenue Zone No. 14 is treated at MWRP, which is a tertiary treatment plant with a design capacity of 28 MGD. MWRP's highly treated effluent meets all of the State of California Title 22 regulations for the reuse of recycled water. Sludge from MWRP is pumped to an OCSD sewer for treatment and disposal.

7.3.1 IRWD Operating Permit, Regional Board Order 2015-0024

On June 19, 2015, the Santa Ana Regional Water Quality Control Board adopted Order No. R8-2015-0024, superseding Order No. R8-2007-0003. Monitoring and Reporting Program under Order No. R8-2015-0024 requires an annual full priority pollutant scan, with quarterly samples analyzed for those pollutants that were detected in the annual scan. Sludge monitoring is not one of the requirements of the Order.

IRWD organic priority pollutant analyses for influent, effluent, and sludge are provided following the narrative. IRWD has scheduled priority pollutant monitoring more frequently than required by permit to provide additional information to OCSD on the quality of wastewater and sludge in Revenue Zone 14. IRWD will continue to monitor the influent, effluent, and sludge quarterly.

On September 7, 2018, the Santa Ana Regional Water Quality Control Board adopted Order No. R8-2018-0070, amending Order No. R8-2015-0024, allowing for discharges to San Diego Creek under emergency conditions. IRWD is currently undergoing the process for permit renewal.

7.3.2 IRWD Analytical Reporting

Annually, the discharger shall submit...a summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the POTW's influent and effluent for those pollutants EPA has identified under Section 307(a) of the Act.

The collection points for the influent, effluent and sludge samples are as follows:

Influent:	Collected at headworks before grit basins.
Effluent:	Collected at the end of the chlorine contact basin (CCB), but downstream of where the CCB effluent and ultraviolet (UV) disinfected effluent are combined, just prior to entering the recycled water distribution system.
Sludge:	Collected at the flow meter vault on the MPS-3 force main prior to ferrous chloride injection.

The sampling of influent, effluent, and sludge is performed by Regulatory Compliance personnel according to the following protocol:

1. Grab samples are collected quarterly for influent, effluent, and sludge samples and analyzed for volatile organic priority pollutants.
2. Composite samples are collected for BNA extractables, inorganic priority pollutants, pesticides/PCBs, and phenols at each location. This sampling is performed with a Sigma sampler that collects discrete samples at hourly intervals over a twenty-four-hour period. The discrete samples are composited according to flow, and aliquots are distributed into the

appropriate sample container. All the samples are collected in glass bottles and distributed into the appropriate glass or plastic bottle.

Samples are submitted to the IRWD Water Quality Laboratory where they are analyzed in-house or contracted to either Weck Laboratories located in the City of Industry, or Eurofins Test America Laboratory located in the City of Irvine. Collected samples are preserved, refrigerated, and shipped on ice as required to the specific lab for analysis. Each lab supplies their respective sample containers with the preservatives as required by the method.

The detection limits may vary from quarter to quarter due to matrix interference and sensitivity of the analytical equipment; however, the results for each quarter are valid for the detection limit reported. IRWD and its contract laboratories have endeavored to meet or exceed reporting levels established in permits.

7.3.3 Inorganic Pollutants

General Minerals

Because IRWD is a water recycling agency, MWRP effluent is subject to general mineral requirements to protect Basin Plan water quality criteria. IRWD utilizes local groundwater and imported water to supply its customer domestic water needs, and the quality of the recycled water is based on the quality of the domestic supply. The current Basin Plan standard for the Irvine Groundwater Basin is 910 mg/L Total Dissolved Solids (TDS), and the current TDS limit for discharges to recycled water reservoirs designated as “Waters of the State” is 720 mg/L. As a purveyor of recycled water, the IRWD goal is to provide high quality water regardless of standards applied in the basin and has implemented several projects which improve the quality of the domestic water supply, which results in improvement in the quality of recycled water. In 1991, IRWD prepared the Michelson Influent Wastewater Quality Improvement Plan which identifies procedures to be followed to produce the highest quality recycled water. An important feature of the plan was to maximize the delivery of high-quality domestic water during the period of greatest recycled water consumption. In April 2002, IRWD commissioned its Deep Aquifer Treatment System plant, an 8-MGD membrane filtration plant, to provide additional high-quality domestic water for its customers. The treatment

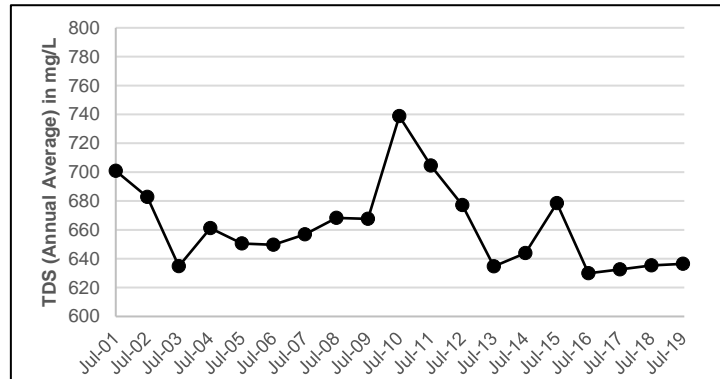


Figure 7-1 MWRP Effluent Total Dissolved Solids (Annual Average)
Irvine Ranch Water District – Michelson Water Recycling Plant
Orange County Sanitation District

plant removes natural organic matter in the form of color from a low TDS (250 mg/l on average) deep groundwater source. In January 2007, IRWD commissioned the Irvine Desalter Project-Potable Treatment Plant (PTP), a 5.5-MGD reverse osmosis plant and in March 2013 commissioned the Wells 21/22 Desalter Plant, a 6.3-MGD reverse osmosis plant, to provide high quality domestic water for its customers. Both desalter plants remove minerals from water in the Irvine Groundwater Basin to provide a target of 420 mg/L TDS in the final product water. All three treatment plants are designed to operate continuously, thereby decreasing consumption of high TDS imported water, and improving mineral quality of the MWRP effluent. IRWD still needs to import some higher TDS water to meet its water supply needs.

The minerals rejected by the reverse osmosis system for the PTP are discharged into the ocean through the Aliso Creek Ocean Outfall, and for the Wells 21/22 Desalter Plant are discharged to the sewer that goes to OCSD’s Reclamation Plant No. 1. For FY19/20, PTP operation has resulted in a net export of

salt from the Irvine Groundwater Basin of approximately 2,288 tons. For FY19/20, the Wells 21/22 Desalter has resulted in a net export of salt from the Irvine Groundwater Basin of approximately 1,410 tons.

Additionally, IRWD has completed a Salt Management Plan that identifies management strategies, cost estimates for implementing recommended actions and provide recommendations for policies that may be considered to manage recycled water salt concentrations throughout the District. Those policies addressed both current and future conditions that take into consideration changing source water conditions during drought conditions as well as water conservation practices that can all impact the TDS concentrations of the sewage treated at MWRP.

The seasonal change in MWRP effluent mineral quality, on a fiscal year annual average, is also shown in Figure 7-1. The recycled water mineral quality, as expressed by total dissolved solids (TDS), varied by 90 mg/l during 2019/2020. The effect of providing higher quality domestic water can be seen in the gradual reduction in TDS of the recycled water over the last five years. The slight increase that occurred during fiscal year (2015/2016) could have been due to impacts from ongoing water conservation efforts and increased TDS concentrations from imported water supplies.

Total Heavy Metals

IRWD has been analyzing the heavy metals on the list of inorganic priority pollutants for the last 37 years at MWRP. During the 37-year period, the total mass of heavy metals has increased from 5 pounds per day (lbs./day) to the current 32.38 lbs./day in the influent, a 20.0% decrease compared to the previous year, and has decreased in the effluent from 12.39 to the current 10.09 pounds per day in 2019/2020, a decrease of 18.6% from the previous fiscal year.

Of all the priority pollutant heavy metals, only two, copper and zinc, were found in significantly greater concentrations than remaining metals. The sum of mass of copper and zinc represents 88% of heavy metals found in the influent and represents 88% of what is found in the effluent, with zinc being the overall heavy meal contributor at both locations. IRWD analyzes for metals by ICP-MS, which is capable of reporting metals in the sub part per billion range. Figure 7-2 shows the annual mass of total heavy metals in the influent and effluent of MWRP.

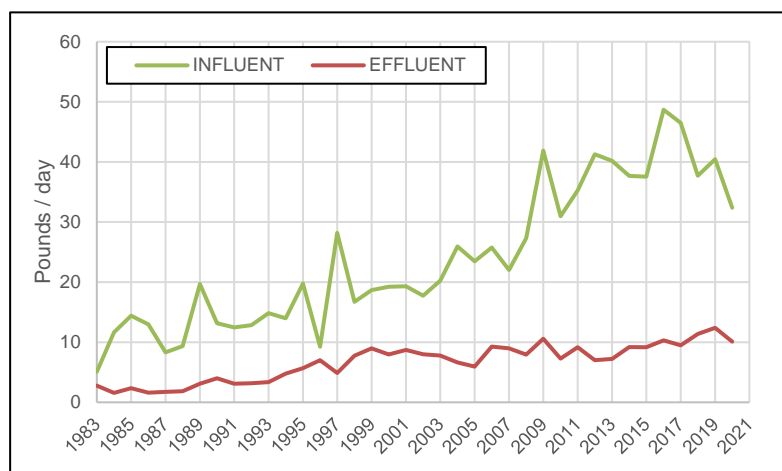


Figure 7-2 MWRP Influent and Effluent Total Heavy Metals
Irvine Ranch Water District – Michelson Water Recycling Plant
Orange County Sanitation District

Copper

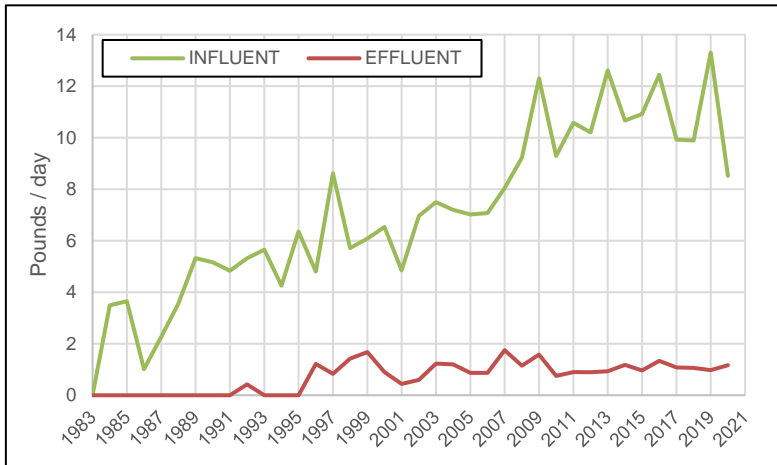


Figure 7-3 MWRP Influent and Effluent Copper
Irvine Ranch Water District – Michelson Water Recycling Plant
Orange County Sanitation District

The major sources of copper are domestic water systems and the printed circuit board industry. Both residential and nonresidential water plumbing are predominantly copper. Currently, IRWD does not have printed circuit board manufacturing in the MWRP service area. The major commercial source of copper is believed to be radiator repair; however, copper from radiator repair activities is declining since many of the newer radiators are made from aluminum and plastic. Growth in the area tributary to MWRP has begun to increase over the last few years, and the increase in the amount of copper

being discharged could potentially be from new copper plumbing.

Figure 7-3 shows that the mass of copper in the influent has increased over the 37-year period from 3.5 to 8.5 lbs./day during the 2019/2020 fiscal year. The mass of copper entering the treatment plant decreased by 36.0% from the 2018/2019 daily average. However, the mass of copper in the effluent increased by 20.3% from the previous fiscal year.

Zinc

Zinc is the predominant heavy metal detected in both the influent and effluent. The major sources of zinc are brass alloys used in domestic water systems, water and oil based paints used by the building industry, and in chemicals and coatings used by industry.

Figure 7-4 shows that the mass of zinc in the influent has increased from 4.6 lbs./day to 19.5 lbs./day over 37 years. The influent mass of zinc decreased by 5.4 lbs./day or a 21.8% reduction from the previous fiscal year. The mass of zinc in the effluent has increased from 1 lbs./day to 7.73 lbs./day over the last 37 years and saw a decrease of 2.0 lbs./day, or 20.5%, from the previous fiscal year.

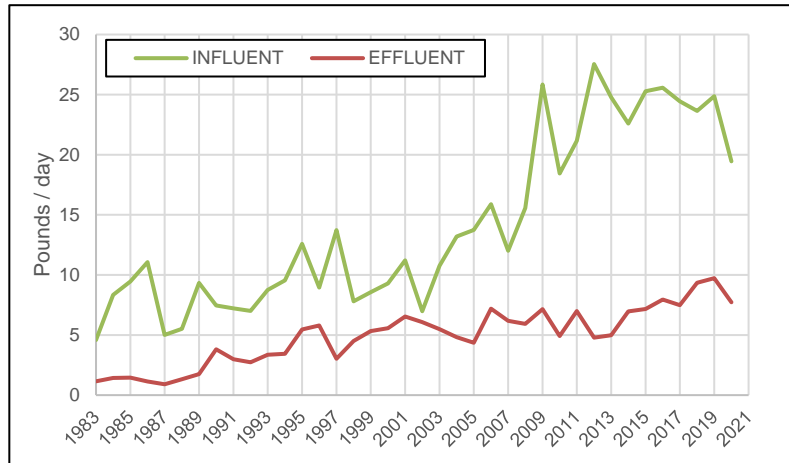


Figure 7-4 MWRP Influent and Effluent Zinc
Irvine Ranch Water District – Michelson Water Recycling Plant
Orange County Sanitation District

7.3.4 Organic Pollutants

IRWD has been analyzing for organic pollutants on the list of organic priority pollutants at MWRP since 1983. The sampling frequency has increased from once per year to quarterly sampling. Samples are collected from the influent, effluent, and sludge.

Figure 7-5 shows the annual mass of total organic pollutants in the influent and effluent of MWRP. Over the last 37 years, the annual mass of total organic pollutants entering MWRP has widely varied and has decreased from a high of 16.82 lbs/day to the current 1.76 lbs/day. The mass of total organic priority pollutants leaving MWRP increased from 15.8 lbs/day in 2018/2019 to 23.6 lbs/day this fiscal year. The general increase in effluent organic pollutants above influent levels is attributed to an increase in trihalomethanes and other volatile organic compounds resulting from final effluent chlorination required to meet California Title 22 Water Recycling Criteria.

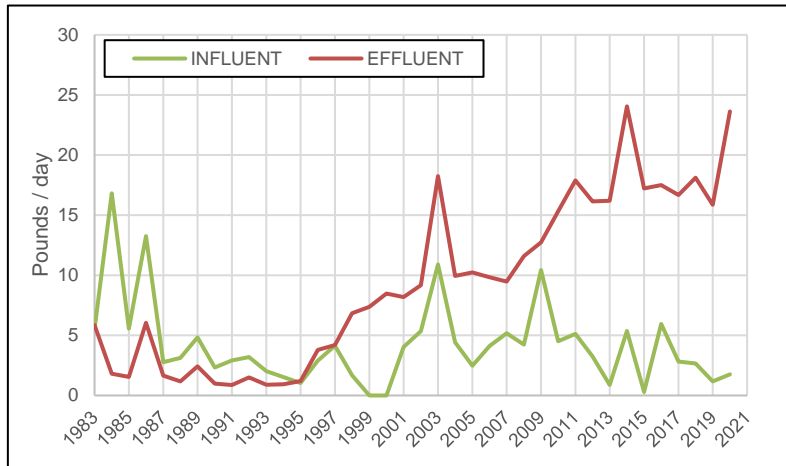


Figure 7-5 MWRP Influent and Effluent Total Toxic Organics
Irvine Ranch Water District – Michelson Water Recycling Plant
Orange County Sanitation District

IRWD has completed its 10 MGD biological nitrogen removal membrane filtration plant expansion at the MWRP and the plant is now operating within its design capacity. The UV Disinfection system went online November 2015 and the effluent total toxic organics concentration and mass has been reduced as the concentration of trihalomethanes and other volatile organic compounds resulting from effluent chlorination has been reduced. The reduction is not as great as expected as flows through the Membrane Bioreactor (MBR) were reduced over this last wet winter.

7.3.5 Report of Upset, Pass-Through and Interference Events

The discharger shall submit annually...a discussion of upset, interference, or pass-through incidents, if any, at the POTW which the discharger knows or suspects were caused by industrial users of the POTW system...

There were no upsets, interference or pass-through incidents caused by industrial users during the reporting period.

7.3.6 Discussion of the List of Industrial Users

The discharger shall submit annually...an updated list of the discharger's significant industrial users...

TABLE 7.1 summarizes those companies in Revenue Zones Nos. 7 and 14 which were under permit and in business as of June 30, 2020. Class I industrial users in Revenue Zone 7 discharge to the IRWD collection system and are treated at OCSD's treatment plant. Class I industrial users in Revenue Zone 14 discharge to the IRWD collection system and are treated at MWRP and at OCSD's treatment plant.

TABLE 7.1 Class 1 Industries Within Irvine Ranch Water District Service Areas Orange County Sanitation District/IRWD					
Permit No.	Facility Name	Physical Address	NAICS Code	Classification	Plant
Z-371301	3M ESPE Dental Products	2111 Mcgaw Ave. (Irvine)	33911	Dental Equipment and Supplies Manufacturing	OCSD
1-541182	Alliance Medical Products, Inc.	9342 Jeronimo Road (Irvine)	32541	Pharmaceutical Preparation Manufacturing	IRWD
Z-361006	Ametek Aerospace, Inc.	17032 Armstrong Ave. (Irvine)	33451	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	OCSD
1-541180	Anchen Pharmaceuticals, Inc. (Fairbanks)	72 Fairbanks (Irvine)	32541	Pharmaceutical Preparation Manufacturing	IRWD
1-600359	Anchen Pharmaceuticals, Inc. (Goodyear)	5 Goodyear (Irvine)	32541	Pharmaceutical Preparation Manufacturing	IRWD
1-541179	Anchen Pharmaceuticals, Inc. (Jeronimo)	9601 Jeronimo Road (Irvine)	32541	Pharmaceutical Preparation Manufacturing	IRWD
1-571332	Avid Bioservices, Inc.	14191 Myford Road (Tustin)	32541	Biological Product (except Diagnostic) Manufacturing	IRWD
1-071054	B. Braun Medical, Inc. (East/Main)	2525 Mcgaw Ave. (Irvine)	32541	Pharmaceutical Preparation Manufacturing	OCSD
1-600382	B. Braun Medical, Inc. (North/Alton)	2206 Alton Parkway (Irvine)	32541	Pharmaceutical Preparation Manufacturing	OCSD
1-541183	B. Braun Medical, Inc. (West/Lake)	2525 Mcgaw Ave. (Irvine)	32541	Pharmaceutical Preparation Manufacturing	OCSD
1-600583	Brothers International Desserts (North)	1682 Kettering St. (Irvine)	31152	Ice Cream and Frozen Dessert Manufacturing	OCSD
1-600582	Brothers International Desserts (West)	1682 Kettering St. (Irvine)	31152	Ice Cream and Frozen Dessert Manufacturing	OCSD

TABLE 7.1 Class 1 Industries Within Irvine Ranch Water District Service Areas					
Orange County Sanitation District/IRWD					
Permit No.	Facility Name	Physical Address	NAICS Code	Classification	Plant
1-600691	Ceradyne, Inc., a 3M Company	17466 Daimler St. (Irvine)	33911	Dental Equipment and Supplies Manufacturing	OCSD
1-600920	CP-Carrillo, Inc. (Armstrong)	17401 Armstrong Ave. (Irvine)	33631	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	OCSD
1-571316	CP-Carrillo, Inc. (McGaw)	1902 McGaw Ave. (Irvine)	33631	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	OCSD
1-071162	Electrolurgy, Inc.	1121 Duryea Ave. (Irvine)	33281	Electroplating, Plating, Polishing, Anodizing, and Coloring	OCSD
1-600585	FMH Aerospace Corp.	17072 Daimler St. (Irvine)	33291	Fluid Power Valve and Hose Fitting Manufacturing	OCSD
1-571314	Graphic Packaging International, Inc.	1600 Barranca Parkway (Irvine)	32221	Folding Paperboard Box Manufacturing	OCSD
1-541178	Imuraya USA, Inc.	2502 Barranca Parkway (Irvine)	31152	Ice Cream and Frozen Dessert Manufacturing	OCSD
1-071056	Kraft Heinz Company	2450 White Road (Irvine)	31194	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	OCSD
1-071024	Maruchan, Inc. (Deere)	1902 Deere Ave. (Irvine)	31182	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	OCSD
1-601021	Maruchan, Inc. (Deere-South)	1902 Deere Ave. (Irvine)	31182	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	OCSD
1-141015	Maruchan, Inc. (Laguna Cyn)	15800 Laguna Canyon Road (Irvine)	31182	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	IRWD
1-141023	Marukome USA, Inc.	17132 Pullman St. (Irvine)	31199	Perishable Prepared Food Manufacturing	OCSD

TABLE 7.1 Class 1 Industries Within Irvine Ranch Water District Service Areas Orange County Sanitation District/IRWD					
Permit No.	Facility Name	Physical Address	NAICS Code	Classification	Plant
1-600006	Meggitt, Inc.	14600 Myford Road (Irvine)	33451	Other Measuring and Controlling Device Manufacturing	IRWD
1-071038	Newport Corporation	1791 Deere Ave. (Irvine)	33451	Analytical Laboratory Instrument Manufacturing	OCSD
1-141012	Oakley, Inc.	1 Icon (Foothill Ranch)	33911	Ophthalmic Goods Manufacturing	IRWD
1-141002	Parker Hannifin Corporation	14300 Alton Parkway (Irvine)	33291	Fluid Power Valve and Hose Fitting Manufacturing	IRWD
Z-600979	Parker Hannifin Corporation	14300 Alton Parkway (Irvine)	33291	Fluid Power Valve and Hose Fitting Manufacturing	IRWD
1-071235	Prudential Overall Supply	16901 Aston St. (Irvine)	81233	Industrial Launderers	OCSD
1-571303	Rayne Dealership Corporation	17835 Sky Park Circle Suite M (Irvine)	45439	Other Direct Selling Establishments	OCSD
1-600297	Shur-Lok Company	2541 White Road (Irvine)	33272	Bolt, Nut, Screw, Rivet, and Washer Manufacturing	OCSD
1-600565	South Coast Baking, LLC	1711 Kettering St. (Irvine)	31182	Cookie and Cracker Manufacturing	OCSD
1-141007	Teva Parenteral Medicines, Inc.	19 Hughes (Irvine)	32541	Pharmaceutical Preparation Manufacturing	IRWD
1-141163	Tropitone Furniture Co., Inc.	5 Marconi (Irvine)	33712	Metal Household Furniture Manufacturing	IRWD
1-600010	Vit-Best Nutrition, Inc.	2832 Dow Ave. (Tustin)	32541	Medicinal and Botanical Manufacturing	IRWD
Z-600960	Vit-Best Nutrition, Inc.	2802 Dow Ave. (Tustin)	32541	Pharmaceutical Preparation Manufacturing	IRWD

7.3.7 Discussion of Industrial User Compliance Status

The discharger shall submit annually...a list or table characterizing the industrial compliance status of each SIU...

The compliance status of each noncompliant SIU is shown in OCSD's Pretreatment Program Annual Report.

7.3.8 Summary of SIU Compliance

The District shall submit annually...a compliance summary table...

A summary of compliance is shown in OCSD's Pretreatment Program Annual Report.

7.3.9 Discussion of Significant Changes in the Pretreatment Program

The District shall submit annually...a short description of any significant changes in operating the pretreatment program which differ from the previous year...

There were no significant changes in operating the pretreatment program between the 2018/2019 and 2019/2020 fiscal years.

7.3.10 Pretreatment Program Costs

The District shall submit annually...a summary of the annual pretreatment budget and the pretreatment equipment purchases...

A financial summary of IRWD's pretreatment program is shown in TABLE 7.2. All the expenses shown in TABLE 7.2 are related to the operation of IRWD's pretreatment program by IRWD staff. All expenses incurred by IRWD under the Memorandum of Understanding between IRWD and OCSD are summarized by OCSD.

TABLE 7.2 Summary of Irvine Ranch Water District Pretreatment Program Costs, 2019-2020 and 2018-2019			
Orange County Sanitation District/IRWD			
Project No.	Description	2019-2020	2018-2019
		Labor	Labor
3093	Quarterly PP	\$638	\$2,871
3094	Baseline PP	\$0	\$1,153
3095	PP Surveillance	\$0	\$552
3096	Compat. Surveillance	\$1,498	\$5,278
3098	Industry. Info. Collection	\$45,818	\$112,322
3099	Eval Data/Reports.	\$115	\$1753
3100	OCSD/SOCWA	\$0	\$5,965
	Total	\$48,069	\$129,894

IRWD records expenses based on project numbers which represent specific activities or groups of related activities. During fiscal year 2019/2020, IRWD spent \$48,069 on the operation of its pretreatment program, which is a decrease of \$81,825 from the previous year.

7.3.11 Equipment Purchases for FY 2019-2020

IRWD maintained its existing equipment inventory as shown in TABLE 7.3.

TABLE 7.3 Summary of Irvine Ranch Water District Pretreatment Equipment, Fiscal Year 2019-2020 Orange County Sanitation District/IRWD	
Quantity	Description
1	Ford F250
4	Sigma AS 950 portable compact auto sampler with pH
1	Sigma 900 Max insulated auto sampler with conductivity and pH
1	Sigma SD 900 insulated auto sampler
3	Sigma compact insulated auto sampler base (spare base) – 24 bottle configuration
3	Sigma large insulated auto sampler base - 24 bottle configuration
2	Sigma large insulated auto sampler base - 12 bottle configuration
6	Sigma lead-acid gel battery
3	Sigma battery charger, 5 stations
2	Sigma data transfer unit (DTU) and Software
2	USB flash drive
1	Digital pH probe
1	Analog pH probe
2	Analog electrical conductivity probe
1	MSA gas detector

7.3.12 Discussion of Public Participation Activities

The District shall submit annually...a summary of public participation activities...

IRWD has a standing program of MWRP tours, where the public is instructed on the sewage collection and treatment, as well as proper hazardous waste disposal practices. These tours are temporarily suspended due to the Covid-19 pandemic but will resume as the situation changes. As Revenue Zones Nos. 7 and 14, IRWD is represented by OCSD in its public participation activities. As an operator of a sewage collection system, IRWD is enrolled under the statewide general permit to manage fats, oils and grease discharges from food service establishments. The public participation program is administered by IRWD staff.

7.3.13 Discussion of Sludge Disposal Activities

The District shall submit annually...a description of any changes in sludge disposal methods...

IRWD has not made changes in sludge disposal methods at this time. However, IRWD began construction in October 2013 of its Biosolids and Resource Recovery Project, that will consist of solids thickening, acid-phase anaerobic digestion, dewatering, drying/pelletizing, energy generation using microturbines, and use of pellets as a fertilizer or e-fuel. With completion of this project towards the end of 2020, IRWD will no longer send its solids to OCSD for treatment.

7.3.14 IRWD Additional Information

The District shall submit annually...any concerns not described elsewhere in the report.

Michelson Water Recycling Plant Flow

Figure 7-6 shows the wastewater flow received by MWRP over the last 37 years. MWRP flow has generally increased over the years with a few exceptions. Average flow for the 2019/2020 fiscal year was 20.1 MGD, which was an 8.9% increase from the previous fiscal year. The increase in influent flow can be attributed to the return to normal operating conditions from the wet winter experienced in 2018-2019, where IRWD had to divert sewage at a higher volume than normal from MWRP to OCSD for treatment.

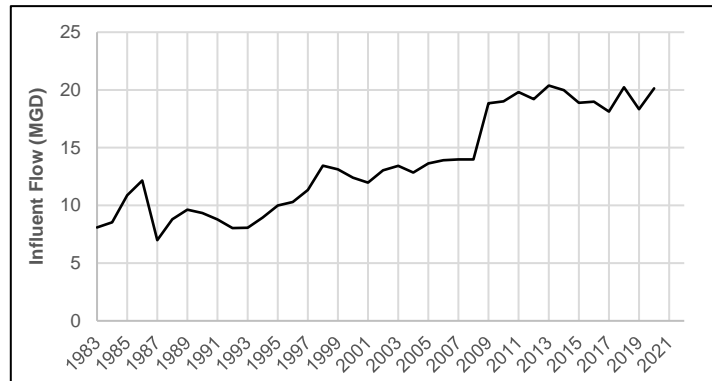


Figure 7-6 MWRP Influent Flow
Irvine Ranch Water District – Michelson Water Recycling Plant
Orange County Sanitation District

Nitrification/Denitrification Facilities

IRWD completed a significant upgrade to MWRP by installing a nitrification/denitrification system on its activated sludge system in the 1998-99 fiscal year. Plant effluent is now fully nitrified year round and substantially denitrified during the months when recycled water is stored in IRWD open storage reservoirs. A fully nitrified effluent means that IRWD maintains a free chlorine residual rather than a combined chlorine residual. A free chlorine residual causes a greater formation of trihalomethanes and related volatile organic compounds, which is evident by the presence of total toxic organic compounds in the effluent. Fortunately, the quality of plant effluent, detention time in the plant, and short time before storage or use, keeps the level of toxic organic compounds below regulatory criteria, even though a relatively high chlorine dose is required to maintain bacterial quality. The operation of the nitrification/denitrification system has improved activated sludge operations, which in turn, has increased the quality of recycled water.

Industrial Parks Development Status

Since the early 1980's, MWRP has been receiving increased industrial wastewater flows from the Irvine Spectrum. The industrial parks located with IRWD's service area are primarily the Irvine Spectrum, a large industrial park located near the former El Toro Marine Corps Air Station and the Foothill Ranch industrial area, located north and east of the El Toro Marine Corps Air Station. The El Toro Marine Corps Air Station is decommissioned and will be the site of the Great Park Development, a master planned community. IRWD sees the potential for gradually increasing levels of organic pollutants and heavy metals as the Irvine Spectrum industrial park and Foothill Ranch sites continue to expand and develop. The University of California, Irvine is expanding the University Research Park located on the southern portion of the university. IRWD sees a potential for organic priority pollutant and heavy metal discharges from the industrial/research parks.

Stormwater, Deminimis Discharges and Selenium

In May 2009, the Santa Ana Regional Water Quality Control Board adopted the fourth term *Waste Discharge Requirements for the County of Orange, Orange, County Flood Control District, and Incorporated Cities of Orange County Within the Santa Ana Region Areawide Stormwater Runoff Orange County, Order R8-2009-0030*. A condition of this permit is a requirement that non-stormwater discharges be prohibited from discharge into the storm drain system except for urban runoff and certain authorized non-stormwater discharges. As a result, there has been an increase of non-wastewater discharges into the sewer system. In general, these discharges contribute to the hydraulic loading to the sewer system and have not been a significant source of conventional and other pollutants.

The northeastern side of the Irvine Basin is dominated by coastal foothills, and historically runoff from the foothills deposited in a seasonal marsh called the Cienega de las Ranas. Natural weathering of the coastal foothills has exposed and eroded the Monterey Formation containing significant amounts of selenium, which over time have accumulated in the seasonal marsh. In addition to runoff, rising groundwater in the area of the seasonal marsh has raised the concentration of selenium in surface water well above the California Toxics Rule criterion of 5 µg/L. The seasonal marsh has been drained, first to promote agriculture, and then the agricultural land has been converted into urban development. Surface waters in the watershed are listed on the Section 303(d) list for selenium impairment, and discharges of water into the surface water system above 5 µg/L are regulated under the Basin Plan.

The effect of the additional prohibition of non-stormwater discharging into the storm drain system has resulted in additional non-stormwater flows being discharged into the sewer system containing significant levels of selenium from groundwater dewatering operations. Some of the discharges are tributary to OCSD's sewer system, and the selenium is ultimately returned into the ocean. However, some of the discharges are tributary to the IRWD sewer system. IRWD has been tracking the fate and transport of selenium since 2002 to garner knowledge on the effect of the additional non-stormwater discharges on MWRP effluent quality.

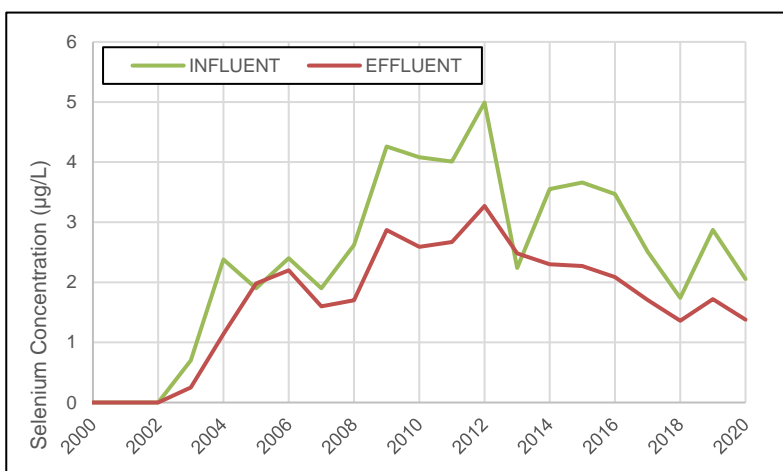


Figure 7-7 MWRP Influent and Effluent Selenium
Irvine Ranch Water District – Michelson Water Recycling Plant
Orange County Sanitation District

During this last fiscal year, the average effluent selenium concentration was approximately 1.4 µg/L, under half the California Toxics Rule criterion. Prior to 2002, the concentration of selenium in the wastewater was negligible, because there was no selenium in the domestic water supply, there were no industries discharging selenium and non-wastewater discharges into the sewer system were prohibited. Because selenium toxicity is based on concentration, IRWD will continue to monitor the concentration of selenium in the influent and effluent from the MWRP.

IRWD Oversight Activities

IRWD has monitored four major trunklines within its service area for priority pollutants. Commercial, residential and industrial areas were monitored on an annual basis. One purpose of this monitoring is to establish a long-term history of priority pollutant discharges into the sewer system. Phthalates are used to maintain flexibility in plastic products and are commonly found. The low concentrations of these constituents are common and are considered emerging pollutants of concern.

Additionally, within the IRWD service area, industrial activities are regulated by the City of Irvine General Plan and Zoning Ordinances, which confines industrial uses to specific zones and the City of Lake Forest, which is the agency currently responsible for the Foothill Ranch Master Plan. Currently, IRWD is reassessing its monitoring programs and locations.

The IRWD service area encompasses the San Diego Creek watershed, the largest watershed that is tributary to Newport Bay. Newport Bay and its tributary watersheds are subject to Total Maximum Daily Load (TMDL) allocations for sediment, nutrients, pathogens, and toxics. IRWD does not discharge wastewater into surface waters, other than its open storage reservoirs; however, as the sole purveyor of water and recycled water in the watershed, IRWD has chosen to become involved with water quality management in the watershed. IRWD is constructing and managing wetlands, under the Natural Treatment Systems Project, which will remove pollutants of concern to the TMDL allocations. IRWD

extends its services to assist commercial and industrial users to recognize the importance of site runoff water quality, point out sources of contamination and areas of potential contamination, and advice on corrective measures.

Local Limits Study

Due to the completion of IRWD's Phase II Expansion at MWRP, as well as the construction of a solids and biosolids handling facility, IRWD decided to undertake a technical evaluation of its local limits that began in 2016, and was completed and submitted to the Regional Board for their approval in October 2016. The local limits study evaluated if IRWD's current limits are protective of not only the new unit processes within IRWD but were also protective enough to ensure that IRWD can produce Class A EQ biosolids, as well as potentially evaluate additional pollutants of concern. IRWD received approval of its local limits by the Regional Board in 2018 and had them adopted by its Board in May 2018.

7.4 SANTA ANA WATERSHED PROJECT AUTHORITY (SAWPA)

OCSD has a National Pollutant Discharge Elimination System (NPDES) permit for ocean discharge and is the Control Authority for the Pretreatment Program required by federal regulations. Because SAWPA discharges to OCSD through the SARI Line, SAWPA is subject to OCSD's Pretreatment Program. Through a 1991 Memorandum of Understanding (1991 MOU), OCSD enabled SAWPA to be OCSD's Delegated Control Authority for the Pretreatment Program in SAWPA's SARI Service Area. SAWPA's responsibilities to run a Pretreatment Program on behalf of OCSD, ability to discharge to the SARI Line, and other financial factors are governed by agreements between OCSD and SAWPA, including the 1991 MOU and a 1996 Wastewater Treatment and Disposal Agreement (1996 Agreement), as amended and succeeded. OCSD routinely reviews all SAWPA Commission, Commission Workshop, and Project meeting agendas and minutes to stay current with the activities in the SAWPA area that may have an impact on the SAWPA Pretreatment Program. In addition, OCSD routinely meets with SAWPA to coordinate at administrative, technical, management, and leadership levels with varying levels of staff in attendance at each meeting to improve the coordination between OCSD's and SAWPA's Pretreatment Programs and to enhance the working relationship with SAWPA in all areas of the 1991 MOU and 1996 Agreement.

SAWPA was formed in 1968 to develop a long-range plan for managing, preserving, and protecting the quality of water supplies in the Santa Ana Basin. SAWPA is a Joint Powers Authority (JPA) consisting of five agencies: Eastern Municipal Water District (EMWD), Inland Empire Utilities Agency (IEUA), Orange County Water District (OCWD), San Bernardino Valley Municipal Water District (Valley District), and Western Municipal Water District (WMWD). SAWPA's program in water quality management is integrated with those of other local, state, and federal agencies.

The Inland Empire Brine Line (Brine Line) is a pipeline that is designed to carry saline wastewater from the Upper Basin to the Orange County Sanitation District (OCSD) for disposal, after treatment, into the Pacific Ocean. This wastewater today consists primarily of desalter brine and saline wastewater from industrial uses, but also has some temporary domestic discharges. Wastewater from the Brine Line is transferred to the SARI Line in Orange County which transports the wastewater to Orange County Sanitation District (OCSD) Plant 2. A flow meter installed at the Orange County line measures SAWPA's discharge. The capacity of the Brine Line available to SAWPA is 30 MG per day (MGD). For the 12-month period from July 1, 2019 through June 30, 2020, a total of 4,014 MG was discharged into the Brine Line, for an average of 11.00 MGD.

7.4.1 Brine Line System Pretreatment Program Overview

SAWPA has a wastewater discharge ordinance applicable to the Brine Line. It is essentially, with some appropriate modifications, substantially similar to OCSD's Wastewater Discharge Regulations Ordinance. In addition, a Memorandum of Understanding is in place to delineate pretreatment permitting, monitoring, enforcement, and reporting responsibilities between SAWPA and OCSD. SAWPA has entered into a Multijurisdictional Pretreatment Agreement (Agreement) with the Member

Agencies, EMWD, IEUA, Valley District, and WMWD and Contract Agencies, City of Beaumont (Beaumont) Jurupa Community Services District (JCSD), San Bernardino Municipal Water Department (SBMWD), and Yucaipa Valley Water District (YVWD). This Agreement delineates the pretreatment responsibilities between SAWPA and the agencies to carry out and enforce a pretreatment program to control discharges from Industrial Users (IU) located in their service areas.

SAWPA owns and operates the Brine Line above or upstream of the Orange County line and has purchased 17 MGD of treatment and disposal capacity rights at OCSD's treatment facilities. SAWPA, through the MOU with OCSD, has the ultimate responsibility to ensure adequate implementation of Pretreatment Program responsibilities in the Upper Basin portion of the Brine Line. SAWPA issues permits to Direct and Indirect Dischargers jointly with Member and Contract Agencies and solely issues permits to all Member and Contract Agency owned or affiliated Direct and Indirect Dischargers. In addition, SAWPA has the Permitting responsibilities for all Liquid Waste Haulers (LWH) that use the four SAWPA-approved Collection Stations. The SAWPA LWH permits assign, for each discharger, a primary collection station and alternate collection stations should the primary collection station become unavailable due to repairs or closure.

Agency staff assists in the conduct of the program for non-agency permittees within their service area. SAWPA conducts all pretreatment oversight activities for agency owned or affiliated permittees. SAWPA has identified, categorized, and summarized the permits herein by geographical location and support from the Member and Contract Agencies. Roles and responsibilities are defined in SAWPA's policies and procedures. SAWPA has three dedicated full-time pretreatment personnel and an additional 1.4 full-time equivalent (FTE) to assist with pretreatment responsibilities. Combined, the 4.4 FTE, along with additional personnel from both Member and Contract Agencies, prepared and issued permits, conducted inspections, prepared enforcement actions, and prepared monthly, quarterly, and annual reports by the date required.

Compliance and billing parameters are sampled at direct and indirect dischargers in accordance with SAWPA's policies and procedures. All samples are properly preserved and iced for transport to the laboratory. Chapter tables show the mass of pollutants as they were measured at OCSD's SARI Metering Station (SMS) at the Orange County line. The data is based on average daily flow unless otherwise noted.

During the reporting period SAWPA continued implementation of numerous program documents and worked to improve the operation and implementation of the Pretreatment Program. SAWPA and the Member and Contract Agencies use Pretreatment Program Control Documents (PPCDs) for uniform and consistent implementation of the Pretreatment Program. A Data Management System (iPACS) continued to be used.

Reporting below is individually presented for each SAWPA Pretreatment Program Member and Contract Agency.

7.4.2 SAWPA, Member Agency, and Contract Agency Pretreatment Programs

7.4.2.1 The City of Beaumont (Beaumont)

Description of Beaumont

Beaumont is the owner and operator of the City of Beaumont wastewater treatment plant and will be responsible for the implementation of certain pretreatment program activities for the industries connected to the Brine Line within its service area upon its connection to the Brine Line in 2020. Beaumont is being required by the Santa Ana Regional Water Quality Control Board to proactively manage salinity in the two underlying groundwater basins, the Beaumont and San Timoteo Groundwater Management Zones. As a result, Beaumont has elected to install Reverse Osmosis (RO) treatment of the tertiary treated wastewater treatment plant

effluent. The RO concentrate will be discharged to the Brine Line. The Beaumont wastewater treatment plant discharges to Cooper's Creek, tributary to San Timoteo Creek, which is tributary to the Santa Ana River. By discharging the brine concentrate to the Brine Line, discharge of a minimum 685 tons of salt to the Santa Ana River are avoided, benefiting the downstream groundwater basins. The RO facility is expected to be completed, tested and on-line and connection to the Brine Line completed in late summer of 2020. Currently there are no permitted users within the Beaumont Service Area.

Enforcement Actions

There was no enforcement action during this reporting period.

7.4.2.2 Eastern Municipal Water District (EMWD)

Description of EMWD

EMWD is a Municipal Water District responsible for the implementation of certain pretreatment activities for the indirect and direct industries that discharge to EMWD's Non-Reclaimable Waste Line, which discharges to the Brine Line at Reach V. In the face of declining groundwater levels and continuing droughts, EMWD was formed in 1950 to secure additional water for a lightly populated area of western Riverside County. EMWD joined the Metropolitan Water District of Southern California a year later to augment its local supplies with recently available imported water. EMWD also provides sewer service throughout its area. The EMWD headquarters are located in Perris, California and serves the eastern portion of the watershed in Riverside County, as well as portions of the Santa Margarita Watershed, south of the Santa Ana River Watershed.

Enforcement Action

- **Infineon Technologies Americas Corporation, Permit No. I1039-3**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Infineon Technologies Americas Corporation (Infineon) on November 20, 2019 for a pollutant limitation violation. On November 11, 2019 EMWD received a low pH alarm at its Integrated Operations Center from an inline pH meter at the EMWD Collection Station. The pH was at 5.7 S.U. a violation of the Daily Minimum Discharge Limitation of 6.0 S.U. as stated by Permit. The NOV/OCA required Infineon to submit a written report detailing the cause, and corrective action taken to prevent the recurrence of the violation by no later than December 4, 2019. Infineon responded on November 27, 2019 and attributed the cause of the violation to be a fouled pH sensor which caused the system to under correct for chemical addition. Immediately upon discovery of the pH violation Infineon cleaned and calibrated the pH meter. Infineon made a decision to clean the pH sensor twice a day to prevent any re-occurrence, and in addition the truckers who haul are required to take the pH with a handheld pH meter for confirmation of the pH with the inline pH meter. The next delivery of Industrial Wastewater from Infineon was within limits for pH. Implementation of the corrective actions identified above, and follow-up sampling indicated compliance; subsequently, the enforcement action was closed. EMWD shall continue to conduct unannounced inspections and wastewater monitoring at Infineon to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

7.4.2.3 Inland Empire Utilities Agency (IEUA)

Description of IEUA

IEUA is a Municipal Water District responsible for the implementation of certain pretreatment program activities for the direct and indirect industries located within IEUA's service area. IEUA, originally named the Chino Basin Municipal Water District (CBMWD), was formed in 1950 to supply supplemental water to the region. Since its formation, IEUA has expanded its areas of responsibility from a supplemental water supplier to a regional wastewater treatment agency with domestic and industrial disposal systems and energy recovery/production facilities. In addition, IEUA has become a recycled water purveyor, bio-solids/fertilizer treatment provider and continues as a leader in water supply salt management, for the purpose of protecting the region's vital groundwater supplies.

IEUA strives to enhance the quality of life in the Inland Empire by providing optimum water resources management for the area's customers while promoting conservation and environmental protection. IEUA covers 242-square miles, distributes imported water, provides industrial/municipal wastewater collection and treatment services, and other related utility services to more than 850,000 people. IEUA's service area includes the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario and Upland, as well as the Cucamonga Valley Water District and the Monte Vista Water District.

Enforcement Actions

- **OLS Energy (Permit No. D1059-3)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to OLS Energy (OLS) on October 2, 2019 for a pollutant limitation violation and failure to report as required. On September 22, 2019, Permittee discharged low pH wastewater (1.5 SU) to the Brine Line. This low pH discharge is a prohibited waste as stated in SAWPA Ordinance No. 8 and IEUA Ordinance No. 106. Permittee failed to immediately notify the Control Authorities as required by permit. The NOV/OCA required OLS to cease and desist discharging low pH wastewater, continue to implement the corrective actions stated in its written response submitted on September 23, 2019 and update its current SOP for its pH neutralization process. The response indicated the violation may have been caused by stratification in neutralization tank (D203). Permittee stated it is implementing safeguards to prevent recurrence. The facility has two neutralization tanks (D203 and D204). Only D203 has a source of low pH wastewater. Permittee will perform the mixing in Neutralization Tank D203 and then transfer it into tank D204 for additional mixing to ensure pH stability prior to discharging it to the Brine Line. On October 16, 2019, OLS submitted an updated SOP for neutralization process. On November 11, 2019, OLS reported to the EPA Regional Waste Management Division that it discharged 59 gallons of hazardous waste to the Brine Line as required. Implementation of the corrective actions identified above, and follow-up sampling indicated compliance; subsequently, the enforcement action was closed. IEUA shall continue to conduct unannounced inspections and wastewater monitoring at OLS to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

- **Repet, Inc. (Permit No. D1069-4)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Repet, Inc. (Repet) on February 18, 2020 for a pollutant limitation violation. On January 21, 2020, Repet notified IEUA that it exceeded its lower pH limit of 6.0 SU at Monitoring Point 001 as stated by Permit. This low pH excursion lasted approximately six (6) hours. The recorded pH was between 6.0 and 4.5 SU during this six hour duration. The NOV/OCA required Repet to investigate the source of the noncompliant discharge and to submit a written report detailing the investigation and how violations of this type would be prevented in the future. On February 24, 2020, Repet responded stating violation was caused when acid began spilling from a fill line in the pH adjustment system. Repet modified its acid injection system by installing new acid fill line which has an air gap to prevent acid from spilling from the fill line. Permittee installed an automatic bypass valve on their wastewater discharge, controlled by high and low pH set points. Wastewater will be diverted back to the process tanks for re-treatment should pH be outside of the set point range. Implementation of the corrective actions identified above, and follow-up sampling indicated compliance; subsequently, the enforcement action was closed. IEUA shall continue to conduct unannounced inspections and wastewater monitoring at Repet to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

- **Repet, Inc. (Permit No. D1069-4)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Repet, Inc (Repet) on May 28, 2020, for a pollutant limitation violation. On May 26, 2020, Repet notified IEUA that it exceeded its lower pH limit of 6.0 SU at Monitoring Point 001 as stated by permit. The low pH excursion was intermittent and lasted approximately one and a half (1.5) hours. The lowest pH reading during intermittent exceedances was 4.2 SU. The NOV/OCA required Repet to investigate the source of the noncompliant discharge and to submit a written report detailing the investigation and how violations of this type would be prevented in the future. On June 5, 2020, Repet responded stating violation was caused when its acid dosing pump failed. This caused excess acid to siphon into the GEM system EQ tank over the weekend. Upon startup after the weekend, low pH wastewater was sent to shaker #2 discharge tank. The wastewater recirculation system activated but system let a small amount of low pH wastewater through. Repet states their bypass valve did not operate quickly because pH controller probe connection was damaged. Repet installed a manual valve on acid injection system which will be closed when system is not in operation to prevent siphoning effect. Repet also replaced both its process control pH probes and its pH probe located at its legal monitoring point. Laboratory analysis results for special pH monitoring indicate compliance. Implementation of the corrective actions identified above, and follow-up sampling indicated compliance; subsequently, the enforcement action was closed. IEUA shall continue to conduct unannounced inspections and wastewater monitoring at Repet to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

7.4.2.4 Jurupa Community Services District (JCSD)

Description of JCSD

JCSD is a public agency responsible for the implementation of certain pretreatment program activities for the direct industries connected to the Brine Line via JCSD's sewer collection system within its service area (Brine Line Reach IV-D). JCSD headquarters is located at 11201 Harrel Street in the City of Jurupa Valley. JCSD was formed in 1956 and provides water, sewer, park services, graffiti abatement, and street lighting. In 1988 the District formed the Community Facilities District (CFD) No. 1 to provide for water, sewer, flood control and street infrastructure within the industrial portion of the Mira Loma area. The boundaries of CFD No. 1 expanded from 1,900 acres to 3,000 acres in 1992. In June 1989, JCSD contracted with WMWD for capacity in Reach IV-D of the Brine Line.

Enforcement Action

- **Del Real Foods, LLC (Permit No. D1021-2.1)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Del Real, LLC (Del Real) by JCSD on February 1, 2019 for pollutant limitation and temperature exceedance violations. On January 27, 2019, Del Real LLC submitted pH and temperature data records from the pH meter Monitoring Point 001, the permitted monitoring point, via email as requested by JCSD staff. The pH of the industrial effluent discharged exceeded the Local Daily Minimum Discharge Limitation of 6.0 S.U. as defined by Permit on January 3, 4, 5, 6, 8, 9, 11, 13, 20, 25, and 26, 2019. Additionally, the temperature data submitted with the pH data records indicated several temperatures as high as 186 degrees Fahrenheit, exceeding the limit of 140 degrees Fahrenheit as stated in SAWPA Ordinance 8 Article 2 Section 201.0J. The NOV/OCA required Del Real to submit a written report by February 18, 2019 stating the cause of the pH and temperature violations and planned corrective actions to ensure that future pH and temperature discharges will be within the Local Non-Domestic Wastewater Limitations Concentration Values. Permittee responded on February 18, 2019 and attributed the pH exceedances to erroneous readings of an unsecured probe in the Monitoring Point 001 Manhole. Del Real replaced the probe and secured it in place in Monitoring Point 001. Additional corrective actions taken by Del Real were to change the Dissolved Air Flotation (DAF) set point from 6.5 to 8 S.U., installation of a thermostatic mixing valve to maintain boiler blowdown temperatures within the compliance range, and a pH dosing connection from the current DAF Caustic tank to the DAF effluent sample box at the exit of the DAF to immediately correct pH. A compliance inspection on August 15, 2019 confirmed installation of AF-3 automated chemical control system which manages chemical dosing at pH tank and emergency caustic pump at the DAF sample box. Implementation of the corrective actions identified above, follow-up site visits, and pH compliance monitoring indicated compliance; subsequently, the enforcement action was closed. JCSD shall continue to conduct unannounced inspections and wastewater monitoring at Del Real to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

7.4.2.5 San Bernardino Municipal Water Department (SBMWD)

Description of SBMWD

SBMWD is a Municipal Water Department and is responsible for administering certain pretreatment program activities for indirect industries associated with the SBMWD Brine Line Collection Station. SBMWD provides potable water and sewerage services for the City of San Bernardino, in addition to sewerage service for the cities of Loma Linda and Highland, as well as some isolated county areas. These services are augmented by the operation of a brine waste collection station which provides an alternate disposal site for industries which generate high strength brine waste. The SBMWD, under contract with the San Bernardino Valley Municipal Water District, is responsible for administering the pretreatment program associated with the SBMWD Brine Line Collection Station.

Enforcement Action

There was no enforcement action during this reporting period.

7.4.2.6 San Bernardino Valley Municipal Water District (Valley District)

Description of Valley District

Valley District is a Municipal Water District responsible for the implementation of certain pretreatment program activities for the direct industries connected to the Brine Line within its service area (Brine Line Reach IV-E). Valley District headquarters is located in the City of San Bernardino and serves most of the northern and eastern reaches of the watershed in San Bernardino County with a small portion of its service area in Riverside County. Valley District was formed in 1954 to plan long-range water supply for the San Bernardino Valley. It is the only State Water Contractor within SAWPA and imports water into its service area through participation in the California State Water Project while also managing groundwater storage within its boundaries. It was incorporated under the Municipal Water District Act of 1911 (California Water Code Section 7100 et seq., as amended). Its enabling act includes a broad range of powers to provide water, as well as wastewater, stormwater disposal, recreation, and fire protection services.

Enforcement Action

There was no enforcement action during this reporting period.

7.4.2.7 Santa Ana Watershed Project Authority (SAWPA)

Description of SAWPA

SAWPA is a Joint Powers Authority, classified as a Special District under State of California law, responsible for the implementation of the pretreatment program for the industries connected to the Brine Line. SAWPA consists of five Member Agencies; Eastern Municipal Water District (EMWD), Inland Empire Utilities Agency (IEUA), Orange County Water District (OCWD), San Bernardino Valley Municipal Water District (Valley District), and Western Municipal Water District (WMWD). SAWPA, through the MOU with OCSD, has the ultimate responsibility to ensure adequate implementation of Pretreatment Program responsibilities in the Upper Basin portion of the Brine Line. SAWPA issues permits to Direct and Indirect

Dischargers jointly with Member and Contract Agencies and solely issues permits to all Member and Contract Agency owned or affiliated Direct and Indirect Dischargers.

Enforcement Action

- **Aramark Uniform & Career Apparel, LLC (Permit No. D1004-1)**

A Cease and Desist Order and Compliance Order (Order) was issued to Aramark Uniform & Career Apparel, LLC by SAWPA on May 12, 2020 for pollutant discharge violations. On March 30, 2020, Aramark Operators staff discovered an accidental discharge of sulfuric acid caused by operator error. The wastewater discharged into the Brine line had a pH of less than 6.0 Standard Units (S.U.) a violation of the minimum daily discharge limitation for the parameter of pH of 6.0 S.U., and at times less than 2.0 S.U., which is subject to the hazardous waste reporting criteria required by 40 CFR 403.12(p) and Section X.B of the Permit. The approximate flow discharged reported was 21,000 gallons and the discharge of wastewater with a pH of less than 2.0 S.U. occurred for approximately 20 minutes. Aramark made immediate notification to WMWD, SAWPA, OCSD, and RWQCB. Additionally, on April 17, 2020, Aramark reported two log pH excursions of less than 6.0 standard units (S.U.) which occurred on April 15, 2020 and April 16, 2020, a violation of the minimum daily discharge limitation for the parameter of pH of 6.0 S.U. Total discharge for both events was approximately 4,641 gallons. At no time was the pH less than 2.0 S.U. Aramark's investigation indicated the April 15, 2020 event was a result of the pH probe being struck during routine maintenance. Aramark's investigation indicated the April 16, 2020 event was attributed to the discharge of sulfuric acid associated with the water softening process. The Order required to immediately cease and desist the discharge of noncompliant wastewater from Aramark to the Brine Line, conduct and document Slug Load Control Plan (SLCP) training for all appropriate Aramark personnel, complete installation of a digital final effluent pH meter recorder for download of complete pH monitoring data, and complete installation of a new brine regeneration softener system to eliminate the necessity for the sulfuric acid currently employed in this process, which resulted in the low pH discharges to the Brine Line as a corrective action for the non-compliant discharges within sixty days (60) of receipt of the Order. Aramark responded on May 20, 2020 documenting completion of the installation of the new Brine regeneration system and completion of the SLCP training. Additionally, Aramark provided a plan for the installation of a digital final effluent pH recorder for download of complete pH monitoring data. The installation is to be completed within thirty (30) days of SAWPA's approval, which was granted on June 8, 2020. It is expected Aramark shall complete the requirements of the Order within August of 2020. SAWPA and WMWD shall continue to conduct unannounced inspections and wastewater monitoring at Aramark while the outstanding Order requirements are completed to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

- **Del Real, LLC (Permit No. D1021-3)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Del Real, LLC (Del Real) by SAWPA on July 14, 2016 for a bypass in the pretreatment wet well and for exceedance of their Brine Line purchased capacity. The NOV/OCA required Del Real to submit a corrective action plan regarding the bypass and to apply for additional Brine Line capacity. Del Real repaired and made improvements to the

existing alarm system to the wet well, which was verified by SAWPA during inspection. Del Real also installed and repaired screens for the production room drains. Del Real submitted a request for additional Brine Line capacity and a Water Balance Report which detailed water consumption and wastewater discharged to the Brine Line. Del Real agreed to purchase an additional 163,000 gallons of Brine Line capacity and submitted the Water Balance Report. Implementation of the corrective actions identified above, and follow-up site visits indicated compliance; subsequently, the enforcement action was closed. JCSD shall continue to conduct unannounced inspections and wastewater monitoring at Del Real to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

- **Del Real, LLC (Permit No. D1021-3)**

A Notice of Violation and Order for Corrective Action and Notice of Significant Noncompliance (NOV/OCA) was issued to Del Real, LLC (Del Real) by SAWPA on May 15, 2019 for a pollutant limitation and failure to report said violation within 24 hours of becoming aware of the violation. Furthermore, Del Real failed to report said violation within 45 days of the required report due date placing the facility in Significant Noncompliance for the 2nd and 3rd quarters of the 2018-2019 fiscal year. On August 10, 2018, Del Real collected a wastewater sample from Monitoring Point 001. The field pH result obtained August 10, 2018 indicated a pH result of 5.4 S.U., a violation of the pH minimum discharge limitation of 6.0 S.U. as stated in the wastewater discharge permit. Furthermore, this violation was not communicated to JCSD until submittal of the Self-Monitoring Report in January 2019. The NOV/OCA required submittal of a written report detailing why the pH violation was not reported as required and what corrective action would be taken to ensure future violations of this nature do not occur again by May 29, 2019. The permittee responded requesting an extension of the deadline until June 3, 2019, which was granted. The permittee provided the report on June 3, 2019. The report identified the cause of the reporting violation as a failure of staff to properly identify the violation and therefore reporting was not made as required. The permittee will ensure proper personnel are present during laboratory field analyses and the contract laboratory will be directly notifying personnel should any further violations be identified so that notification can be made as required. Implementation of the corrective actions identified above, and follow-up sampling indicated compliance; subsequently, the enforcement action was closed. JCSD shall continue to conduct unannounced inspections and wastewater monitoring at Del Real to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

- **EMWD Perris and Menifee Desalination Facility (Permit No. D1061-3)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to the EMWD Perris and Menifee Desalination Facility by SAWPA on November 7, 2019 for discharging to the Brine Line without obtaining a Wastewater Discharge Permit. On October 2, 2019 EMWD Source Control staff notified SAWPA that a contractor operator for the Desalitech R.O. pilot project discharged 250 gallons of wastewater to the Brine Line without obtaining a Wastewater Discharge Permit for the discharge. The NOV/OCA required EMWD to submit a written report to SAWPA detailing how the violation shall be prevented in the future. The written report was due no later than November 21, 2019. An extension on the November 21, 2019 deadline was requested

and granted to accommodate signing of the response by the Authorized Representative to November 22, 2019. The response to the NOV/OCA was received November 22, 2019. EMWD has developed a Standard Operating Procedure to prevent future non-compliant discharges to the brine line from contracted operators or EMWD employees. Implementation of the corrective actions identified above, and follow-up sampling indicated compliance; subsequently, the enforcement action was closed. SAWPA shall continue to conduct unannounced inspections and wastewater monitoring at the EMWD Perris and Menifee Desalination Facility to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

7.4.2.7.1 SAWPA Waste Hauler Program

SAWPA solely permits the Waste Haulers allowing for the Waste Haulers to have only one permit to provide service to the four Member Agencies' Collection Stations. This also facilitates utilization of the Generator's regular Waste Hauler if an Alternate Collection Station must be used.

Existing Permits – Permitted Waste Haulers

- **Alpha Petroleum Transport, Inc. II (Permit No. H1126-1)
22740 Temescal Canyon Road, Corona, CA 92883**
- **Environmental Management Technologies, Inc. (Permit No. H1025-3)
1456 S. Gage Street, San Bernardino, CA 92408**
- **Giuliano & Sons Briners, Inc. (Permit No. H1031-3)
10380 Alder Avenue, Bloomington, CA 92316**
- **Haz Mat Trans, Inc. (Permit No. H1033-3)
230 E. Dumas Street, San Bernardino, CA 92408**
- **Hazardous Waste Transportation Services, Inc. (Permit No. H1034-3)
10600 South Painter Avenue, Santa Fe Springs, CA 90670**
- **Hidden Villa Ranch (Permit No. H1120-2)
1811 Mountain Avenue, Norco, CA 92860**
- **K-VAC Environmental Services, Inc. (Permit No. H1049-3)
8910 Rochester Avenue, Rancho Cucamonga, CA 91730**
- **Patriot Environmental Services, Inc. (Permit No. H1127-1)
508 East E Street, Wilmington, CA 90744**
- **Rayne Water Conditioning (Permit No. H1066-3.2)
939 West Reece Street, San Bernardino, CA 92411**
- **Western Environmental Services, Inc. (Permit No. H1098-3)
400 W. Foothill Blvd., Suite H, Glendora, CA 91740**

Enforcement Action

- **Alpha Petroleum Transport, Inc. II (Permit No. H1126-1)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Alpha Petroleum by SAWPA on December 20, 2019 for discharging a wastewater load to the Brine Line without cleaning the waste hauler truck as required resulting in an unauthorized discharge to the IEUA Collection Station. On November 27, 2019 at 12:30 p.m., Alpha Petroleum discharged a wastewater load, which originated from Eastside Water Treatment Facility (EWTF), to the IEUA Collection Station. After the wastewater was offloaded to the IEUA Collection Station the tanker hose was disconnected by the driver and an IEUA inspector witnessed the discharge of grease leaking out of the tankers discharge pipe and onto the ground. When the IEUA inspector questioned the driver concerning the grease discharging from the tanker, the driver stated a load of wastewater containing grease was transported and offloaded at a different site, but the tanker was not cleaned prior to loading wastewater from the EWTF. Alpha Petroleum failed to follow the actions submitted in their Liquid Waste Hauler Cleaning and Maintenance Plan a violation of Wastewater Discharge Permit No. H1126-1. The NOV/OCA required the permittee to submit a written report detailing the cause and corrective actions taken to prevent recurrence of the violations by no later than 1/6/2020. SAWPA and IEUA shall continue to conduct unannounced inspections and wastewater monitoring at the IEUA Collection Station of Alpha Petroleum to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

7.4.2.8 Western Municipal Water District (WMWD)

Description of WMWD

WMWD is a Municipal Water District responsible for the implementation of certain pretreatment program activities for the direct and indirect industries connected to the Brine Line within its service area. WMWD was formed in 1954 under the Municipal Water District Act of 1911 for the purpose of bringing supplemental water from the Metropolitan Water District of Southern California to a growing western Riverside County. Western's service area covers 527 square miles, serving a population of approximately 900,000 people. The District serves 10 wholesale customers with imported water via the Colorado River and the State Water Project. WMWD also supplies imported water and groundwater directly to approximately 25,000 residential, commercial and agricultural customers in the areas of El Sobrante, Eagle Valley, Temescal Creek, Woodcrest, Orangecrest, Mission Grove, Lake Mathews, March Air Reserve Base, Rainbow Canyon and portions of the cities of Riverside and Murrieta. The Murrieta division provides water and wastewater services in a 6.5-square mile portion of Murrieta and relies on both groundwater and imported sources. WMWD headquarters is located in Riverside, California and serves the western Riverside County portion of the watershed, as well as portions of the Santa Margarita Watershed, south of the Santa Ana River Watershed.

Enforcement Action

- **Decra Roofing Systems (Permit No. I1020-3)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Decra Roofing Systems (Decra) by WMWD on August 8, 2019 for pollutant discharge limitation

violation. On July 23, 2019 Decra collected a wastewater sample from Monitoring Point 001. The field analysis results reported by Decra on July 24, 2019 indicated a Dissolved Sulfide concentration of 1.1 mg/L, which exceeded the Daily Maximum Discharge Limitation of 0.5 mg/L as stated in Permit No. I1020-3. The NOV/OCA required Decra to investigate the cause of the violation and submit a report with corrective actions by August 16, 2019. Additionally, Decra was required to resample for dissolved sulfides weekly for three consecutive weeks and submit the first result by August 23, 2019. The remaining results must be submitted within 10 days of receiving them. Decra submitted the Corrective Actions Report on August 19, 2019. An informal notice was provided for the late report and it was immediately provided. The first resample was submitted and indicated a non-detect for dissolved sulfides (<0.01mg/L). The contracted lab could not provide accurate results for the remaining two samples due to a lab error. Decra rescheduled the sampling and it was completed on September 19, 2019 and September 26, 2019. The results for both samples indicated non-detect for the dissolved sulfides (<0.01mg/L). Implementation of the corrective actions identified above, and follow-up sampling indicated compliance; subsequently, the enforcement action was closed. WMWD shall continue to conduct unannounced inspections and wastewater monitoring at Decra to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

- **Frutarom USA, Inc. (Permit No. D1029-3)**

A Notice of Violation and Order for Corrective Action (NOV/OCA) was issued to Frutarom USA, Inc. on June 10, 2020 for a pollutant discharge violation. On 5/20/2020 the Permittee collected a wastewater sample from Monitoring Point 002. The laboratory results submitted on 6/5/2020 indicated a Dissolved Sulfides concentration of 1.0 mg/L, which exceeded the Daily Maximum Discharge Limitation of 0.5 mg/L as stated in the Wastewater Discharge Permit. The NOV/OCA required a written response and resampling to be conducted once per week for three consecutive weeks. The first resample result is due by 7/9/2020. It is expected Frutarom shall complete the requirements of the Order within July of 2020. WMWD shall continue to conduct unannounced inspections and wastewater monitoring at Frutarom while the outstanding NOV/OCA requirements are completed to ensure consistent compliance with permit requirements and SAWPA Ordinance No. 8.

7.4.2.9 Yucaipa Valley Water District (YVWD)

Description of YVWD

YVWD is a Water District responsible for the implementation of certain pretreatment program activities for the industries connected to the Brine Line within its service area. Currently there are no permitted users within the YVWD Service Area. YVWD was formed on September 14, 1971, when the Secretary of State of the State of California certified and declared formation of the District. The District operates under the County Water District Law, being Division 12 of the State of California Water Code. Although the immediate function of the District at the time was to provide water service, the YVWD currently provides a variety of services to residential, commercial and industrial customers. The YVWD provides sewer collection and sewer treatment services. Sewer treatment takes place at the highly advanced Wochholz Regional Water Recycling Facility that provides advanced treatment, including the capability to demineralize the recycled water. The demineralization process involves a reverse osmosis system that separates small molecules from the recycled water supply. In 2012, the YVWD

completed an extension of the Inland Empire Brine Line operated by the Santa Ana Watershed Project Authority. The brine disposal facility is critical to insure the YVWD meets the stringent water quality objectives set by the Regional Water Quality Control Board for the Yucaipa Management Zone, Beaumont Management Zone and the San Timoteo Management Zone.

Although YVWD currently has no permitted industries discharging to the Brine Line they have participated in Brine Line activities, including training conducted by SAWPA personnel, since 2013. They conduct the industrial user survey upstream of the Henry Wochholz Regional Water Recycling Facility that began discharge to the Brine Line in July of 2016, in accordance with SAWPA policies and procedures. The Henry Wochholz Regional Water Recycling Facility service area includes three industrial permittees:

- Sorensen Engineering with Permit No. CP-001-03, Class I – CIU per 40 CFR 433.17 (PSNS) Metal Finishing issued by the YVWD for a maximum flow of 20,000 gallons per day. It should be noted that in most cases the YVWD local limits are more stringent than the categorical limits, especially for metals and cyanide. Self-monitoring requirements are specified by pollutant on a semi-annual basis. The Sorensen permit clearly denotes the most stringent limits that apply.
- Skat-Trak Performance Products with Permit No. CP-003-03, Class II – Non-Significant CIU per 40 CFR 464.15 (PSES), Subpart A, for Aluminum Casting and 40 CFR 464.35 (PSES), Subpart C, for Ferrous Casting issued by YVWD as a zero-discharge permit. The no discharge requirement is clearly noted in the permit and the applicable categorical limit tables are provided in the permit as informational items.
- Yucaipa Valley Regional Water Filtration Facility (YVRWFF) with Permit No. SP 001-04, is a Class I – SIU per 40 CFR. YVRWFF is a surface water treatment facility with an initial capacity of 12 MGD and provisions for expansion to 36MGD The water treatment includes automatic strainers and free surface flow distribution structure, manual strainers, microfiltration membrane system, nano-filtration membrane system, blending structure, a membrane room, a DAF and a CIP process. The YVRWFF produces high quality potable water.

Enforcement Action

There was no enforcement action during this reporting period.

7.4.3 Self-Monitoring Program

A self-monitoring program is required of permittees discharging to the Brine Line. The self-monitoring reports (SMRs) are delivered to the applicable agency for review and action if required. The SMR water quality data is included in the SAWPA Data Management System.

7.4.4 Field Inspection, Sampling, and Monitoring QA/QC

SAWPA conducts sampling QA/QC in accordance with EPA requirements including equipment blanks and field blanks. Analysis of the QA/QC data indicated samples collected were representative and free of contamination.

7.4.5 Identification of New Permittees

SAWPA requires a wastewater discharge permit for all facilities with discharge to the Brine Line, except for certain areas in the JCSD and WMWD service areas, therefore new permittees are identified upon

their completion of a wastewater discharge permit application. Most new companies identified by SAWPA or upstream agencies in areas upstream of emergency connections are discovered by field inspectors responding to completed industrial user surveys that indicate an inspection is warranted or during inspections of previously unoccupied warehouse and facility spaces. Facilities identified upstream of emergency connections requiring a permit are responded to by the upstream agency with oversight by SAWPA. These permitted facilities are listed in the emergency permit fact sheet and in the corresponding agency's Annual Reports.

EMWD

In the EMWD service area all new proposed connections or proposed new indirect dischargers must complete a permit application that is thoroughly reviewed by EMWD and SAWPA prior to developing a permit. The draft permit is then reviewed and commented on by SAWPA and OCSD before issuing a final permit.

IEUA

In the IEUA service area, IEUA collaborates with the City of Chino to identify industries that may be subject to Federal Categorical Standards or local limits. No industries are allowed to connect to the Brine Line until they have entered into a capacity right agreement with IEUA and obtained a wastewater discharge permit issued by IEUA and SAWPA as required. IEUA in partnership with the City of Chino obtains new business information from the following:

- City business licensing departments
- Industrial User Survey questionnaires
- City utility service requests
- City referrals during storm water inspections

Most new companies that could potentially connect to the Brine Line are identified by IEUA field inspectors while out inspecting current permittees and when following up on tips provided by the City of Chino Source Control division. Facilities identified upstream of an emergency connection are listed in the emergency permit fact sheet and in the IEUA Annual Report.

JCSD

In the JCSD service area SAWPA checks various sources for companies that may be subject to Federal Categorical Standards or local limits. Wastewater permits are issued by SAWPA and JCSD as required. SAWPA or JCSD obtains new business information from the following:

- The building department and business license process
- Industrial User Survey (IUS) questionnaires are completed by new water/sewer customers, the IUS is verified by site inspections
- Agency utility service requests and high-water users are inspected for wastewater generating activities
- Industry, trade, or association magazines
- Internet searches & field observations
- New construction/tenant improvement—plan checks

JCSD will conduct regular inspections of all customers connected to the Inland Empire Brine Line (Brine Line) to verify the type of wastewater generated at their location. In addition, any closed-circuit TV (CCTV) revealing a possible illegal connection will be investigated. The

majority of new companies identified by SAWPA or upstream agencies in these scenarios are discovered by field inspectors responding to completed industrial user surveys that indicate an inspection is warranted or during inspections of previously unoccupied warehouse and facility spaces. A priority determination is assigned as follows: High Priority – any non-permitted facility generating industrial wastewater is inspected and monitored annually for local limits, Medium Priority – any dry manufacturing facility is inspected every 2 years unless changes to manufacturing and Low Priority – warehouse/commercial business is inspected every 5 years. Facilities identified in the JCSD service area requiring a permit is reviewed by SAWPA with final permit concurrence by OCSD. Facilities identified upstream of emergency connections in other jurisdictions requiring a permit are reviewed to by the upstream agency with oversight by SAWPA. These permitted facilities are listed in the emergency permit fact sheet and in the corresponding agency's Annual Reports.

SBMWD

In the SBMWD service area all new proposed connections or proposed new indirect dischargers must complete a permit application that is thoroughly reviewed by SBMWD and SAWPA prior to developing a permit. The draft permit is then reviewed and commented on by SAWPA and OCSD before issuing a final permit.

Valley District

In the Valley District service area, all new proposed connections must complete a permit application that is thoroughly reviewed by Valley District and SAWPA prior to developing a permit. The draft permit is then reviewed and commented on by SAWPA and OCSD before issuing a final permit.

WMWD

In the WMWD service area, except for the areas upstream of the Corona WRF No. 1 and WRCRWA SRPS, all new proposed connections or proposed new indirect dischargers must complete a permit application that is thoroughly reviewed by WMWD and SAWPA prior to developing a permit. The draft permit is then reviewed and commented on by SAWPA and OCSD before issuing a final permit. For the Corona WRF No. 1 permit WMWD directs the City of Corona, with oversight by SAWPA, through their industrial survey process. The City of Corona is alerted of any new business moving into their jurisdiction through the building department and business license process. New businesses are given a pretreatment questionnaire which is returned to the Pretreatment Department and reviewed. Pretreatment personnel visit the site to verify the information submitted in the questionnaire.

In the WMWD service area with potential to discharge to the Brine Line in an emergency condition from the WRCRWA SRPS, WRCRWA checks for various sources for companies that may be subject to Federal Categorical Standards or local limits. Wastewater permits are issued by WRCRWA agencies as required. WRCRWA obtains new business information from the following:

- The building department and business license process
- Industrial User Survey (IUS) questionnaires are completed by new water/sewer customers, the IUS is verified by site inspections
- Agency utility service requests and high-water users are inspected for wastewater generating activities

- Industry, trade, or association magazines
- Internet searches & field observations
- New construction/tenant improvement—plan checks

YVWD

In the YVWD service area upstream of the Henry Wochholz Regional Water Recycling Facility, YVWD checks various sources for companies that may be subject to Federal Categorical Standards or local limits. Wastewater permits are issued by YVWD as required. YVWD obtains new business information from the following:

- The building department and business license process
- Industrial User Survey (IUS) questionnaires are completed by new water/sewer customers, the IUS is verified by site inspections
- Agency utility service requests and high-water users are inspected for wastewater generating activities
- Industry, trade, or association magazines
- Internet searches & field observations
- New construction/tenant improvement—plan checks

7.4.6 Future Projects that will Affect Quantity of Discharge to the Brine Line

California Institution for Women (CIW) which is primarily domestic (reclaimable) wastewater will be diverted to the Pine Avenue Sewer, away from the Brine Line, when the diversion project is completed. Diversion of the CIW wastewater to the Pine Avenue Sewer away from the Brine Line is anticipated for Fiscal Year 2020/2021.

City of Beaumont has completed plans and commenced construction to upgrade the City's existing wastewater treatment plant. These plans include a salinity management strategy to comply with basin plan objectives set by the Regional Water Quality Control Board for the Beaumont and San Timoteo Groundwater Management Zones. The improvements are contingent on the ability to tie the discharge from the treatment plant upgrade to the Brine Line for brine conveyance. The City of Beaumont is not within the Brine Line Service Area, so therefore requires authorization from OCSD General Manager prior to discharge. In a letter dated January 2, 2020 OCSD's General Manager provided authorization for the out of SAWPA Inland Empire Brine Line Service Area wastewater flows from the Beaumont wastewater treatment plant upgrade to the Brine Line following issuance of a Wastewater Discharge Permit. It is expected the City of Beaumont shall be issued a Brine Line Wastewater Discharge Permit within August of 2020.

Rialto Bioenergy is a food waste-to-energy facility in Rialto, California, which has submitted a wastewater discharge permit application to SAWPA and Valley District. The facility is expected to come online and begin discharge to the Brine Line in late-2020 following issuance of a wastewater discharge permit.

7.4.7 SAWPA Special Projects

SAWPA conducted the following Special Project efforts during the reporting period:

1. Right of way (ROW) maintenance including road grading and vegetation removal for Reach 4A Lower and Reach 4B Lower.

2. Pipeline cleaning, pipeline inspection, and scale assessment for Reach 4A Lower and Reach 4B Lower.
3. Repaired corrosion on Maintenance Access Structure (MAS) 4A-0010.
4. Siphon cleaning on Reach 4A Upper (Pine Avenue Siphon).
5. Pipeline inspection and siphon cleaning on Reach 4D.

Activity	Reach 4A Lower	Reach 4B Lower	Corona Lateral	Reach 4A Upper	Reach 4D
ROW Maintenance	1.5 miles	3 miles	0.3 miles	-	
Line Inspection	-	1,400 ft	1,250 ft	-	35,000 ft
Line Cleaning	-	1,400 ft	1,250 ft	-	
MAS Inspected	19	15	3	-	19
Siphon Cleaned	-	-	-	2	3

7.4.8 SAWPA Member and Contract Agency Ordinances and Resolutions

- SAWPA adopted Ordinance No. 8 and Local Limits Resolution 2017-11 on September 19, 2017.
- EMWD adopted EMWD Ordinance No. 91.3, incorporating the changes made for SAWPA Ordinance No. 8 on May 2, 2018.
- IEUA adopted IEUA Ordinance No. 106, incorporating the changes made for SAWPA Ordinance No. 8 on February 21, 2018.
- JCSD adopted the JCSD Brine Line Ordinance 423 on January 8, 2018, incorporating the changes made for SAWPA Ordinance No. 8. JCSD adopted JCSD Brine Line Ordinance 424, incorporating the changes made for SAWPA Resolution 2017-11 on January 22, 2018.
- SBMWD adopted SAWPA Resolution No. 2017-11 with SBMWD Resolution No. 918 on October 17, 2017. SBMWD adopted SAWPA Ordinance No. 8 with SBMWD Resolution No. 919 on October 17, 2017.
- Valley District adopted Valley District Ordinance No. 80, incorporating the changes made for SAWPA Ordinance No. 8 on June 19, 2018.
- WMWD adopted WMWD Brine Line Ordinance No. 389, incorporating the changes made for SAWPA Ordinance No. 8 on March 21, 2018.
- YVWD adopted SAWPA Ordinance No. 8 by Resolution on October 3, 2017. YVWD adopted SAWPA Resolution No. 2017-11 by Resolution on February 6, 2018.

7.4.9 Public Participation

None.

7.4.10 Permittees in Significant Noncompliance (SNC)

Summary of SAWPA and Member/Contract Agency Permittees in SNC July 1, 2019 – June 30, 2020		
EMWD Permittees		
Company Name	Permit No.	Reporting or Discharge Violation
None		
IEUA Permittees		
Company Name	Permit No.	Reporting or Discharge Violation
None		
JCSD Permittees		
Company Name	Permit No.	Reporting or Discharge Violation
None		
SBMWD Permittees		
Company Name	Permit No.	Reporting or Discharge Violation
None		
Valley District Permittees		
Company Name	Permit No.	Reporting or Discharge Violation
None		
SAWPA Permittees		
Company Name	Permit No.	Reporting or Discharge Violation
None		
WMWD Permittees		
Company Name	Permit No.	Reporting or Discharge Violation
None		

7.4.10.1 Summary of Permittees in SNC Newspaper Notice

There were no Permittees in Significant Noncompliance.

7.4.11 Non-Industrial Source Control and Public Education Programs

EMWD supports an extensive education program designed to provide a useful academic experience at all grade levels.

IEUA educates its permittees during site inspections when applicable for typical outreach efforts such as FOG and hazardous waste education.

JCSD's Pretreatment staff coordinates public outreach in cooperation with JCSD's Community Affairs Staff. The public outreach occurs in community newsletters, public outreach events such as JCSD's Open House and Wellness Events, and JCSD's website. Topics include FOG Control, root control, hazardous waste disposal and Sewer System Management Plan components. Information is provided to the dischargers during the permit renewal process and site inspections.

SBMWD implements a number of outreach programs to educate industry and to minimize pollutants discharged. Field inspectors provide Best Management Practice (BMP) brochures during site inspections to educate industry and minimize the discharge of pollutants. SBMWD operates a quarterly Silver Waste Disposal Program to provide a disposal site for small quantity silver generators within the service area.

Valley District provides public educational information to their customers to encourage the efficient use of water through advertising, classroom instruction, contests, paying 25% of retail water agency rebates, etc. In collaboration with its retail water agencies, iEfficient.com was created, which provides water-saving tips and information on water issues. Valley District conducts regular Board Meetings which are open to the public on the 1st and 3rd Tuesday of each Month. Valley District also provides public information via their website at <http://www.sbvmd.com/> which includes scheduled events and other opportunities for public participation on a variety of issues.

WMWD provides public educational information to their customers to encourage the efficient use of water through advertising, rebates, programs, and workshops.

7.4.12 Other Public Participation

SAWPA Agency Dental Amalgam Programs

City of Beaumont (Beaumont)

Beaumont is not currently discharging to the Brine Line.

Eastern Municipal Water District (EMWD)

EMWD has no areas of discharge to the Brine Line which have dental facilities.

Inland Empire Utilities Agency (IEUA)

IEUA has no direct connections from dental facilities within their jurisdiction. In the IEUA jurisdiction area there is one Infrequent Discharge Permit/Emergency Permit with an area that includes dental facilities that would discharge to the Brine Line in the event of an emergency. IEUA has completed the inventory of dentists that discharge from this area which includes portions of the cities of Chino and Chino Hills. IEUA has sent the one-time compliance report (OCTR) survey to these dental facilities. A second and third round of the OCTR surveys were sent to non-respondents in November 2019 and February 2020, respectively. IEUA is in the process of placing phone calls to remaining non-respondent dental facilities. Approx. 60% of the surveys have been received.

Jurupa Community Services District (JCSD)

JCSD has no dental facilities from the areas with direct connections to the Brine Line. In the JCSD jurisdiction area there are various Emergency Permits that have dental facilities that can discharge to the Brine Line in the event of an emergency. JCSD has issued surveys to all dental facilities that discharge within the Emergency Permitted service area. All open facilities have submitted their one-time compliance report (OTCR) and have been inspected to verify compliance.

San Bernardino Municipal Water Department (SBMWD)

There are no dental facilities within the SBMWD service area which have a direct connection to the IEBL. The City of San Bernardino Municipal Water Department has been issued an Emergency

Discharge Permit which, if an emergency discharge were to occur, would include wastewater from dental facilities which normally discharge to the SBWMD Water Reclamation Plant. The SBWMD Environmental Control Section has actively implemented a Dental Amalgam Program beginning in 2016 with approximately 155 dental industries identified within the service area. Nearly one hundred dental industries have submitted the required compliance report. The remaining dental industries include 46 which have no amalgam generating operations, facilities which were determined to be permanently closed, and others which are currently closed due to COVID-19 operating restrictions or a general slowdown in business operations. Approximately ten dental industries currently in operation have not submitted the required certification statement and will be inspected to collect the required compliance report and confirm the installation and operation of amalgam separators in advance of the required October 12, 2020 due date.

San Bernardino Valley Municipal Water District (Valley District)

Valley District has no areas of discharge to the Brine Line which have dental facilities.

Western Municipal Water District (WMWD)

WMWD has no direct connections from dental facilities within their jurisdiction. In the WMWD jurisdiction area there are two Emergency Permits with areas that have dental facilities that can discharge to the Brine Line in the event of an emergency:

- **Corona WRF No. 1**
Corona has moved from the preliminary survey to on-going monitoring via the new business license list that is received monthly. A total of 100 surveys have been collected and there are 5 surveys that remain outstanding. As the monitoring of new and renewed business licenses continues, there is a constant rotation of surveys due.
- **WRCRWA SRPS**
WRCRWA has three agency jurisdictions that discharge to the WRCRWA SRPS: WMWD, Home Gardens, and City of Norco. The WMWD area is residential and no dental facilities have been identified. Home Gardens has issued surveys to all dental facilities that discharge to the WRCRWA SRPS from within their jurisdiction. All dental facilities have been surveyed and have been made aware of the dental amalgam rule. The City of Norco has identified all the dental facilities that discharge to the WRCRWA SRPS from within their jurisdiction and has issued surveys to these facilities. At this time twelve surveys have been returned. The City of Norco is currently in the process of reaching out to the facilities that have yet to return a survey to determine if they are still in business.

Yucaipa Valley Water District (YVWD)

YVWD has no direct connections from dental facilities within their jurisdiction. YVWD has one permit, issued by SAWPA, for the Henry Wochholz Water Reclamation Facility that discharges Brine Wastewater from a reclamation process for the wastewater treatment plant. For the area that discharges to the YVWD Henry Wochholz Water Reclamation Facility YVWD is in the process of issuing surveys to all dental facilities and have received all but two of those back at this time. YVWD is in the process of pursuing enforcement actions on those that have not completed the surveys.

7.4.13 Changes to the SAWPA Pretreatment Program

SAWPA has continued to refine a new Pretreatment Program developed in 2013. SAWPA staff consists of a Manager of Permitting and Pretreatment, a Senior Pretreatment Program Specialist, and a Pretreatment Program Technician, with an additional 1.4 full-time equivalent consisting of other SAWPA

personnel. SAWPA oversees the Brine Line program with assistance from Pretreatment Program managers, senior management, and inspectors from the Member and Contract Agencies. A full description of personnel available to the Brine Line program is detailed in 7.4.14.

Two working groups made up of 1) Pretreatment Program managers; and 2) managers and senior management met during the year to coordinate work of the Pretreatment Program team. Working group meetings are utilized to review Brine Line procedures, discuss upcoming pretreatment issues, and provide training on various topics related to the program. SAWPA continued an Inter-Agency training program to promote the continued growth of all agency inspectors. Inspectors from each agency accompany a different agency on an inspection each quarter to observe inspection practices, but also see new types of facilities, broadening each inspector's experience.

SAWPA conducted covert downstream monitoring of dischargers where concerns of potential non-compliance issues were present. Although to date no non-compliance issues have been discovered due to this sampling, SAWPA will continue the practice in FY 2020/21.

SAWPA conducted audits of its member/Contract Agencies in late 2018 and early 2019. During these audits SAWPA personnel ensure agencies were performing inspection, monitoring, permitting, and enforcement activities in line with the SAWPA policies and procedures. SAWPA personnel reviewed documentation for completeness, accuracy, and adherence to SAWPA policies and consistency between agency programs. SAWPA personnel also accompanied agency personnel on inspection and sampling events to observe techniques and ensure adherence to SAWPA procedures and consistency between agency programs. SAWPA observed no major findings at any of the member or Contract Agencies.

SAWPA Draft Pretreatment Program Control Documents Submittal

SAWPA Submitted draft updates to the Pretreatment Program Control Documents (PPCDs), also known as the SAWPA Policy and Procedures, for OCSD's review on April 2, 2018. These documents have been updated to incorporate OCSD's outstanding comments from their 2013 review of the PPCDs, to incorporate changes due to SAWPA Ordinance No. 8 and Local Limits Resolution 2017-11, as well as to incorporate any program changes SAWPA has made since 2013. SAWPA also engaged OCSD regarding a potential Stormwater Policy based on the OCSD Business Washpad Rule. SAWPA's intent was to employ the Policy requiring a SOP for facilities that had potential to discharge stormwater as outlined in the draft Policy. SAWPA has previously shared the draft Stormwater Policy with OCSD. SAWPA understands that OCSD wished to withhold any potential concurrence on this document until a template SOP for the Stormwater Policy could be reviewed. These documents were submitted alongside the Draft Pretreatment Program Control Documents submittal on April 2, 2018. In a letter dated February 15, 2019 OCSD responded to the April 2, 2018 Draft Pretreatment Program Control Documents submittal with submittal review comments. SAWPA and OCSD have met to review these comments in more detail however it was agreed that work on the PPCDs should wait until completion of Ordinance No. 9.

OCSD has completed the process of updating and revising their Sewer User Ordinance, Ordinance OCSD-53. As Delegated Control Authority to OCSD, SAWPA is required to update their Ordinance to include relevant OCSD revisions. SAWPA has developed draft Ordinance No. 9, which has been revised to incorporate the updates within the new OCSD Ordinance. The proposed updates include a new prohibition on hydrolysate, a new prohibition on discharge via non-domestic surface or floor drains, and clarification of existing language for facility reports of changed conditions and notifications for sale of change of ownership. Additionally, SAWPA has proposed additional revisions to update the definition

of an Industrial User to standardize it with the OCSD definition. Furthermore, SAWPA has proposed creation of a new classification of Non-Industrial User for Brine Line dischargers that do not meet the definition of an Industrial User. SAWPA has also created a new authorization process, a Connection Authorization, that will allow greater flexibility in managing infrequent discharges to the Brine Line. SAWPA submitted the most recent draft of Ordinance No. 9 to OCSD on June 11, 2020 and as of June 30, 2020 are still awaiting comments.

7.4.14 Pretreatment Program Budget

Staffing – EMWD

As of June 30, 2020, the Pretreatment Program staff consisted of 1 manager, 1 senior analyst, 1 analyst, 1 senior inspector, 5 field inspectors, and 1 administrative support personnel for a total of 11 staff members. Traditionally, EMWD designates 20% of the departmental budget to the Brine Line Pretreatment Program. The total estimated budget for Brine Line FY 2019/20 was \$354,293.

Staffing – IEUA

As of June 30, 2020, the Pretreatment Program staff consists of 1 manager, 1 deputy manager, 1 engineer, 4 field inspectors, and 1 administrative support personnel for a total of 8 staff members. The total estimated budget for FY 2019/20 was \$191,456. This represents the total estimated budget dedicated to Brine Line activities.

Staffing – JCSD

As of June 30, 2020, the Pretreatment Program staff consists of 1 supervisor, 2 field inspectors and a sewer sample technician for a total of 4 staff members. The JCSD Pretreatment Budget for FY 2019/20 was \$284,290 for the Brine Line Service Area. The Agency does not differentiate within its budget between Brine Line and non-Brine Line activities.

Staffing – SBMWD

As of June 30, 2020, the Pretreatment Program staff consists of 1 manager, 2 field technicians, 1 collection station operator, and 1 administrative support personnel for a total of 5 staff members. Total budget for the entire Pretreatment Program including the brine program for 2019/20 for staff and equipment was \$742,936. The Agency does not differentiate within its budget between Brine Line and non-Brine Line activities.

Staffing – Valley District

As of June 30, 2020, the Pretreatment Program staff consists of 1 manager and 2 consultant provided personnel for a total of 3 staff members. The consulting budget for FY 2019/20 was \$45,946, which includes the sampling and monitoring costs. Valley District management time is estimated at approximately 10% of the program implementation budget, or \$4,595. The Agency does not track time to differentiate between Brine Line and non-Brine Line activities. Total cost for FY 2019/20 was approximately \$50,541.

Staffing – SAWPA

As of June 30, 2020, the Pretreatment Program staff consisted of 1 manager, 1 specialist, and 1 technician. An additional 1.4 FTE is contributed from 2 engineers, and 3 technical support personnel. The actual Brine Line Pretreatment Program activity expenditures for FY 2019/20 were \$1,479,407.

Staffing – WMWD

As of June 30, 2020, the Pretreatment Program staff consists of 1 manager, and 2 Source Control Specialists for a total of 3 staff members. Estimated budget for FY 2019/20 was \$300,000 (this figure does not include sampling costs, which are assigned to the customer as a pass-through charge). The District does not differentiate within its budget between Brine Line and non-Brine Line activities.

7.4.15 Equipment Inventory Listing

The Summary of Pretreatment Equipment used by and available to SAWPA in Pretreatment Activities, such as field inspection and sampling activities, is provided in the following table. The quantities listed in each Member and Contract Agency column below represents the total resources available for Brine Line activities. The Member and Contract Agencies do not track time to differentiate between Brine Line and non-Brine Line activities or resource allocations. A summary of the pretreatment equipment used by the dischargers is shown in Appendix H titled “SAWPA Pretreatment Program Permittees with Pretreatment Equipment”.

TABLE 7.4 Santa Ana Watershed Project Authority – Summary of Pretreatment Equipment for Fiscal Year 2019/20 Orange County Sanitation District/SAWPA						
Equipment Description	Quantity					
	EMWD	IEUA	JCSD	SBMWD	SAWPA	WMWD
Vehicles	7	4	3	3	2	8
Automated Samplers	11	16	9	16	5	14
Handheld Portable Samplers	-	-	2	5	1	-
Sampler Batteries	24	25	18	16	6	8
Sampler Battery Chargers	12	18	2	2	1	2
Sampler Batter Power Packs	-	-	-	-	1	-
Portable Area/Velocity Flow Meters	-	5	5	-	-	-
Gas Meters/Detectors with Pumps	6	4	-	2	1	2
Laboratory Dishwashers	-	1	1	-	-	-
Ice Machines	-	1	2	-	1	-
Portable pH Meters	6	8	4	3	1	7
Sulfide Test Kits	1	7	1	-	1	-
SONDE Trunk Line Monitoring Devices	-	4	-	-	-	-
Laptop Computers	6	4	1	-	2	-
Continuous H2S Trunk Line Monitoring Devices	-	4	-	-	-	-
Spill Response Kits	-	-	-	3	-	-

7.4.16 SAWPA Pretreatment Program Training

SAWPA, EMWD, IEUA, WMWD, SBMWD, Valley District, and JCSD staff attended training classes and workshops presented by the California Water Environment Association (CWEA), including the P3S conference, and Southern California Alliance of Publicly Owned Treatment Works (SCAP) pretreatment committee meetings.

Inter-Agency training was conducted each quarter throughout the 2019/2020 fiscal year to promote the continued growth of all agency inspectors. Inspectors from each agency accompany a different agency on an inspection each quarter to observe inspection practices, but also see new types of facilities, broadening each inspector's experience.

Additional training was conducted throughout the 2019/2020 fiscal year by SAWPA for member/Contract Agencies. The following training classes were conducted with all SAWPA agencies represented:

- SAWPA Agency Guidance for IPACS Data Entry to minimize errors – July 18, 2019
- SAWPA Agency recap of Tri State information from topics presented – August 15, 2019
- SAWPA Agency Guidance for “Lessons Learned” for Semi-Annual Reporting – February 20, 2020

SOLIDS MANAGEMENT PROGRAM

SOLIDS MANAGEMENT PROGRAM

8.1 INTRODUCTION

This section provides an overview of OCSD's Biosolids Program, focusing on the biosolids quality with respect to metals. Biosolids are nutrient-rich, treated organic matter recovered through the treatment of wastewater. These solids are considered a resource because of their nutrient and energy values, and they are recyclable in part because of their low metal content. The pretreatment program is a key element in ensuring the recyclability of OCSD's biosolids by minimizing the discharge of heavy metals and other undesirable constituents into the collection system and ultimately the treated solids, which are used to fertilize farms.

OCSD's annual biosolids compliance report was completed, submitted to regulators, and posted online in February. Visit OCSD.com/503 to access the most recent document that contains Biosolids Program information, regulations, quantities, policies, guiding principles, and how and where biosolids are recycled.

8.2 BIOSOLIDS QUALITY

Biosolids quality plays an important role in ensuring the continued recyclability of OCSD's biosolids. OCSD's pretreatment program has been extremely effective in reducing and maintaining levels of pollutants (e.g., OCSD's influent sewage meets drinking water standards for the biosolids monitoring metals). The ceiling concentrations and EQ (exceptional quality) concentrations promulgated by the EPA's biosolids regulations (40 CFR 503) are presented in the figures as a reference. For FY 2019/20, OCSD biosolids met the EQ limits for all the regulated parameters.

TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2011-2020
(Concentration in mg/kg, dry weight)
Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg	Min.	Max	Avg.
Arsenic		41						
	2010-11		7.2	9.7	8.4	8.6	12	10
	2011-12		2.3	11	7.4	6.6	66	22
	2012-13		0	7.8	4.7	2.0	10	7.0
	2013-14*		3.5	9.5	5.8	5.4	11	8.4
	2014-15		4.5	11	7.2	7.8	12	9.3
	2015-16*		6.3	12	8.3	6.2	12	9.2
	2016-17*		6.7	12	8.1	5.6	12	8.6
	2017-18*		7.2	16	9.9	7.9	16	11
	2018-19*		7.3	24	16	9.4	24	18
2019-20*		1.3	8.8	5.4	1.3	12	5.5	

TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2011-2020
(Concentration in mg/kg, dry weight)
 Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Cadmium		39						
	2010-11		1.2	3.8	2.6	1.4	5.0	2.5
	2011-12		0.8	6.0	3.8	1.1	4.4	3.6
	2012-13		2.6	7.8	4.7	1.9	4.4	3.1
	2013-14*		1.6	11	3.9	2.1	6.0	3.5
	2014-15		2.7	7.8	5.1	3.1	5.8	4.0
	2015-16*		1.3	4.7	2.5	2.0	4.5	3.0
	2016-17		2.6	3.1	2.3	2.0	3.8	3.0
	2017-18*		1.7	4.4	3.0	2.5	7.7	5.1
	2018-19*		1.2	3.0	1.6	2.7	8.4	4.2
2019-20		1.3	2.7	1.9	2.2	8.4	3.3	
Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Chromium		**						
	2010-11		41	58	47	50	66	59
	2011-12		42	74	52	40	70	56
	2012-13		42	56	49	42	59	49
	2013-14		39	52	45	40	53	46
	2014-15		30	51	40	34	70	46
	2015-16		31	89	46	28	60	46
	2016-17		30	89	49	29	67	46
	2017-18		27	38	34	38	54	44
	2018-19		29	58	39	32	53	45
2019-20		37	51	45	35	49	42	
Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Copper		1,500						
	2010-11		520	600	570	500	720	570
	2011-12		430	670	520	380	720	520
	2012-13		480	640	540	500	640	540
	2013-14		460	540	510	470	540	500
	2014-15		320	570	470	320	560	470
	2015-16		380	560	460	340	570	480
	2016-17		400	560	460	340	570	490
	2017-18		320	500	420	380	590	460
	2018-19		355	600	470	335	665	510
2019-20		440	600	530	410	590	490	

**TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2011-2020
(Concentration in mg/kg, dry weight)
Orange County Sanitation District, Resource Protection Division**

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Lead		300						
	2010-11		21	24	23	9.0	30	20
	2011-12		ND	25	9.0	ND	32	13
	2012-13		7.5	19	15	7.5	17	14
	2013-14*		13	18	14	13	17	14
	2014-15*		8.7	15	13	9.0	17	13
	2015-16*		8.3	20	12	8.0	17	13
	2016-17*		7.9	20	11	7.5	17	12
	2017-18*		8.9	19	12	10	16	13
	2018-19		9.9	15	12	10	15	13
2019-20		9.8	14	12	14	24	17	
Mercury		17						
	2010-11		0.8	2.2	1.3	0.8	2.3	1.2
	2011-12		0.8	1.4	1.2	0.8	2.6	1.3
	2012-13		0.7	4.1	1.5	0.8	3.8	1.4
	2013-14		0.8	1.2	1.0	0.7	2.8	1.4
	2014-15		1.0	1.5	1.1	1.0	1.5	1.0
	2015-16		0.6	1.7	0.9	0.6	1.2	1.0
	2016-17		0.5	1.7	0.9	0.7	1.2	0.9
	2017-18		0.7	1.1	0.9	0.3	1.1	0.8
	2018-19		0.6	1.1	0.9	0.6	1.0	0.8
2019-20		0.5	1.2	0.8	0.5	0.8	0.6	
Molybdenum		**						
	2009-10		6.0	16	13	6.0	14	10
	2010-11		12	19	15	4.8	18	14
	2011-12		6.5	18	13	12	20	17
	2012-13		9.8	20	14	12	20	15
	2013-14		12	18	15	14	18	15
	2014-15		9.4	18	15	12	20	16
	2015-16*		11	18	15	11	23	16
	2016-17		12	18	15	11	23	16
	2017-18*		10	16	14	13	18	15
2018-19		13	20	16	15	22	18	
2019-20		14	22	18	14	24	18	

TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2011-2020
(Concentration in mg/kg, dry weight)
Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Nickel		420						
	2010-11		28	46	37	14	38	32
	2011-12		15	48	35	20	39	31
	2012-13		34	48	40	23	41	30
	2013-14		36	55	43	28	56	37
	2014-15		26	47	37	26	41	34
	2015-16*		29	45	38	20	41	33
	2016-17		25	45	36	21	41	32
	2017-18		28	37	32	31	39	34
	2018-19		23	44	33	29	44	37
2019-20		27	41	35	26	46	35	
Selenium		100						
	2010-11		2.8	26	11	3.7	26	9.8
	2011-12		ND	26	9.0	ND	19	9.0
	2012-13		0	20	9.0	0	20	8.0
	2013-14*		3.5	13	7.9	4.2	13	8.3
	2014-15*		4.1	13	7.1	4.5	15	7.3
	2015-16*		4.4	11	8.1	3.7	10	7.6
	2016-17*		4.1	10	8.4	4.8	10	8.0
	2017-18*		3.0	7.8	4.9	2.7	8.0	4.9
	2018-19*		2.5	48	6.6	2.3	2.9	2.7
2019-20*		0.9	12	3.7	0.9	12	3.5	
Silver		**						
	2010-11		10	17	13	5.2	12	9.6
	2011-12		7.0	14	10	4.0	12	8.5
	2012-13		6.2	14	8.6	6.4	13	8.6
	2013-14*		2.9	7.6	5.3	3.6	9.1	6.3
	2014-15*		3.3	7.8	5.8	3.4	8.6	6.5
	2015-16*		2.4	7.7	5.6	2.5	7.9	5.6
	2016-17*		2.7	5.6	4.4	2.5	6.8	4.9
	2017-18*		3.2	5.1	3.9	3.7	5.0	4.2
	2018-19*		2.9	5.1	4.0	3.5	5.8	4.3
2019-20*		3.0	5.0	4.0	2.7	5.8	4.0	

TABLE 8.1 Trends in Trace Metal Content of Biosolids, Fiscal Years 2011-2020
(Concentration in mg/kg, dry weight)
 Orange County Sanitation District, Resource Protection Division

Metal	Fiscal Year	Exceptional Quality Limits	Plant 1			Plant 2		
			Min.	Max.	Avg.	Min.	Max.	Avg.
Zinc		2,800						
	2010-11		630	740	700	700	830	740
	2011-12		560	880	710	560	910	750
	2012-13		640	860	720	680	880	770
	2013-14		590	730	670	620	750	700
	2014-15		420	720	620	470	740	670
	2015-16		500	770	620	520	890	730
	2016-17		550	770	610	520	890	740
	2017-18		470	680	600	590	910	720
	2018-19		520	810	600	500	790	720
	2019-20		640	810	760	590	890	720

ND Non-detect

* Calculations included data below the reporting limit, but above the method detection limit, and were therefore flagged as “detected not quantified” or the method detection limit was substituted for non-detect values.

** EPA’s extensive health risk analysis determined that no limits were needed for these metals (EPA 40CFR 503).

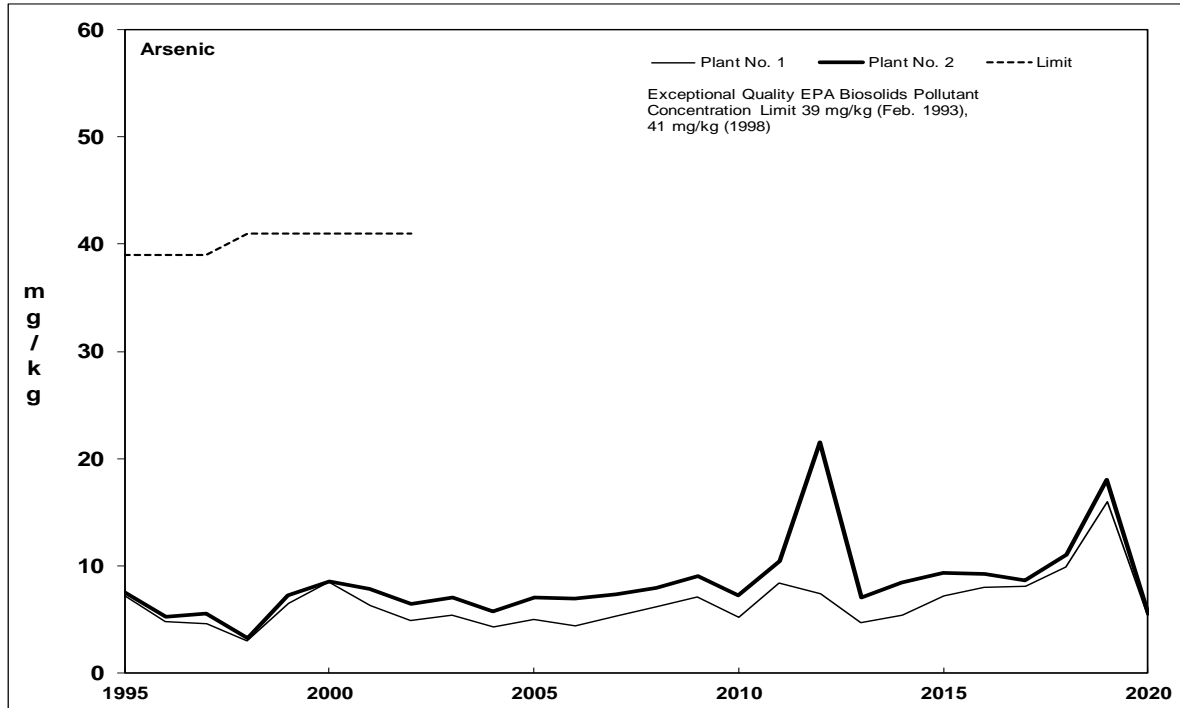


Figure 8-1 Trends in Concentrations of Arsenic in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

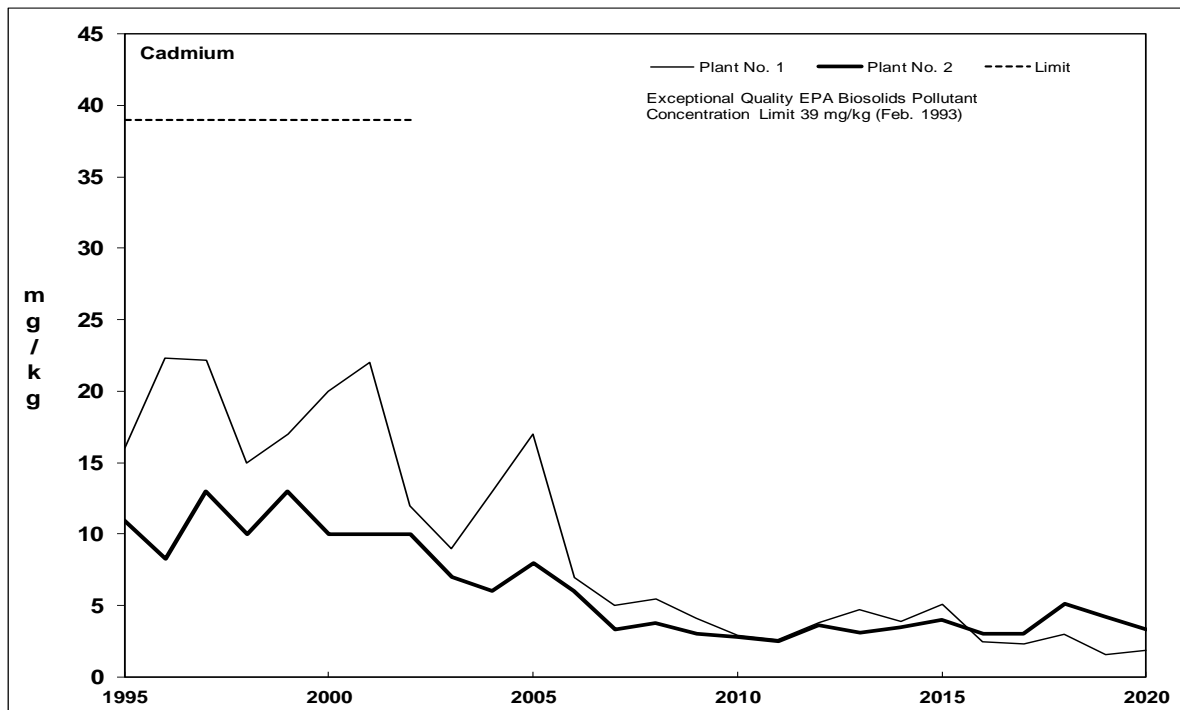


Figure 8-2 Trends in Concentrations of Cadmium in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

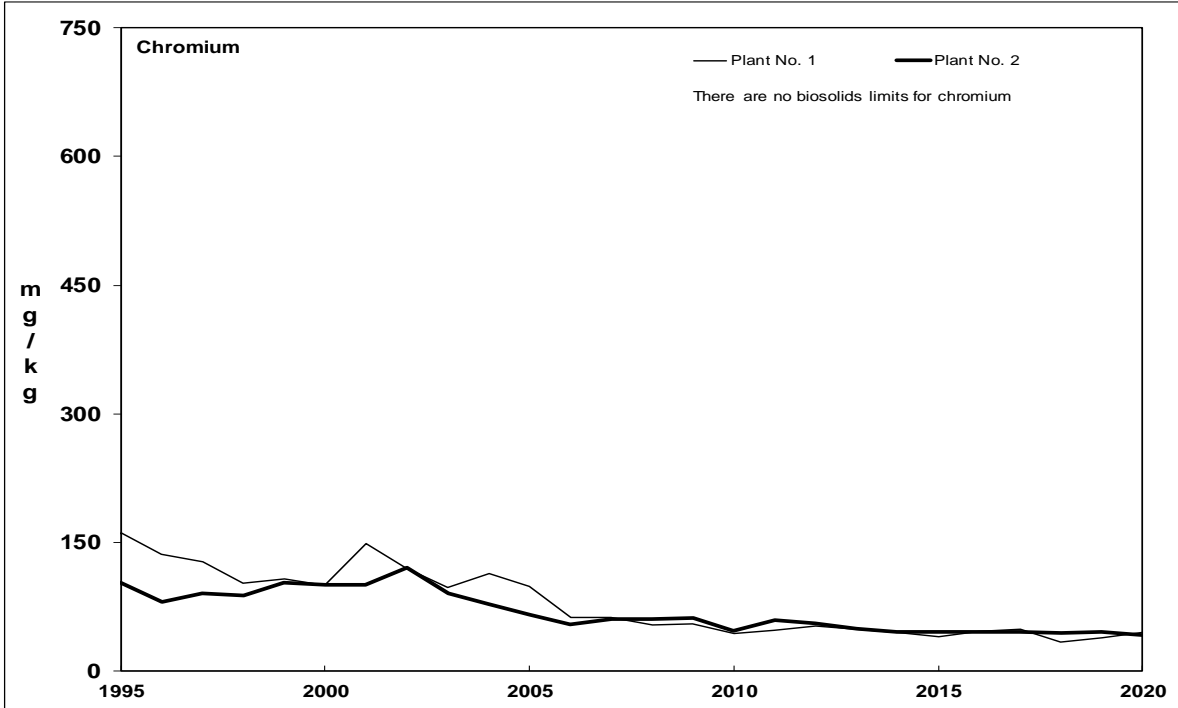


Figure 8-3 Trends in Concentrations of Chromium in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

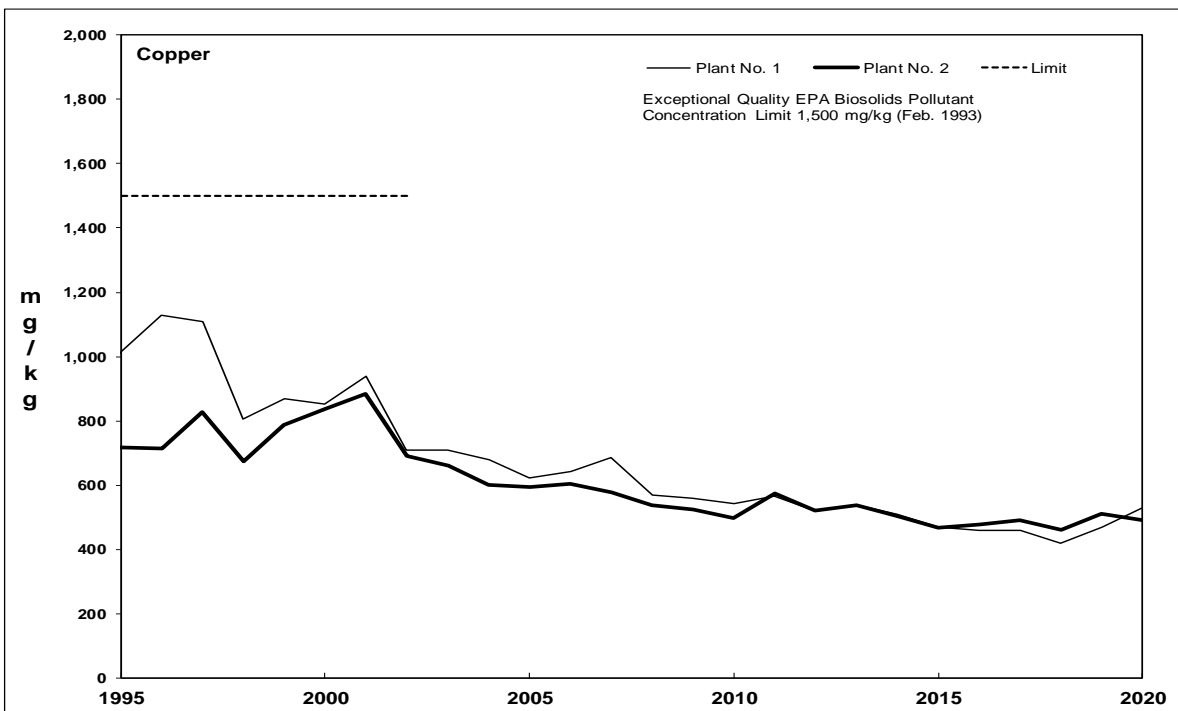


Figure 8-4 Trends in Concentrations of Copper in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

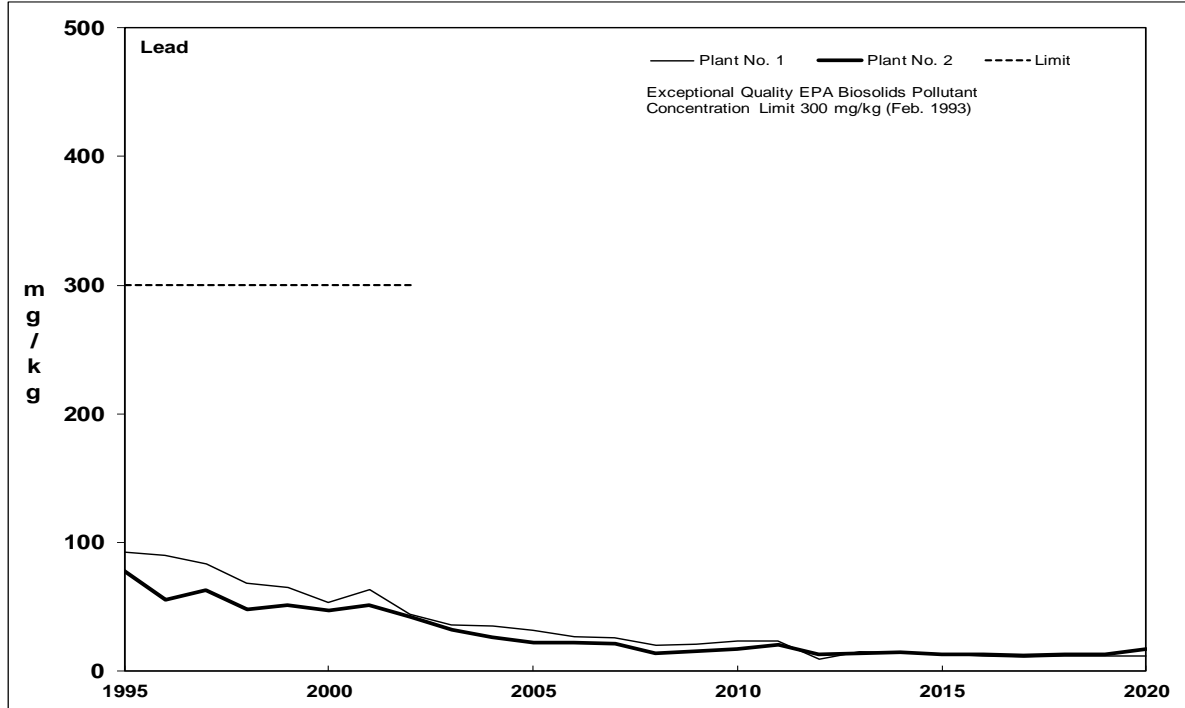


Figure 8-5 Trends in Concentrations of Lead in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

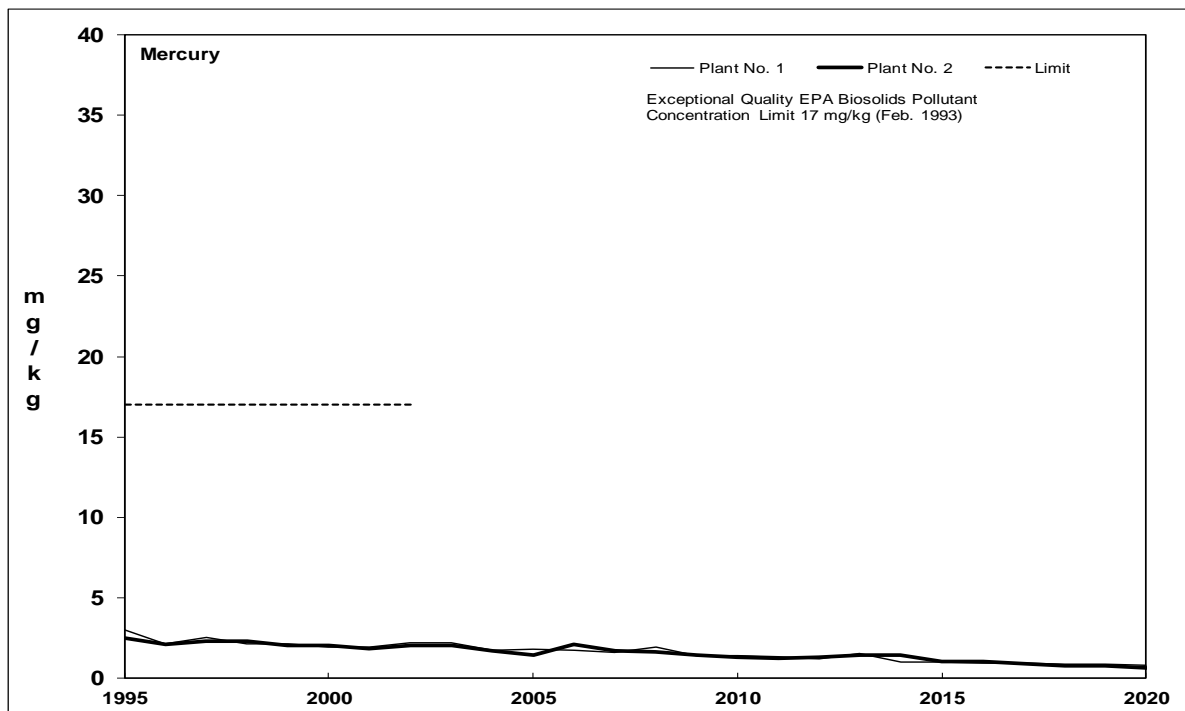


Figure 8-6 Trends in Concentrations of Mercury in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

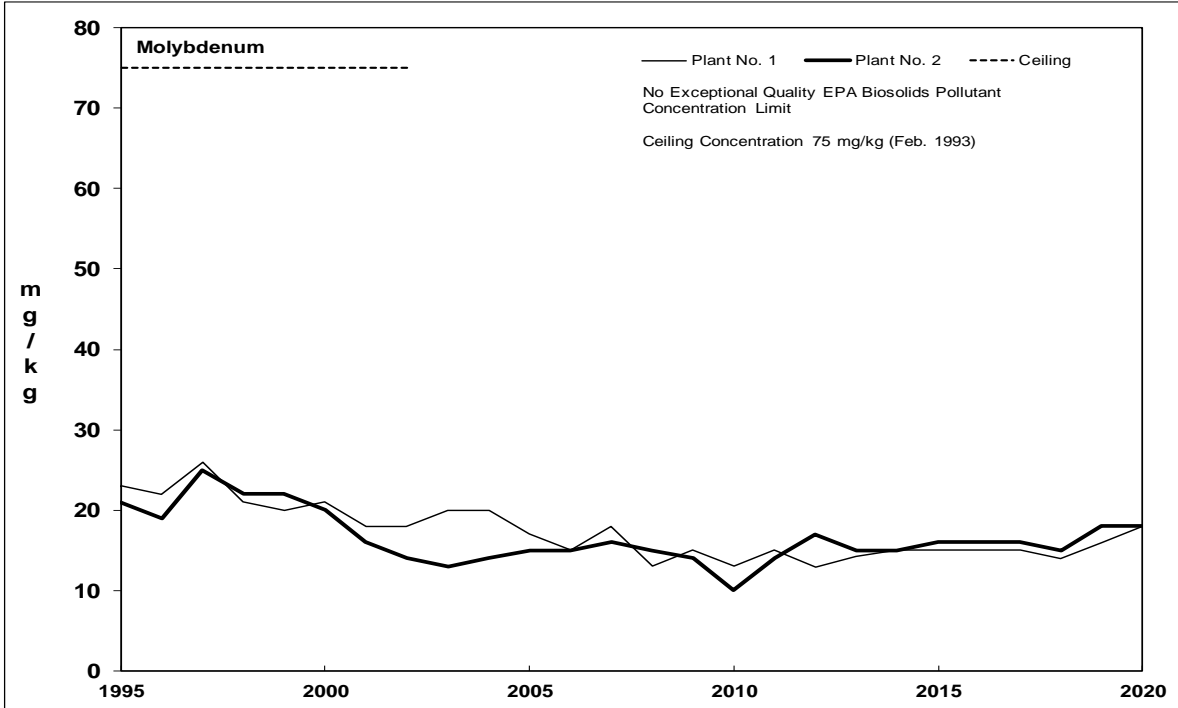


Figure 8-7 Trends in Concentrations of Molybdenum in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

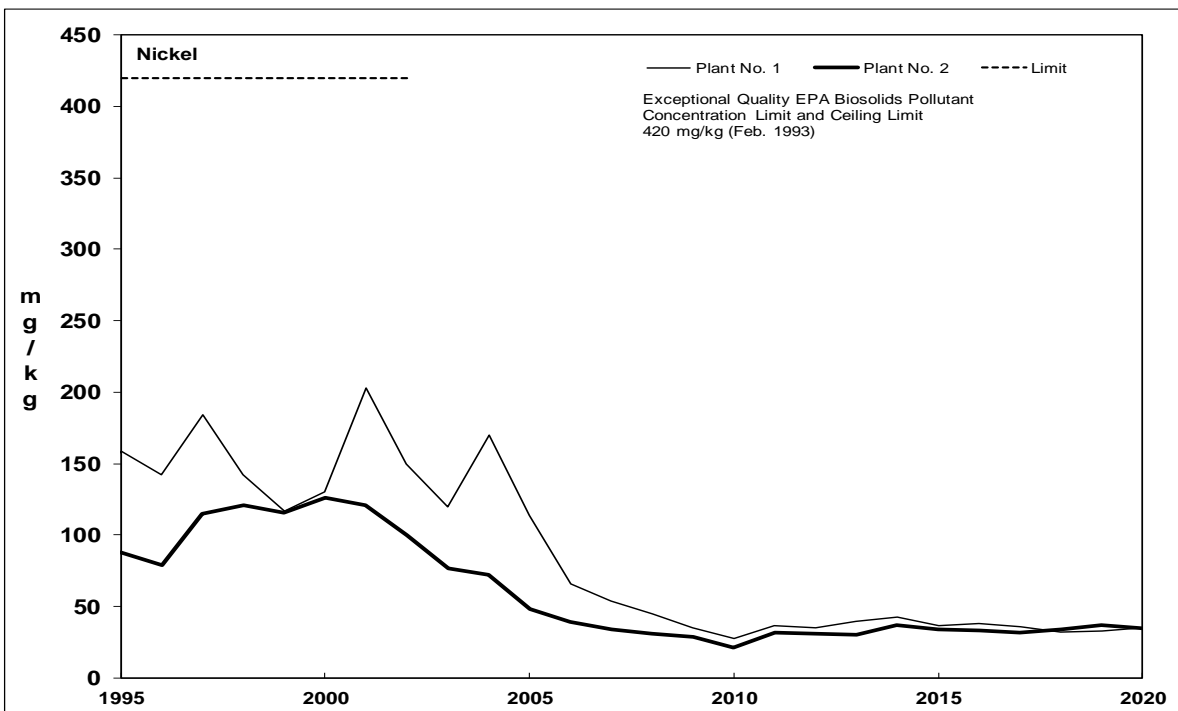


Figure 8-8 Trends in Concentrations of Nickel in Biosolids, Fiscal Years, 1995-2020
Orange County Sanitation District, Resource Protection Division

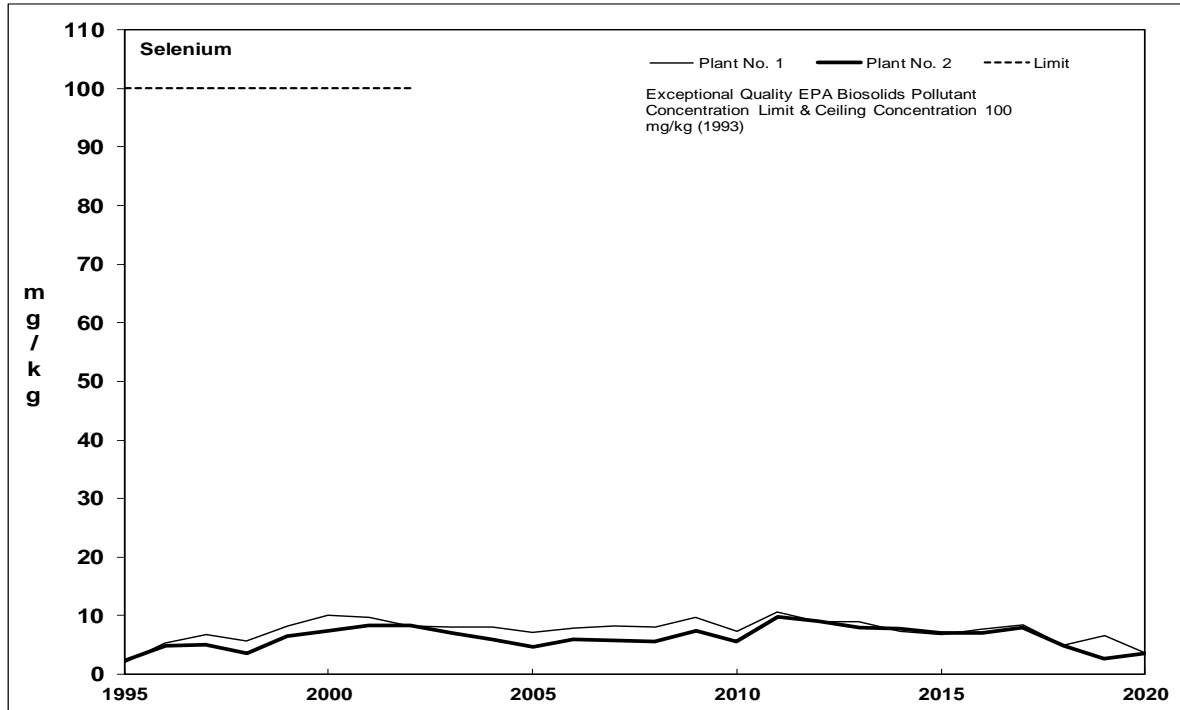


Figure 8-9 Trends in Concentrations of Selenium in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

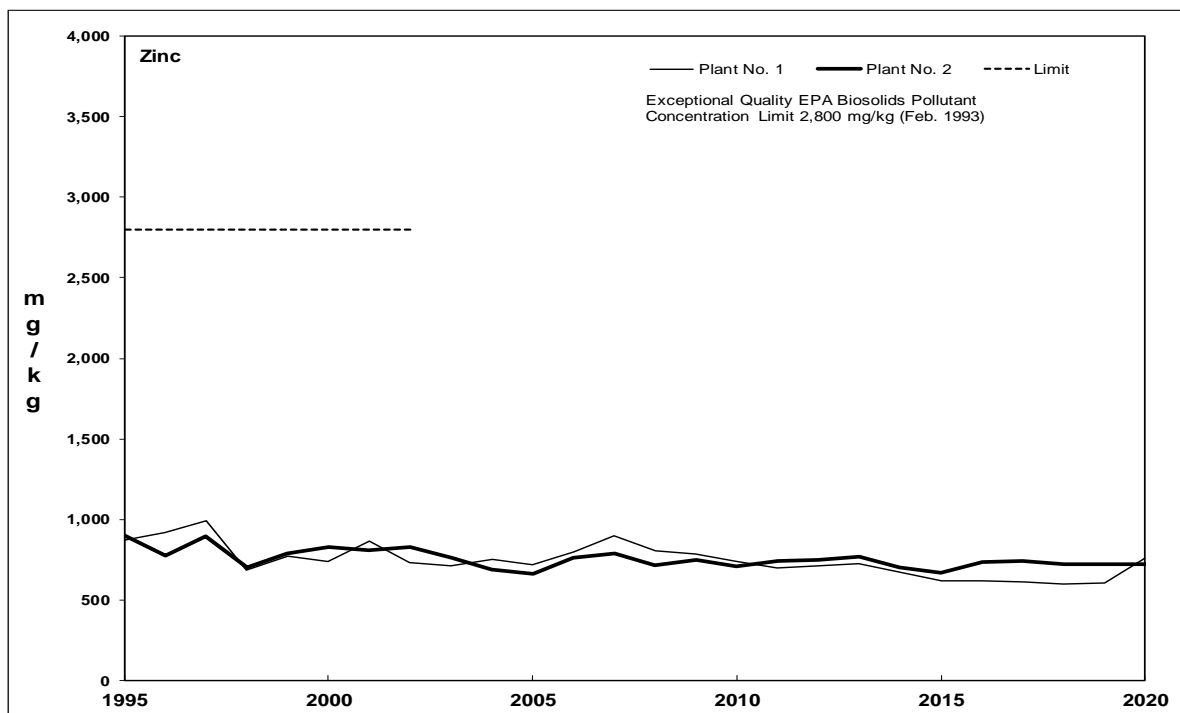


Figure 8-10 Trends in Concentrations of Zinc in Biosolids, Fiscal Years 1995-2020
Orange County Sanitation District, Resource Protection Division

NON-INDUSTRIAL SOURCE CONTROL (NISC) PROGRAM AND PUBLIC EDUCATION PROGRAMS

Introduction

Fats, Oils, and Grease (FOG) Control Programs

Radiator Shops

Dry Cleaners

Urban Runoff

Dental Amalgam

Public Education

NON-INDUSTRIAL SOURCE CONTROL AND PUBLIC EDUCATION PROGRAMS

9.1 INTRODUCTION

In response to regulatory requirements in support of water reuse through the Orange County Sanitation District's (OCSD) partnership with the Orange County Water District (OCWD) for the Groundwater Replenishment System (GWRS), as well as concerns regarding pollutants which pose potential impacts to OCSD's collection system, treatment works, personnel, biosolids, National Pollutant Discharge Elimination System (NPDES) discharge, or which aid diversion of Urban Runoff to OCSD's treatment facilities, OCSD's Pretreatment Program was expanded to include non-industrial sources. The non-industrial programs are listed in TABLE 9.1.

TABLE 9.1 Non-Industrial Programs, FY 2019/20	
Orange County Sanitation District, Resource Protection Division	
Programs	
Fats, Oils, and Grease Control	
Radiator Shops	
Dry Cleaners	
Urban Runoff	
Dental Amalgam	

9.2 FATS, OILS, AND GREASE (FOG) CONTROL PROGRAMS

9.2.1 Fats, Oils, and Grease Control

Background

A frequent cause of Sanitary Sewer Overflows (SSOs) is grease accumulation in the small- to medium-sized sewer lines typically owned and operated by cities and local sewerage agencies. In April 2002, the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) issued Order No. R8-2002-0014, *General Waste Discharge Requirements (WDR)*, which required Orange County cities and sewerage agencies, known as WDR Co-Permittees, to monitor and control SSOs. Specifically, the order required WDR Co-Permittees to develop a Sewer System Management Plan (SSMP), one element of which was a Fats, Oils, and Grease Control Program (FOG program). On November 17, 2004, OCSD passed FOG Ordinance No. OCSD-25 establishing the legal authority to prohibit food service establishments (FSEs) from discharging FOG to the sewer system. OCSD implemented its FOG program for FSEs in its direct service area starting January 1, 2005.

In May 2006, the State Water Resources Control Board (SWRCB) adopted *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, Water Quality Order No. 2006-0003 (Statewide WDR), which required a similar effort statewide. In December 2006, the RWQCB rescinded its WDR in lieu of the Statewide WDR. OCSD submitted its SSMP to the SWRCB in May 2009. OCSD completed its most recent audit of the SSMP in May 2019. More specifics on the county-wide FOG program can be found in Chapter VIII of the SSMP. The following sections detail OCSD's FOG control efforts in FY 2019/20.

Program Administration

The Commercial FOG program is administered through a combination of permitting, inspection, compliance tracking, report monitoring, and enforcement. The main elements of the FOG program include:

- 1) Ordinance No. OCSD-25 - Fats, Oils, and Grease Ordinance for Food Service Establishments;
- 2) FOG Wastewater Discharge Permits to define and communicate permittees' responsibilities regarding FOG discharges;
- 3) Required Best Management Practices (BMPs) to minimize FOG-bearing wastewater discharges;
- 4) Installation and/or required maintenance of grease interceptors (G.I.s), when applicable;
- 5) Semi-annual monitoring of BMP implementation and G.I. maintenance;
- 6) Screening and evaluation of all inspection and monitoring reports to identify violations and/or deficiencies;
- 7) Inspection of FSE facilities to verify compliance; and
- 8) Enforcement Response Plan to respond to violations in a consistent and timely manner.

Permitting

During the initial phases of the program, OCSD conducted an examination of the FOG trouble spots, as well as an inspection of the FSEs in the service area to collect operational information. A scheme was developed to categorize the distinct types of facilities based upon their potential to discharge FOG, the need to enforce the regulatory requirements of the FOG Ordinance, and the potential of each FSE to impact known or potential trouble spots. Using the combination of inspection data and trouble spot information, FSEs were categorized into the following six groups:

Category 1: FSEs with a G.I. installed.

Category 2: FSEs without a G.I. installed, that are a significant contributor to a FOG trouble spot and probably need to install a G.I. due to their FOG impact to the sewer.

Category 3: FSEs without a G.I. installed, that are considered a less significant contributor to a FOG trouble spot but may still need to install a G.I. in the future due to their proximity.

Category 4: FSEs without a G.I. installed, that are not considered a significant contributor of FOG, are not upstream of a trouble spot, and probably will not need a G.I. installed.

Category 5: FSEs found to be an insignificant source of FOG that will not be required to have a permit.

Category 6: Commercial property owners that maintain a G.I. common to multiple FSEs.

After creating the six categories and examining the FSEs' operations and discharge configurations, different FOG Wastewater Discharge Permit (permit) alternatives were needed to cover the various conditions encountered. The six categories eventually produced three permit variations. The first permit, Type 1, covers FSEs that have FOG pretreatment, typically considered to be a below-ground G.I. The second variety, Type 2, is issued to FSEs without pretreatment, categories 2, 3, and 4. Type 2 permits include a Conditional Waiver from the FOG pretreatment requirement, as mandated for all FSEs by OCSD's FOG Ordinance. The third permit variation, Type 6, was developed for the strip mall or food court owners who have several FSEs plumbed to a common G.I. Type 6 permits only require G.I. maintenance and do not include any BMP requirements. The individual FSEs connected to the common interceptor at a Type 6 location are still issued a Type 2 permit that requires BMP implementation.

Permits are currently issued for two-year terms. Prior to permit renewal, the FSE is required to complete and submit an updated permit application and pay the permit application fee. Ownership changes also trigger a permit re-issuance as the permit is non-transferable. During FY 2019/20 OCSD managed thirty-nine (39) FOG permittees with one permit listed as void or expired during the fiscal year.

Self-Monitoring Report

As a condition of the FOG permits, FSEs are required to implement the BMPs, maintain their G.I.s, if applicable, keep records/logs of employee training and yellow grease disposal, and submit periodic self-monitoring reports to inform OCSD of their BMP efforts and G.I. maintenance activities. Submitted reports are evaluated and used to determine compliance.

Inspection

Regular FSE inspections are an integral and essential part of the FOG program because they serve as a regulatory reminder to implement the required BMPs, and for FSEs with G.I.s to maintain their FOG pretreatment devices. Every inspection presents an opportunity to provide educational outreach to the FSE community by further reinforcing the importance of the kitchen BMPs and strengthening the cooperative effort ultimately needed to effectively control FOG discharges to the sewer. The FOG program includes two distinct types of inspections, 1) a kitchen BMP inspection conducted by the Orange County Health Care Agency (OCHCA), and 2) a compliance inspection conducted by OCSD staff. The verification that G.I.s are periodically pumped out and in compliance with the 25% rule is accomplished through the *Semi-Annual G.I. Wastehauling Report* submittals.

Compliance

Violation of a permit requirement or a provision of the FOG Ordinance, or the failure to submit a required report can lead to issuance of a Corrective Action Notice (CAN). The CAN is followed by a Notice of Violation which includes the assessment of noncompliance fees if the deficiency is not corrected in a timely manner.

FOG Program Effectiveness

Monitoring the effectiveness of the FOG program enables OCSD to refine its program implementation as necessary to comply with its requirement to eliminate preventable SSOs. OCSD uses a geographic information system (GIS) to analyze the relationship between trouble spots, FSEs, and SSOs. Areas of concern are evaluated and prioritized based on the impact of FSE proximity, tributary residential density, and FOG accumulation in the sewer line, as determined by both CCTV and field crew observations. OCSD coordinates with the Collection Facilities staff to maintain an effective Commercial FOG program by keeping trouble spots under surveillance and following up on grease accumulations before they reach a critical stage. TABLE 9.2 summarizes the SSO data from the past two reporting periods. This data demonstrates the effectiveness of the FOG program at reducing the frequency of SSO events.

TABLE 9.2 FOG Program Effectiveness, FY 2019/20		
Orange County Sanitation District, Resource Protection Division		
Spills	FY 2018/19	FY 2019/20
OCSD system spills attributable to FSE FOG	0	0
OCSD system spills attributable to residential FOG	0	0
Private lateral spills attributable to FOG	0	0
Total FOG-related Spills	0	0

9.3 RADIATOR SHOPS

The Radiator Shop Certification Program aims to prevent heavy metal-bearing liquids, oil and grease, spent antifreeze/coolant, as well as any other hazardous wastes from being discharged to the sewer. The program requires shops that rebuild and repair radiators to biennially certify the following:

- No industrial wastewater or spent antifreeze/coolant is discharged to the sewers,
- Floor drains are permanently sealed and secured from spills or accidental discharges,
- Water recycling systems are close-looped with no connection to the sewer, and
- Wastehauling records are maintained on-site and available for review upon request.

There were fifteen (15) radiator shops participating in the Radiator Certification Program for FY 2019/20.

9.4 DRY CLEANERS

Initially implemented to prevent soil and groundwater contamination by perchloroethylene (PERC) exfiltration from sewers, the Dry Cleaner Certification Program was revitalized as an important outreach tool to help protect the GWRS. The program tracks the solvent usage and facility ownership within the dry cleaner community to prevent the discharge of solvent-containing wastes from dry cleaning operations. Rather than just examining the spent solvent disposal, additional emphasis is placed on the contaminated water from the solvent/water separator, which is typically managed either by wastehauling off-site or by performing on-site evaporation. The program requires dry cleaning establishments to annually certify the following:

- 1) No waste solvent is discharged to the sewer,
- 2) Dry cleaning machines and auxiliary equipment are not connected to the sewer,
- 3) Floor drains are secured from spills and accidental discharges,
- 4) Solvent waste is wastehauled off-site for disposal in accordance with all applicable laws, and
- 5) Solvent contaminated separator water is wastehauled and/or evaporated.

Certifications are mailed to every dry-cleaning facility at the beginning of the annual cycle. After the completed certifications are returned, audit inspections are conducted to verify the information. Dry cleaning facilities must maintain their wastehauling records on site and make them available for review during inspection. Although all active facilities and garment collection facilities with equipment on-site receive a certification form, only PERC users are routinely inspected by OCSD. During the FY 2019/20 cycle, OCSD conducted twenty-seven (27) PERC facility inspections. At the end of FY 2019/20, there were a total of two hundred and fifty one (251) dry cleaning facilities in the OCSD Dry Cleaner Certification Program. As of January 1, 2021, all PERC dry cleaning systems within South Coast Air Quality Management District must be removed from service by physically removing the machine or by disconnecting utilities (electric, steam lines) to the machine and draining all PERC from the machine tanks. Therefore, OCSD will evaluate its Dry Cleaner Certification Program after January 1, 2021 to determine if any adjustments are required.

9.5 URBAN RUNOFF

OCSD accepts the diversion of urban runoff to the sewer for treatment to remediate various public health and environmental issues which are impractical to control through traditional stormwater BMPs. Urban runoff is water that is generated by daily activities such as lawn irrigation, hosing down sidewalks, and car washing. As the water flows across the urban landscapes and through the storm drain system, the water becomes contaminated with nutrients, pesticides, heavy metals, toxic chemicals, bacteria, and viruses. Once the contaminated water reaches our creeks, rivers, and shoreline, the pollutants carry the potential to harm wildlife and native vegetation, spoil recreational opportunities, and even cause human illness through contact with recreational waters.

Investigation into the bacterial contamination along the Huntington Beach shoreline in 1999 suggested that dry weather urban runoff flowing into the ocean from the surrounding watersheds may have caused or contributed to the resulting beach closures. Recognizing that County beaches were being affected by pollution carried by urban runoff, the OCSD Board of Directors adopted a series of resolutions agreeing to accept dry weather urban runoff into the sewer system. Resolution No. 01-07, adopted March 28, 2001, declared that OCSD will initially waive fees and charges associated with authorized discharges of dry weather urban runoff to the sewer system until the total volume of all runoff discharges exceeds 4 million gallons per day (MGD) calculated on a monthly average. In June 2002, Assembly Bill 1892 amended OCSD's charter to formally allow the diversion and management of dry weather urban runoff flows. For the first 12 years of the Urban Runoff Program, the average monthly flow averages remained less than the 4 MGD threshold, thus avoiding user fee costs being assessed to the diversion permittees. In 2012, OCSD received several diversion proposals to deal with bacteria, nitrogen, and selenium loading to the Upper Newport Bay. The discharge from the additional proposed diversions combined with the existing diversion flows would eventually exceed the fee threshold. On June 12, 2013, the Board of Directors adopted Urban Runoff Resolution No. 13-09 which expanded the waiver of fees or charges on the treatment of dry weather urban runoff from 4 MGD to 10 MGD. This latest policy opened the door to additional flows to help remediate other environmental problems, including the excessive loading in the Upper Newport Bay Watershed. The latest resolution's adoption once again demonstrated OCSD's commitment to protecting public health and the environment.

Under Resolution No. 13-09, the cities or agencies are authorized to divert a maximum of 10 MGD for all permitted urban runoff diversions combined. OCSD continues to work closely with Orange County Watersheds, the lead agency that coordinates the cities' efforts in implementing the Water Quality Management Plan required by the County of Orange's NPDES permit. Before a diversion is implemented, the proposed project is presented to OC Watersheds' Technical Advisory Committee. The committee evaluates the proposal, and, if approved, puts the diversion on their Dry Weather Diversion Priority List. This approval step ensures that the program's limited capacity is effectively utilized to improve coastal water quality.

Once OC Watersheds accepts a new diversion proposal, OCSD will initiate an *Agreement for Dry Weather Urban Runoff Discharge* with the responsible entity. The agreement cites the reasons that the discharge is being accepted and details the responsibilities of the entity, or agency, that will be maintaining and operating the diversion. The agreement stipulates that the quality and quantity of the Dry Weather Urban Runoff from the Drainage Area shall meet all terms, conditions, and discharge limits contained in OCSD's Wastewater Discharge Regulations.

In addition to the agreement, the Resource Protection Division administers the Urban Runoff Program through the issuance of a discharge permit for each of the diversion structures. The permit establishes discharge limits, constituent monitoring, and flow metering requirements, as well as provides guidelines that specifically prohibit storm runoff, thus authorizing discharge only during periods of dry weather.

9.5.1 Dry Weather Diversion Systems and Urban Runoff Flow

Currently there are twenty-one (21) active urban runoff diversion structures, three (3) owned and operated by the County of Orange, eleven (11) owned and operated by the City of Huntington Beach, three (3) owned and operated by the City of Newport Beach, three (3) owned and operated by the Irvine Ranch Water District (IRWD), and one (1) owned and operated by PH Finance, who is the present owner of the Pelican Hill Resort.

TABLE 9.3 shows the range of monthly diversion discharges and the total discharge over the past six years.

TABLE 9.3 Dry Weather Urban Runoff Discharges, FY 2014/15 – FY 2019/20 Orange County Sanitation District, Resource Protection Division		
July through June	Gallons Discharged (MG)	Monthly Average Flow Range (MGD)
2014 – 2015	412	0.71 to 1.49
2015 – 2016	262	0.32 to 1.21
2016 – 2017	369	0.18 to 1.58
2017 – 2018	461	0.29 to 1.90
2018 – 2019	337	0.28 to 1.56
2019 – 2020	480	0.44 to 2.06

The diversions cumulatively discharged 480 million gallons (MG) of urban runoff, with a normalized discharge of 1.52 MGD, and a monthly flow range between 0.44 and 2.06 MGD. Despite the numerous diversion deactivations during the year 2019-20, the flow volume trended upward by 143 MG from the previous year. The increase in flow may have been due to all the Huntington Beach diversions being fully operational this year.

Flows for the eleven City of Huntington Beach diversions increased 94 MG from FY 2018/19 totals. Total cumulative flow discharge for the three active Orange County Public Works (OCPW) diversions, Huntington Beach, Greenville Channel, and Santa Ana River, remained the same as the previous year, despite the Greenville Channel diversion being under repair for the entire year. The flow from the three IRWD diversions, Muddy Canyon, Los Trancos Canyon, and Peters Canyon, increased 46 MG overall. The flow from the City of Newport Beach diversions increased 10 MG over the previous year, with the Big Canyon, and the Mid Big Canyon diversions contributing most of the flow at approximately 15 and 10 MG respectively, to the Newport Beach 25 MG flow total. The Pelican Point Diversion flow continues to remain consistent with previous report periods.

Only three of the twenty-one diversions flow to Plant 1: the Santa Ana River Diversion, the Peters Canyon Diversion, and a portion of the Scenario Diversion. Due to the multiple paths that the Scenario flows can take to reach OCSD Plant 1 or Plant 2 simultaneously, it is not possible to accurately determine how much water from this diversion is available for the GWRS. The remaining 18 diversions that are located closer to the coast, flow to Plant 2 and are not currently available for reclamation. The Santa Ana River and Peters Canyon Diversions discharged a total of 158 MG to Plant 1 in FY 2019/20. These two diversions account for 32.9% of the total urban runoff diverted to the OCSD's collection system in FY 2019/20 and contributed an average of 13 MG per month to GWRS.

OCSD expects to receive between 400 MG and 950 MG this coming year if current discharge trends continue. During the past 21 years, OCSD treated over 10.2 billion gallons of dry weather urban runoff that would have otherwise gone into the ocean without treatment. Since OCSD's Urban Runoff Program began, total treatment cost has reached approximately \$11.5 million, based upon applicable industrial user fee rates over this period. Because the monthly average flow range remained under 10 MGD, OCSD currently waives all fees and charges associated with authorized discharges of Dry Weather Urban Runoff.

TABLE 9.4 details the current diversion locations, trunkline/tributary destinations, and the average discharge volume of each individual location for this reporting period.

**TABLE 9.4 Average Urban Runoff Discharge Volume by Diversion, FY 2019/20
Orange County Sanitation District, Resource Protection Division**

Urban Runoff Diversions		Location	Trunkline	Tributary	Average Discharge* (MGD) [†]
No.	Description				
<i>Owned and Managed by City of Huntington Beach</i>					
1	Atlanta Diversion	8151 Atlanta Avenue	Coast (via Atlanta Interceptor)	Plant 2	0.220 ^A
2	Banning Diversion	2201 Malibu Lane	Miller-Holder	Plant 2	0.077 ^B
3	Newland Diversion	8612 Hamilton Street	Coast (via Atlanta Interceptor)	Plant 2	0.158 ^C
4	Indianapolis Diversion	9221 Indianapolis	Miller-Holder	Plant 2	0.039
5	Hamilton Diversion	10101 Hamilton Avenue	Miller-Holder	Plant 2	0.071 ^D
6	Meredith Diversion	20192 Mainland Lane	Miller-Holder	Plant 2	0.015
7	Flounder Diversion	9731 Flounder Drive	Bushard	Plant 2	0.014
8	Yorktown Diversion	9211 Yorktown Avenue	Miller-Holder	Plant 2	0.010
9	Adams Diversion	19661 Chesapeake Lane	Miller-Holder	Plant 2	0.041 ^E
10	Scenario Diversion	4742 Scenario Drive	Knott	Plant 1 & 2 ⁻	0.024
11	1 st Street CDS	103 Pacific Coast Hwy	Coast	Plant 2	0.008 ^F
<i>Owned and Managed by County of Orange</i>					
12	Greenville-Banning Channel	2501 Placentia Avenue	Interplant	Plant 2	0.000 ^G
13	Huntington Beach Channel	8092 Adams Avenue	Coast (via Delaware)	Plant 2	0.105
14	Santa Ana River	10844 Ellis Avenue	Sunflower	Plant 1	0.056 ^H
<i>Owned and Managed by Irvine Ranch Water District</i>					
15	Los Trancos Diversion	Pacific Coast Highway (Crystal Cove State Park)	South Coast	Plant 2	0.118
16	Muddy Canyon Diversion	Pacific Coast Highway (El Moro State Park)	South Coast	Plant 2	0.022
17	Peters Canyon Diversion	3001 Main Street	Main Street	Plant 1	0.395

TABLE 9.4 Average Urban Runoff Discharge Volume by Diversion, FY 2019/20 Orange County Sanitation District, Resource Protection Division					
Urban Runoff Diversions		Location	Trunkline	Tributary	Average Discharge* (MGD)[†]
<i>Owned and Managed by City of Newport Beach</i>					
18	Newport Dunes Diversion (Gravity Flow)	1131 Back Bay Drive	South Coast (via Back Bay)	Plant 2	0.003 [†]
19	Big Canyon	15 Rue Verte Lane	South Coast (via Back Bay)	Plant 2	0.098 [‡]
20	Mid Big Canyon	1851 Jamboree Road	South Coast (via Back Bay)	Plant 2	0.041 [‡]
<i>Owned and Managed by PH Finance, LLC</i>					
21	Pelican Point Diversion	36 Pelican Point Drive	South Coast	Plant 2	0.005
Sum of the Average Daily Discharges (FY 2019/20)					1.518 / MGD[†]
<p>* Individual daily averages calculated using the formula - cumulative flow total for the year / number of discharge days ~ Scenario flows to Plant 1 and Plant 2 simultaneously due to Bushard-Ellis junction box [†] Million Gallons per Day</p> <p>A. Atlanta: System off-line Feb through Mar (ten-month average) B. Banning: System off-line Jul through Dec (six-month average) C. Newland: System off-line Jan (eleven-month average) D. Hamilton: System off-line Jul through Aug, Nov (nine-month average) E. Adams: System off-line Jul through Aug (ten-month average) F. 1st Street CDS: System off-line Mar (eleven-month average) G. Greenville: System off-line for the entire year H. Santa Ana: System off-line Dec, Jan, Mar, Apr (eight-month average) I. Newport Dunes: System off-line Nov through May (five-month average) J. Big Canyon: System off-line Dec through Jun (five-month average) K. Mid Big Canyon: System off-line Mar through Jun (eight-month average)</p>					

TABLE 9.5 summarizes several significant Urban Runoff Program statistics.

TABLE 9.5 Urban Runoff Program, FY 2019/20 Orange County Sanitation District, Resource Protection Division	
Item	Count
New permits generated	0
Permitted diversions	21
Total average daily discharge	1.52 MGD
Monthly average daily discharge range	0.44 to 2.06 MGD
Proposed diversions	2
Estimated combined discharge for proposed/pending diversions	3.1 MGD
Maximum combined urban runoff discharge allowance	10 MGD*
* Resolution No. 13-09 accommodates 10 MGD of urban runoff without cost to permittees.	

9.5.2 Proposed Urban Runoff Diversion Systems

The City of Newport Beach's Arches Diversion project consists of two diversions near the intersection of Newport Boulevard and Pacific Coast Highway. The project has already been vetted with OC Watershed's Technical Advisory Committee and is in the final design stage. For the past year, OCSD's Engineering Planning Division has been working with the City of Newport Beach on the design specifications, and OCSD's Resource Protection Division has been working on the draft agreement.

Despite long delays due to right-of-way issues and COVID-19 closures, construction on the Santa Ana-Delhi Channel Diversion in the City of Santa Ana is nearing completion. OCSD continues to work on the draft agreement for the Santa Ana-Delhi Channel dry weather urban runoff diversion discharge to be executed between OCSD and Orange County Flood Control District/Orange County Public Works. The Santa Ana-Delhi Channel Diversion is projected to add up to three (3) MGD of flow to OCSD's Plant 1. In FY 2019/20, OCSD learned, during meetings to address the Newport Bay Total Maximum Daily Load (TMDL) issues, that there are at least two new flood control channel diversions in the proposal stages: the Santa Isabel and East Costa Mesa Channel diversions. Modifications to the Newport Dunes diversions are also under consideration.

9.5.3 Dry Weather Urban Runoff Quality

OCSD requires self-monitoring of the urban runoff discharges and conducts semi-annual sampling and analysis to ensure discharge limit compliance for various regulated constituents. Overall, the monitoring of the urban runoff discharges shows very consistent compliance with OCSD's Local Limits. During this reporting period, a single pesticide constituent, Diazinon, with a value of 0.000029 mg/L, was detected at the IRWD Muddy Canyon diversion. The detectable value was well within the Local Discharge Limit of 0.01 mg/L. Trichloroethene at 0.0313 mg/L was also detected at the City of Newport Beach Mid Big Canyon diversion. Although OCSD no longer has a local limit for TTOs since the adoption of Ordinance No. OCSD-48 in 2016, the Resource Protection Division continues to monitor for TTOs as a safety measure to screen for pollutants of concern.

Monitoring results for metal constituents were all within the Local Discharge Limits.

TABLE 9.6 summarizes the minimum and maximum concentrations detected in the urban runoff during the reporting period. OCSD's latest Instantaneous Discharge Limits are included for comparison.

TABLE 9.6 Urban Runoff Compliance, FY 2019/20 Orange County Sanitation District, Resource Protection Division			
Constituent	Minimum Concentration Reported* (mg/L)	Maximum Concentration Reported (mg/L)	Instantaneous Discharge Limit (mg/L)
Ammonia N	ND (<0.05)	2.12	None
BOD	ND (<20)	55	None
TSS	ND (<10)	202	None
Cadmium	ND (<0.007)	0.07	1.0
Chromium	ND (<0.01)	0.00172	20.0
Copper	ND (<0.01)	0.12	3.0
Lead	ND (<0.02)	0.0011	2.0
Molybdenum	ND (<0.01)	0.296	2.3
Nickel	ND (<0.01)	0.39	10.0
Selenium	ND (<0.01)	0.07	3.9
Zinc	ND (<0.02)	0.309	10.0
Oil & Grease Min.	ND (<0.7)	5.83	100
Sulfide (Dissolved)	ND (<0.1)	0.00	0.5
Sulfide (Total)	ND (<0.1)	2.53	5.0
Pesticides	ND (<0.00025)	0.000029**	0.01
Total Toxic Organics	ND (<0.01)	0.0313	None
* ND - Non-Detectable (below analytical detection limits). ** Detectable analytical value due entirely to Diazinon. mg/L milligram per liter			

OCSD's Urban Runoff Program continues its success in helping to maintain the quality of the receiving waters along the Orange County coastline. For a fourth year in a row, Orange County's beaches have received very favorable ratings from Heal the Bay's annual report. Summer Dry Grades were excellent and just below the five-year average with 95% of the beaches receiving A or B grades. Wet weather grades were substandard but higher than average with 63% of the beaches receiving A and B grades. Winter Dry Grades were stellar and higher than the five-year average with 96% of the beaches receiving A and B grades. A total of 20 beaches made it on the Honor Roll, which is more than any other county and double the amount of beaches from last year. Orange County received 11 inches of rain, which is higher than the historical average of nine inches. The increase in rainfall did not appear to impact Wet Weather Grades.

OCSD's Urban Runoff Program provides an important economic benefit to the Orange County economy by maintaining the coastline's reputation as a desirable tourist destination. By helping to keep our beaches open, the program continues to provide a significant benefit to the beach-going public.

The role of the Urban Runoff Program expanded with the addition of diversions issued to the Big Canyon permit on February 1, 2015; Peters Canyon on July 1, 2016; and Mid Big Canyon on August 9, 2017. Constructed to reduce selenium-laden waters reaching the Upper Newport Bay, these diversions enhance the estuarine environment for the threatened and endangered species that inhabit the area. Based upon Orange County Watersheds' estimate, diversion of the various Peters Canyon Wash and Big Canyon tributaries will decrease the amount of selenium reaching the bay by 150 to 250 pounds annually. Based

upon the flow and monitoring data received for these three diversions, 57.4 pounds of selenium were diverted from the bay during the FY 2019/20 reporting period.

This rerouting of urban runoff from stormwater pump stations, flood control channels, and natural conveyances before it reaches receiving waters, allows OCSD to provide essential regional public health and water quality protection. In this manner, the program is instrumental in providing vital protection to the Areas of Special Biological Significance along Orange County's coastline.

9.5.4 Urban Runoff Diversion Locations

The diversion systems are located in four different watersheds in Orange County: Anaheim Bay-Huntington Harbor, Lower Santa Ana River, Newport Bay, and Newport Coastal. These watersheds encompass a variety of designated land uses such as residential, commercial, industrial, and agriculture.

9.6 DENTAL AMALGAM

On June 14, 2017, the EPA published technology-based Pretreatment Standards under the Clean Water Act to reduce discharges of mercury from dental offices into municipal sewage treatment plants known as Publicly Owned Treatment Works. The new Dental Office Point Source Category requires dental offices to utilize amalgam separators and implement two BMPs. The Dental Office Point Source Category became effective on July 14, 2017.

New dental facilities opened on or after July 14, 2017, designated Pretreatment Standards New Sources (PSNS), must immediately comply with pretreatment standards, including the installation of amalgam separators. A One-Time Compliance Report must be submitted to OCSD no later than 90 days following the introduction of wastewater to OCSD. Although PSNS does not include the purchase of an existing dental facility, those facilities changing ownership must also submit their report no later than 90 days following the transfer. Existing facilities designated as Pretreatment Standards Existing Sources that started before July 14, 2017 without amalgam separators on June 14, 2017, must install amalgam separators by July 14, 2020 and submit their One-Time Compliance Reports by October 12, 2020. Existing dental facilities with amalgam separators on June 14, 2017 must replace those separators by June 14, 2027 or whenever the amalgam separator needs to be replaced, whichever is earlier.

To conform to this federal Pretreatment Program requirement, OCSD implemented a Dental Amalgam Source Control Program to enable the dental offices to comply with this new regulation. OCSD developed and posted Dental Office Point Source Category information on the OCSD website (www.ocsd.com) complete with links to the EPA's development document, effluent guidelines, fact sheet, and the applicable Dental Category regulation. This information was present on the website as of August 2017. Two compliance reports forms were developed for the dental facilities: a comprehensive form for facilities that place or remove amalgam, and a second exempt/limited form for facilities that only remove amalgam on a limited or emergency basis. The forms were first made available in September 2017.

As required by the regulation, OCSD implemented procedures for receiving, reviewing, and retaining dental office Compliance Reports. OCSD conducted its first mass mailing to 922 dental offices in OCSD's service area in January 2018, and a second one to over 1700 offices in June 2020. As of the end of this reporting period, OCSD has received and processed 579 reports. OCSD is currently assisting the dental offices with their report submittal and expects this activity to continue until the required amalgam separator installation and report submittal deadlines are reached, July 14, 2020 and October 12, 2020, respectively. OCSD plans to continue reaching out to the dental community and assisting the dental offices with the new regulation during this critical compliance period.

9.7 PUBLIC EDUCATION and OUTREACH

Resource Protection Division staff routinely works with its Member Agencies, attends outside

agency/association meetings, conferences, and workshops; serves on committees; and gives presentations. Working with Member Agencies and outside agencies and associations benefits OCSD by helping OCSD keep abreast of potential future regulation and trends which may be beneficial or have impacts that OCSD must prepare for, as well as providing information to the public about OCSD's programs. Listed below are public outreach activities for FY 2019/20.

9.7.1 Industrial Environmental Coalition of Orange County

On January 23, 2020, a Pretreatment Program staff member presented an OCSD update at the Industrial Environmental Coalition of Orange County (IEC/OC) Annual Regulatory Update meeting. The IEC/OC provides a forum for communication between industry and government on environmental health and safety issues. The Pretreatment Program staff member informed approximately 60 members about OCSD's Pretreatment Program, OCSD's NPDES Permit renewal, the Dental Program, Per- and Polyfluoroalkyl Substances (PFAS) issues, and about Constituents of Emerging Concern.

9.7.2 California Water Environment Association Pretreatment, Pollution Prevention, and Stormwater Committee

Over January 27-29, 2020, many of OCSD's Pretreatment Program staff hosted, presented at, or attended the California Water Environment Association Pretreatment, Pollution Prevention, and Stormwater Committee Annual Conference.

Appendices

Monitoring and Compliance Status Report
Summary of Priority Pollutants and Trace Constituents Analyses
Priority Pollutants
Fees/Penalties for Non-Compliances
Public Notice of Significantly Non-Compliant Industries
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Santa Ana Watershed Project Authority (SAWPA) Reports, Data, SNC Notice
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Appendix A

**MONITORING AND COMPLIANCE
STATUS REPORT**



APPENDIX A
LISTS OF SIUs WITH MONITORING COMPLIANCE STATUS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

Facility	Permit No.	Address	NAICS Code	Regulation	No. of Inspections	Agency Samples	SMR Samples	Pollutant(s) in Discharge Violation	SNC Status	Comment
3M ESPE Dental Products	Z-371301	2111 Mcgaw Ave, Irvine, CA 92614	339114	433.17(a), 467.16, 471.65(n), 471.65(q)	1	0	0			
9W Halo Western opCo, L.P.	1-600378	1575 N.Case St, Orange, CA 92867	812332	403.5(d)	4	21	4			
A & G Electropolish	1-531422	18330 Ward St, Fountain Valley, CA 92708	332813	433.17(a)	3	17	8			
A & K Deburring and Tumbling, Inc.	1-511362	2008 S.Yale St, H Unit, Santa Ana, CA 92704	332812	403.5(d)	4	24	4			
A & R Powder Coating, Inc.	1-021088	1198 N.Grove St, B Unit, Anaheim, CA 92806	332812	433.17(a)	5	20	8			
Access Business Group, LLC	1-531435	5600 Beach Blvd, Buena Park, CA 90621	325412	439.47	4	14	9			
Accurate Circuit Engineering	1-011138	3019 Kilson Dr, Santa Ana, CA 92707	334412	433.17(a)	4	30	8			
Active Plating, Inc.	1-011115	1411 E.Pomona St, Santa Ana, CA 92705	332813	433.17(a)	4	31	60			
ADS Gold, Inc.	Z-321851	3843 E.Eagle Dr, Anaheim, CA 92807	331410	433.17(a)	1	0	0			
Advance Tech Plating, Inc.	1-021389	1061 N.Grove St, Anaheim, CA 92806	332813	433.17(a)	5	45	41	Zinc	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s)	
Advanced Plating Technology	Z-371321	1765 N.Batavia St, Orange, CA 92865	332813	433.17(a)	2	0	0			
Air Industries Company, A PCC Company (Chapman)	1-031013	7100 Chapman Ave, Garden Grove, CA 92841	332722	403.5(d)	4	5	2			
Air Industries Company, A PCC Company (Knott)	1-531404	12570 Knott St, Garden Grove, CA 92841	332722	433.15(a), 471.64(a), 471.65(a)	4	43	58			
Alex C. Fergusson	1-031186	8371 Monroe Ave, Stanton, CA 90680	325611	417.166, 417.176, 417.36	4	23	4			
Alexander Oil Company	1-581185	19065 Stewart St, Huntington Beach, CA 92648	211111	403.5(d)	5	14	2			
All Metals Processing of O.C., Inc.	1-031110	8401 Standustrial St, Stanton, CA 90680	332813	433.17(a)	4	27	20			
Alliance Medical Products, Inc.	1-541182	9342 Jeronimo Rd, Irvine, CA 92618	325412	439.47	4	18	10			
Allied Electronics Services, Inc.	1-011073	1342 E.Borchard Unk, Santa Ana, CA 92705	334412	433.17(a)	4	25	8			
Allied International	1-031107	6700 Caballero Blvd, Buena Park, CA 90620	325612	417.166, 417.176, 417.66, 417.86	4	25	7	Zinc	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s)	Formerly listed as Hanson-Loran Co., Inc.
Alloy Die Casting Co.	1-531437	6550 Caballero Blvd, Buena Park, CA 90620	331523	464.15(a), 464.15(b), 464.15(c), 464.15(h), 464.45(a), 464.45(b), 464.45(d)	4	31	16	Zinc		



APPENDIX A
LISTS OF SIUs WITH MONITORING COMPLIANCE STATUS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

Facility	Permit No.	Address	NAICS Code	Regulation	No. of Inspections	Agency Samples	SMR Samples	Pollutant(s) in Discharge Violation	SNC Status	Comment
Alloy Tech Electropolishing, Inc.	1-011036	2220 S.Huron Dr, Santa Ana, CA 92704	332812	433.17(a)	4	20	8			
AlSCO, Inc.	1-021656	1755 S.Anaheim Blvd, Anaheim, CA 92802	812331	403.5(d)	5	28	16			
Aluminum Forge - Div. of Alum. Precision	1-071035	502 E.Alton Ave, Santa Ana, CA 92707	332112	467.46	4	28	22			
Aluminum Precision Products, Inc. (Central)	1-011038	3132 W.Central Ave, Santa Ana, CA 92704	332112	467.45	4	22	10			
Aluminum Precision Products, Inc. (Susan)	1-011100	2621 S.Susan St, Santa Ana, CA 92704	332112	467.45, 467.46	4	26	20	Zinc		
Aluminum Precision Products, Inc. (Warner)	1-511387	3323 W.Warner Ave, Santa Ana, CA 92704	332112	467.46	4	16	10			
American Circuit Technology, Inc.	1-021249	5330 E.Hunter Ave, Anaheim, CA 92807	334412	433.17(a)	4	32	7		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Amerimax Building Products, Inc.	1-021102	1411 N.Daly St, Anaheim, CA 92806	332812	465.35	4	26	8			
Ameripeac, Inc.	1-031057	6965 Aragon Cir, Buena Park, CA 90620	312111	403.5(d)	4	21	0			
Ametek Aerospace, Inc.	Z-361006	17032 Armstrong Ave, Irvine, CA 92614	334511	433.17(a)	1	0	0			
Anaheim Extrusion Co., Inc.	1-021168	1330 & 1340 N.Kraemer Blvd, Anaheim, CA 92806	331318	467.35(c)	4	25	8			
Anchen Pharmaceuticals, Inc. (Fairbanks)	1-541180	72 Fairbanks Unk, Irvine, CA 92618	325412	439.47	5	41	30	pH		
Anchen Pharmaceuticals, Inc. (Goodyear)	1-600359	5 Goodyear Unk, Irvine, CA 92618	325412	439.47	4	40	35	Acetone		
Anchen Pharmaceuticals, Inc. (Jeronimo)	1-541179	9601 Jeronimo Rd, Irvine, CA 92618	325412	439.47	4	38	30	Acetone		
Andres Technical Plating	1-521798	1055 Ortega Way, C Unit, Placentia, CA 92870	332813	433.17(a)	4	18	23			
AnoChem Coatings	1-600295	1102 East Washington Ave, Santa Ana, CA 92701	332813	433.17(a)	4	30	12			
Anodyne, Inc.	1-511389	2230 S.Susan St, Santa Ana, CA 92704	332813	433.17(a)	4	23	30			
Anomil Ent. Dba Danco Metal Surfacing	1-011155	401 W.Rowland St, Santa Ana, CA 92707	332813	433.17(a)	4	26	20			
APCT Anaheim	1-600689	250 E.Emerson Ave, Orange, CA 92865	334112	433.17(a)	3	21	24	Copper		Formerly listed as Cirtech, Inc.
APCT Orange County	1-600503	1900 Petra Ln, C Unit, Placentia, CA 92870	334412	433.17(a)	4	30	68			
ARO Service	1-021192	1186 N.Grove St, Anaheim, CA 92806	336411	433.17(a)	4	20	8	Copper, Zinc		
Arrowhead Operating Inc.	1-601062	219 First St, Huntington Beach, CA 92648	211111	403.5(d)	0	0	1			New Class 1 Permit Issued
Arrowhead Products Corporation	1-031137	4411 Katella Ave, Los Alamitos, CA 90720	336413	433.17(a)	4	30	19	Nickel, pH		



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Aseptic Technology LLC	1-600716	4940 E.Landon Dr, Anaheim, CA 92807	31193	403.5(d)	5	10	10			
Astech Engineered Products, Inc.	1-571295	3030 Red Hill Ave, Santa Ana, CA 92705	336412	433.17(a)	4	26	20	pH		
Astech Engineered Products, Inc. # 2	Z-371320	3030 Red Hill Ave, Santa Ana, CA 92705	336412	471.65(x)	2	0	0			
Auto-Chlor System of Washington, Inc.	1-511384	530 Goetz Ave, Santa Ana, CA 92707	325611	417.166	4	20	10			
Aviation Equipment Processing	1-071037	1571 MacArthur Blvd, Costa Mesa, CA 92626	336413	433.17(a)	4	22	3		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Avid Bioservices, Inc.	1-571332	14191 Myford Rd, Tustin, CA 92780	325414	439.17, 439.27	3	17	13			
B&B Enameling, Inc.	Z-331432	17591 Sampson Ln, Huntington Beach, CA 92647	332812	433.17(a)	0	0	0			
B. Braun Medical, Inc. (East/Main)	1-071054	2525 Mcgaw Ave, Irvine, CA 92614	325412	439.47, 463.26, 463.36	4	27	10			
B. Braun Medical, Inc. (North/Alton)	1-600382	2206 Alton Pkwy, Irvine, CA 92614	325412	439.47	4	19	10			
B. Braun Medical, Inc. (West/Lake)	1-541183	2525 Mcgaw Ave, Irvine, CA 92614	325412	439.47, 463.16, 463.26, 463.36	4	22	10			
B/E Aerospace	Z-600654	3355 La Palma Ave, Anaheim, CA 92806	336413	433.17(a)	1	0	0			New Zero Discharge Certification Issued
Basic Electronics, Inc.	1-031094	11371 Monarch St, Garden Grove, CA 92841	334412	433.17(a)	4	22	16			
Bazz Houston Co.	1-031010	12700 Western Ave, Garden Grove, CA 92841	33211	403.5(d)	4	26	12			
Beckman Coulter, Inc.	1-521824	200 S.Kraemer Blvd, Brea, CA 92821	334516	433.17(a)	3	16	8			
Beo-Mag Plating	1-511370	3313 W.Harvard St, Santa Ana, CA 92704	332813	433.17(a)	4	17	25			
Bimbo Bakeries U.S.A, Inc.	1-521838	500 S.Placentia Ave, Placentia, CA 92870	311812	403.5(d)	5	22	4	pH		
Black Oxide Industries, Inc.	1-021213	1735 N.Orangethorpe Park, Anaheim, CA 92801	332812	433.17(a)	3	19	8			
Blue Lake Energy	1-521785	5837 Casson Dr, Yorba Linda, CA 92886	211111	403.5(d)	4	17	4			
Bodycote Thermal Processing	1-031120	7474 Garden Grove Blvd, Westminster, CA 92683	332811	403.5(d)	5	31	5	Molybdenum	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s)	
Boeing Company (Graham)	1-111018	15400 Graham St, Huntington Beach, CA 92649	33641	433.17(a)	4	28	8			
Brasstech, Inc	1-600316	1301 E.Wilshire Ave, Santa Ana, CA 92705	332813	433.17(a)	2	11	10			
Brea Power II, LLC	1-521837	1935 Valencia Ave, Brea, CA 92823	221112	403.5(d)	5	24	3	pH		
Bridge Energy, LLC	1-600398	2744 Valencia Ave, Brea, CA 92821	211111	403.5(d)	4	21	6			



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Bridgemark Corporation	1-521844	2930 E.Frontera St, A Unit, Anaheim, CA 92806	211111	403.5(d)	3	11	4			
Brindle/Thomas - Bradley	1-531428	221 1st St, Huntington Beach, CA 92648	211111	403.5(d)	4	29	4			
Brindle/Thomas - Brooks & Kohlbush	1-531429	18462 Edwards St, Huntington Beach, CA 92648	211111	403.5(d)	4	32	4			
Brindle/Thomas - Catalina & Copeland	1-531430	18851 Stewart Ln, Huntington Beach, CA 92648	211111	403.5(d)	4	29	4			
Brindle/Thomas-Dabney & Patton	1-531427	19192 Stewart Ln, Huntington Beach, CA 92648	211111	403.5(d)	4	29	4			
Bristol Industries	1-021226	630 E.Lambert Rd, Brea, CA 92821	332722	433.17(a), 467.36(c), 471.35(dd), 471.35(ee), 471.35(ff), 471.35(i), 471.35(r), 471.35(s), 471.35(t), 471.35(u), 471.35(v)	12	111	117	Cadmium, Cyanide, Cyanide Amenable, Nickel, Silver		
Broncs, Inc., dba WesCoast Textiles, Inc.	1-600519	12641 Industry St, Garden Grove, CA 92841	313310	403.5(d)	3	0	0			Class 1 Permit Deactivated
Brothers International Desserts (North)	1-600583	1682 Kettering St, Irvine, CA 92614	311520	403.5(d)	5	16	4	pH		
Brothers International Desserts (West)	1-600582	1682 Kettering St, Irvine, CA 92614	311520	403.5(d)	4	20	4			
Burlington Engineering, Inc.	1-521770	220 W.Grove Ave, Orange, CA 92865	332811	433.17(a)	4	14	4			
Cadillac Plating, Inc.	1-021062	1147 W.Struck Ave, Orange, CA 92867	332813	433.17(a)	6	42	56		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Cal-Aurum Industries, Inc.	1-111089	15632 Container Ln, Huntington Beach, CA 92649	332813	433.17(a)	4	30	29			
California Faucets	Z-331431	5271 Argosy Unk, Huntington Beach, CA 92649	332812	433.17(a)	1	0	0			
California Gasket and Rubber Corporation	1-521832	533 W.Collins Ave, Orange, CA 92867	339991	428.66(a)	5	12	4			
Cargill, Inc.	1-031060	600 N.Gilbert St, Fullerton, CA 92833	311225	403.5(d)	5	25	14			
Catalina Cylinders, A Div. of APP	1-031021	7300 Anaconda Ave, Garden Grove, CA 92841	331318	467.46	4	18	13			
CD Video, Inc.	1-511076	12650 Westminster Ave, Garden Grove, CA 92706	334613	433.17(a)	4	21	8			
Central Powder Coating	1-021189	593 Explorer St, Brea, CA 92821	332812	433.17(a)	5	29	8			
Ceradyne, Inc., a 3M Company	1-600691	17466 Daimler St, Irvine, CA 92614	339114	403.5(d)	4	18	4			



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Chromadora, Inc.	1-511414	2515 S.Birch St, Santa Ana, CA 92707	332813	433.17(a)	4	20	20			
Circuit Technology, Inc.	1-521821	1911 N.Main St, Orange, CA 92865	334112	433.17(a)	4	22	8			
City of Anaheim - Public Utilities Dept	1-021073	6751 E.Walnut Canyon Rd, Anaheim, CA 92807	221310	403.5(d)	5	3	9			
City Of Anaheim - Public Utilities Dept.	1-521862	1144 N.Kraemer Blvd, Anaheim, CA 92806	221112	403.5(d)	4	7	0			
City of Anaheim Public Utilities (Water Services WRDF)	1-521843	210 S.Anaheim Blvd, Anaheim, CA 92805	221320	403.5(d)	5	18	0			
City of Anaheim, Canyon Power Plant	1-600296	3071 E.Miraloma Ave, Anaheim, CA 92806	221112	403.5(d)	4	23	2			
City of Huntington Beach Fire Department	1-111015	19081 Huntington St, Huntington Beach, CA 92648	211111	403.5(d)	4	16	4			
City of Newport Beach (West Coast Hwy - Oil Extraction)	1-600584	5810 West Coast Hwy, Newport Beach, CA 92660	211111	403.5(d)	4	11	2	Oil & Grease minerals		Formerly listed as City of Newport Beach
City of Tustin - Maintenance Yard	1-071058	1472 Service Rd, Tustin, CA 92780	921190	403.5(d)	5	27	5	Zinc		
City of Tustin Water Service (17Th St.)	1-071013	18602 E.17th St, Tustin, CA 92705	221310	403.5(d)	4	18	2			
City of Tustin, Water Service (Main St)	1-071268	235 E.Main St, Tustin, CA 92780	221310	403.5(d)	1	0	0			
CJ Foods Manufacturing Corp.	1-521849	500 State College Blvd, Fullerton, CA 92831	311824	403.5(d)	4	20	12			
CLA-VAL Co. Div. of Griswold Ind.	Z-361103	1701 Placentia Ave, Costa Mesa, CA 92627	332911	433.15(a)	1	0	0			
Coast to Coast Circuits, Inc.	1-111129	5332 Commercial St, Huntington Beach, CA 92649	334412	433.17(a)	5	36	20	pH		
Coastline High Performance Coatings, LTD	1-600812	7181 Orangewood Ave, Garden Grove, CA 92841	332812	433.17(a)	3	16	1			New Class 1 Permit Issued
Coastline Metal Finishing Corp., A Division of Valence Surface Technologies	1-600708	7061 Patterson Dr, Garden Grove, CA 92841	332813	433.17(a)	4	25	11			
Coca-Cola Company -Anaheim Water Plant	1-021392	2121 E.Winston Rd, Anaheim, CA 92806	312112	403.5(d)	3	12	2			
Columbine Associates	1-521784	4660 San Antonio Rd, E. on B St Dir, Yorba Linda, CA 92886	211111	403.5(d)	4	18	4			
Continuous Coating Corporation	1-021290	520 W.Grove Ave, Orange, CA 92865	332812	433.17(a), 465.15	4	34	20			
Cooper and Brain, Inc.	1-031070	1390 Site Dr, Brea, CA 92821	211111	403.5(d)	3	15	6			
Corru-Kraft Buena Park	1-600806	6200 Caballero Blvd, Buena Park, CA 90620	322211	403.5(d)	7	24	12	pH		
CP-Carrillo, Inc. (Armstrong)	1-600920	17401 Armstrong Ave, Irvine, CA 92614	336310	433.17(a)	4	17	15	pH		New Class 1 Permit Issued



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CP-Carrillo, Inc. (McGaw)	1-571316	1902 McGaw Ave, Irvine, CA 92614	336310	403.5(d)	4	18	5			Formerly listed as CP-Carrillo, Inc.
CPPG, Inc.	Z-321813	3911 E.Miraloma Ave, Anaheim, CA 92806	332813	433.17(a)	1	0	0			
Crest Coating, Inc.	1-021289	1361 S.Allec St, Anaheim, CA 92805	332812	433.17(a)	4	26	8			
CRH California Water, Inc.	1-011051	502 S.Lyon St, Santa Ana, CA 92701	561990	403.5(d)	1	7	4			
Custom Enamellers, Inc.	1-021297	18340 Mount Baldy Cir, Fountain Valley, CA 92708	332812	433.17(a)	4	26	8			
Cytec Engineered Materials, Inc.	Z-600005	1440 N.Kraemer Blvd, Anaheim, CA 92806	325520	433.17(a)	3	0	0			
D.F. Stauffer Biscuit Co., Inc.	1-600414	4041 W.Garry Ave, Santa Ana, CA 92704	311821	403.5(d)	4	8	3			
Dae Shin USA, Inc.	1-031102	610 N.Gilbert St, Fullerton, CA 92833	313310	403.5(d)	4	23	0			
DAH Oil, LLC	1-581173	18962 Stewart Ln, Huntington Beach, CA 92648	211111	403.5(d)	3	21	4			
Darling International, Inc.	1-511378	2624 Hickory St, Santa Ana, CA 92707	562219	403.5(d)	5	27	12			
Data Aire, Inc. #2	1-021379	230 W.Blueridge Ave, Orange, CA 92865	332322	433.17(a)	5	24	8	pH		
Data Electronic Services, Inc.	1-011142	410 Nantucket Pl, Santa Ana, CA 92703	334412	433.17(a)	4	18	8			
Data Solder, Inc.	1-521761	2915 Kilson Dr, Santa Ana, CA 92707	334412	433.17(a)	4	18	8			
Dayton Flavors, LLC	1-600038	580 S.Melrose Unk, Placentia, CA 92870	311930	403.5(d)	4	12	4			
DCOR, LLC	1-111013	4541 Heil Ave, Huntington Beach, CA 92649	211111	403.5(d)	4	29	8			
Derm Cosmetic Labs, Inc.	Z-600455	6370 Altura Blvd, Buena Park, CA 90620	325611	417.156, 417.166, 417.66, 417.86	1	0	0			New Zero Discharge Certification Issued
Diamond Environmental Services, LP	1-600244	1801 Via Burton None, B Unit, Fullerton, CA 92832	532490	403.5(d)	4	20	4			
DNR Industries, Inc.	Z-601019	1562 S.Anahaim Blvd, Anaheim, CA 92805	811111	433.17(a)	3	0	0			New Zero Discharge Certification Issued
Dr. Smoothie Enterprises - DBA Revolution Group	1-600131	1730 Raymer Ave, Fullerton, CA 92833	311930	403.5(d)	7	28	4	pH		
DRS Network & Imaging Systems, LLC	1-531405	10600 Valley View St, Cypress, CA 90630	334413	469.18(a)	4	15	10			
DS Services of America	1-021393	1522 N.Newhope St, Santa Ana, CA 92703	312112	403.5(d)	4	19	4			
Ducommun Aerostructures, Inc.	1-021105	1885 N.Batavia St, Orange, CA 92865	336413	433.17(a)	4	30	28			
Dunham Metal Plating Inc.	1-601023	1764 N.Case St, Orange, CA 92865	332813	433.17(a)	1	9	5			New Class 1 Permit Issued



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Dunham Metal Processing	1-021325	936 N.Parker St, Orange, CA 92867	332813	433.17(a)	4	25	8			
E&B Natural Resources- Angus Petroleum Corporation	1-600254	1901 California St, Huntington Beach, CA 92648	211111	403.5(d)	4	21	8			
Earth Friendly Products	1-600739	11150 Hope St, Cypress, CA 90630	325611	417.166, 417.86	3	13	6			New Class 1 Permit Issued
EFT Fast Quality Service, Inc.	1-011064	2328 S.Susan St, Santa Ana, CA 92704	334112	433.17(a)	4	18	7			
Electro Metal Finishing Corporation	1-021158	1194 N.Grove St, Anaheim, CA 92806	332812	433.17(a)	4	17	8			
Electrolurgy, Inc.	1-071162	1121 Duryea Ave, Irvine, CA 92614	332813	433.17(a)	5	24	62	Silver, Zinc		
Electron Plating Inc.	1-021336	13932 Enterprise Dr, Garden Grove, CA 92843	332813	433.17(a)	4	26	20	Cadmium		
Electronic Precision Specialties, Inc.	1-021337	537 Mercury Ln, Brea, CA 92821	332813	433.17(a)	4	26	20			
Electrorack Products Co., Inc.	Z-321092	1443 S.Sunkist St, Anaheim, CA 92806	332999	433.17(a)	1	0	0			
Embee Processing (Anodize)	1-600456	2148 S.Hathaway St, Santa Ana, CA 92705	332813	413.14(c), 413.54(c), 413.64(c), 433.17(a)	4	26	16			
Embee Processing (Plate)	1-600457	2144 S.Hathaway St, Santa Ana, CA 92705	332813	413.14(c), 413.54(c), 413.64(c), 413.74(c), 433.17(a)	4	26	16			
Excello Circuits Manufacturing Corp.	1-521855	1924 Nancita Cir, Placentia, CA 92870	334412	433.17(a)	5	27	59	Copper, pH		
Expo Dyeing and Finishing, Inc.	1-031322	1365 Knollwood Cir, Anaheim, CA 92801	313310	403.5(d)	4	22	0			
Fabrica International, Inc.	1-011278	3201 S.Susan St, Santa Ana, CA 92704	314110	403.5(d)	6	15	0			
Fabrication Concepts Corporation	1-011068	1800 E.St. Andrew Pl, Santa Ana, CA 92705	332114	433.17(a)	5	36	9	pH, Zinc		
Fineline Circuits & Technology, Inc.	1-021121	594 Apollo St, Brea, CA 92821	334412	433.17(a)	4	26	8			
FMH Aerospace Corp.	1-600585	17072 Daimler St, Irvine, CA 92614	332912	433.17(a), 467.16, 471.65(m), 471.65(n), 471.65(p), 471.65(q), 471.65(w)	4	28	62			
FujiFilm Irvine Scientific, Inc.	1-600977	2511 Daimler St, Santa Ana, CA 92705	325414	439.47	2	33	2			New Class 1 Permit Issued
Fullerton Custom Works, Inc.	Z-331424	1165 E.Elm Ave, Fullerton, CA 92831	332813	433.17(a)	3	0	0			
Gaffoglio Family Metalcrafters	1-600443	11161 Slater Ave, Fountain Valley, CA 92708	336111	426.66	4	19	2			



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Gallade Chemical, Inc.	1-011257	1230 E.Saint Gertrude Pl, Santa Ana, CA 92707	422690	403.5(d)	3	11	4			
Gemini Industries, Inc.	1-071172	2311 S.Pullman St, Santa Ana, CA 92705	331492	415.24, 421.265(a)	4	30	18	Molybdenum		
Gemtech Coatings	Z-600544	2737 S.Garnsey St, Santa Ana, CA 92707	332812	433.17(a)	0	0	0			New Zero Discharge Certification Issued
General Container Corporation	1-031042	5450 Dodds Ave, Buena Park, CA 90621	322211	403.5(d)	4	15	4			Class 1 Permit Deactivated
GKN Aerospace Transparency Systems	1-531401	12122 Western Ave, Garden Grove, CA 92841	336413	403.5(d)	3	18	4			
Golden State Pumping LLC	1-600975	1051 N.Patt St, Anaheim, CA 92801	562219	403.5(d)	5	17	0	pH	Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	New Class 1 Permit Issued
Gomtech Electronics, Inc.	1-021352	990 N.Enterprise St, M Unit, Orange, CA 92867	334412	433.17(a)	4	24	8			
Goodwin Company	1-031043	12361 Monarch St, Garden Grove, CA 92841	325611	403.5(d)	4	25	16			
Graphic Packaging International, Inc.	1-571314	1600 Barranca Pkwy, Irvine, CA 92606	322212	403.5(d)	5	20	4	pH		
Harbor Truck Bodies, Inc.	1-021286	255 Voyager Ave, Brea, CA 92821	336370	433.17(a)	4	16	20			
Harry's Dye & Wash, Inc.	1-521746	1015 E.Orangethorpe Ave, Anaheim, CA 92801	313310	403.5(d)	4	21	12			
Hartwell Corporation	1-021381	900 Richfield Rd, Placentia, CA 92870	332999	403.5(d)	4	9	8			
Hellman Properties, LLC	1-600273	1650 Adolfo Lopez Dr, Seal Beach, CA 90740	211111	403.5(d)	4	21	7			
Hi Tech Solder	1-521790	700 Monroe Way, Placentia, CA 92870	334412	433.17(a)	7	30	10	Copper, Lead		
Hightower Plating & Manufacturing Co.	1-021185	2090 N.Glassell Unk, Orange, CA 92865	332813	433.17(a)	3	33	20			
Hixson Metal Finishing	1-061115	829 Production Pl, Newport Beach, CA 92663	332813	413.14(c), 413.14(g), 413.24(c), 413.24(g), 413.44(c), 413.44(g), 413.54(c), 413.54(g), 413.64(c), 413.64(g), 433.17(a)	6	37	73	Cadmium, Silver		
House Foods America Corporation (East)	1-600906	7351 Orangewood Ave, Garden Grove, CA 92841	311991	403.5(d)	1	5	0			New Class 1 Permit Issued
House Foods America Corporation (West)	1-031072	7351 Orangewood Ave, Garden Grove, CA 92841	311224	403.5(d)	3	19	0			Formerly listed as House Foods America Corporation



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Howmet Global Fastening Systems Inc.	1-021081	800 S.State College Blvd, Fullerton, CA 92831	332722	433.15(a), 433.17(a), 467.46, 471.65(i), 471.65(j), 471.65(m), 471.65(n), 471.65(o), 471.65(p), 471.65(q), 471.65(r), 471.65(s), 471.65(w), 471.65(x)	8	58	39	Cyanide, Cyanide Amenable, Molybdenum	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s)	Formerly listed as Arconic Global Fasteners & Rings, Inc.
Hyatt Die Casting & Engineering Corp.	Z-331236	4656 Lincoln Ave, Cypress, CA 90630	331523	464.16(a), 464.16(c)	1	0	0			
Ideal Anodizing, Inc.	1-021041	1250 & 1270 N.Blue Gum St, Anaheim, CA 92806	332813	433.17(a)	4	26	8			
Ikon Powder Coating, Inc.	1-521756	1375 N.Miller St, Anaheim, CA 92806	332812	433.17(a)	4	18	8			
Image Technology, Inc.	1-521755	1380 N.Knollwood Cir, Anaheim, CA 92801	325611	417.86	2	8	3			
Imperial Plating	1-031106	2007 Raymer Ave, N Ste, Fullerton, CA 92833	332813	433.17(a)	4	25	38		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Imuraya USA, Inc.	1-541178	2502 Barranca Pkwy, Irvine, CA 92606	311520	403.5(d)	4	19	4			
Independent Forge Company	1-021401	692 N.Batavia St, Orange, CA 92868	332112	467.45	2	0	0			Class 1 Permit Deactivated
Independent Forge Company	Z-601008	692 N.Batavia St, Orange, CA 92868	332112	467.45	2	0	0			New Zero Discharge Certification Issued
Industrial Coating, INC	Z-601061	2990 E.Blue Star St, Anaheim, CA 92806	332812	433.17(a)	1	0	0			New Zero Discharge Certification Issued
Industrial Metal Finishing, Inc.	1-521828	1941 Petra Ln, Placentia, CA 92870	332813	403.5(d)	4	16	8			
Intec Products, Inc.	1-021399	1145 N.Grove St, Anaheim, CA 92806	314999	403.5(d)	4	15	4			
Integral Aerospace, LLC	1-600243	2036 E.Dyer Rd, Santa Ana, CA 92705	336413	433.17(a)	4	22	20			
International Paper Company (Anaheim)	1-521820	601 E.Ball Rd, Anaheim, CA 92805	322211	403.5(d)	4	24	7			
International Paper Company (Buena Park Bag)	1-531419	6485 Descanso Ave, Buena Park, CA 90620	322224	403.5(d)	3	17	5			
International Paper Company (Buena Park Container)	1-031171	6211 Descanso Ave, Buena Park, CA 90620	322211	403.5(d)	3	11	4			
Irvine Ranch Water District (Wells 21/22 Desalter)	1-571327	1221 Edinger Ave, Tustin, CA 92780	221310	403.5(d)	2	12	4			
Irvine Ranch Water District - DATS	1-011075	1704 W.Segerstrom Ave, Santa Ana, CA 92704	221310	403.5(d)	4	21	6			



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J & R Metal Finishing Co.	1-521823	307 N.Euclid Way, H1 Bldg, Anaheim, CA 92801	332812	403.5(d)	4	23	6			
J&J Marine Acquisition Co., LLC	1-551152	151 Shipyard Way, 7 Unit, Newport Beach, CA 92663	336611	403.5(d)	4	7	6			
JD Processing, Inc. (East)	1-511407	2220 Cape Cod Way, Santa Ana, CA 92703	332813	433.17(a)	4	28	20			Formerly listed as JD Processing, Inc.
Jellco Container, Inc.	1-021402	1151 N.Tustin Ave, Anaheim, CA 92807	322212	403.5(d)	4	21	6			
John A. Thomas- Bolsa Oil	1-031065	18701 Edwards St, Huntington Beach, CA 92648	211111	403.5(d)	4	32	8			
Joint Forces Training Base, Los Alamitos	1-031270	Orangewood Gate, Northwest Corner of the Base Unk, Los Alamitos, CA 90720	928110	403.5(d)	4	27	0			
Kanstul Musical Instruments	Z-321800	1332 Claudina St, Anaheim, CA 92805	339992	433.17(a)	1	0	0			Zero Discharge Certification Deactivated
Kenlen Specialities, Inc.	1-021171	11691 Coley River Cir, Fountain Valley, CA 92708	332812	433.17(a)	4	26	8			
Kimberly Clark Worldwide Inc., Fullerton Mill	1-021425	2001 E.Orangethorpe Unk, Fullerton, CA 92831	322121	430.127	5	26	0			Class 1 Permit Deactivated
Kinsbursky Brothers Supply, Inc.	1-021424	1314 N.Anaheim Blvd, Anaheim, CA 92801	423930	403.5(d)	4	20	8			
Kirkhill, Inc. (North)	1-600608	300 E.Cypress St, Brea, CA 92821	339991	428.76(a)	4	25	8			
Kirkhill, Inc. (South)	1-600609	300 E.Cypress St, Brea, CA 92821	339991	428.76(a)	4	25	8			
Kraft Heinz Company	1-071056	2450 White Rd, Irvine, CA 92614	311941	403.5(d)	4	21	5			
Kryler Corporation	1-021428	1217 E.Ash Ave, Fullerton, CA 92831	332813	413.14(b), 413.14(f), 433.17(a)	4	33	10			
Kyocera Precision Tools, Inc.	1-511385	3565 Cadillac Ave, Costa Mesa, CA 92626	333515	403.5(d)	4	17	4			
La Habra Bakery	1-031029	850 S.Cypress St, La Habra, CA 90631	311812	403.5(d)	4	21	12	pH		
La Habra Plating Company	Z-331399	900 S.Cypress Unk, La Habra, CA 90631	332813	433.17(a)	1	0	0			Formerly listed as La Habra Plating Co., Inc.
Lightning Diversion Systems LLC	1-600338	16572 Burke Ln, Huntington Beach, CA 92647	334412	433.17(a)	4	22	12			
Linco Industries, Inc.	1-021253	528 S.Central Park Ave, West Dir, Anaheim, CA 92802	332812	403.5(d)	4	30	13	Zinc		
LM Chrome Corporation	1-511361	654 Young St, Santa Ana, CA 92705	332813	433.17(a)	5	31	25	Lead		
Logi Graphics, Inc.	1-031049	17592 Metzler Ln, Huntington Beach, CA 92647	334412	433.17(a)	4	24	2	Copper, Lead		
M.S. Bellows	1-111007	5322 Mcfadden Ave, Huntington Beach, CA 92649	332813	433.17(a)	4	22	8			



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Magma Finishing Corp.	Z-321810	2294 N.Batavia St, D Ste, Orange, CA 92865	332813	433.17(a)	2	0	0			
Magnetic Metals Corporation	1-531391	2475 W.La Palma Ave, Anaheim, CA 92801	335311	433.17(a)	4	20	8			
Manufactured Packaging Products	1-521793	3200 Enterprise St, Brea, CA 92821	322211	403.5(d)	5	25	2	Copper		
Manufactured Packaging Products (MPP Fullerton)	1-021681	1901 E.Rossllyn Ave, Fullerton, CA 92831	322211	403.5(d)	4	17	4			
Markland Manufacturing, Inc.	1-011046	1111 E.Mcfadden Ave, Santa Ana, CA 92705	332813	433.17(a)	4	26	28			
Maruchan, Inc. (Deere)	1-071024	1902 Deere Ave, Irvine, CA 92606	311824	403.5(d)	4	13	4			
Maruchan, Inc. (Deere-South)	1-601021	1902 Deere Ave, Irvine, CA 92606	311824	403.5(d)	3	9	0	pH		New Class 1 Permit Issued
Maruchan, Inc. (Laguna Cyn)	1-141015	15800 Laguna Canyon Rd, Irvine, CA 92618	311824	403.5(d)	4	13	8			
Marukome USA, Inc.	1-141023	17132 Pullman St, Irvine, CA 92614	311991	403.5(d)	6	22	4			
Master Wash, Inc.	1-511399	3120 Kilson St, Santa Ana, CA 92707	811192	403.5(d)	4	10	4			
Mckenna Labs, Inc.	1-021422	1601 E.Orangethorpe Ave, Fullerton, CA 92831	325620	417.86	5	21	4	Zinc	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s)	
MCP Foods, Inc.	1-021029	424 S.Atchison St, Anaheim, CA 92805	311942	403.5(d)	4	19	0			
Meggitt, Inc.	1-600006	14600 Myford Rd, Irvine, CA 92606	334519	433.17(a)	5	16	8	Lead		Class 1 Permit Deactivated
Mercial, LLC	1-600655	233 E.Bristol Ln, Orange, CA 92865	325412	439.47	4	20	13			
Mesa Water District	1-061007	1350 Gisler Ave, Costa Mesa, CA 92626	221310	403.5(d)	4	14	6			
Micrometals, Inc.	1-021153	5615 E.La Palma Ave, Anaheim, CA 92807	334416	471.105(e)	4	25	7			
Murrietta Circuits	1-521811	5000 E.Landon St, Anaheim, CA 92807	334412	433.17(a)	4	26	8			
Nalco Water Pretreatment Solutions, LLC	1-521748	1961 Petra Ln, Placentia, CA 92870	561990	403.5(d)	4	14	4			
National Construction Rentals	1-600652	1550 E.Chestnut Ave, Santa Ana, CA 92701	562991	403.5(d)	5	22	5	pH		
Neutron Plating, Inc.	Z-321812	2993 E.Blue Star St, Anaheim, CA 92806	332812	433.17(a)	2	0	0			
Neutronic Stamping and Plating	1-521772	10535 Lawson River Ave, Fountain Valley, CA 92708	334417	433.17(a)	4	18	8			
Newlight Technologies, Inc.	1-600888	14382 Astronautics Ln, Huntington Beach, CA 92647	325211	-	3	15	2			New Class 1 Permit Issued
Newport Corporation	1-071038	1791 Deere Ave, Irvine, CA 92606	334516	403.5(d)	4	13	2			



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Newport Fab, LLC (dba TowerJazz Semiconductor)	1-571292	4321 Jamboree Rd, Newport Beach, CA 92660	334413	469.18(a)	4	24	1			Formerly listed as Jazz Semiconductor
Nobel Biocare USA, LLC	1-521801	22725 Savi Ranch Pkwy, Yorba Linda, CA 92887	339114	433.17(a)	3	17	12			
Nor-Cal Beverage Co., Inc. (Main)	1-021284	1226 N.Olive St, Anaheim, CA 92801	312111	403.5(d)	5	22	0	pH		
Nor-Cal Beverage Co., Inc. (NCB)	1-021283	1226 N.Olive St, Anaheim, CA 92801	312111	403.5(d)	5	23	0	pH		
Nu-Tec Powder Coating	Z-321383	2990 E.Blue Star St, Anaheim, CA 92806	332812	433.17(a)	2	0	0			
O'Donnell Oil Company, LLC	1-581191	7800 Palin Cir, Huntington Beach, CA 92648	211111	403.5(d)	4	16	1			
O.C. Waste & Recycling	1-141018	20661 Newport Coast Dr, Newport Beach, CA 92657	562910	403.5(d)	5	19	4			
Oakley, Inc.	1-141012	1 Icon Unk, Foothill Ranch, CA 92610	339115	463.16, 463.26, 463.36	4	0	0			
Omni Metal Finishing, Inc.	1-021520	11665 Coley River Cir, Fountain Valley, CA 92708	332813	433.17(a)	5	26	20			
Omni Metal Finishing, Inc. (Building 4)	1-600981	11639 Coley Riv, Fountain Valley, CA 92708	332813	433.17(a)	2	13	5			New Class 1 Permit Issued
Only Cremations for Pets (Stanton)	1-601085	8101 Monroe Ave, Stanton, CA 90680	812220	403.5(d)	0	0	0			New Class 1 Permit Issued
Orange County Chemical Supply, Inc.	1-600766	10680 Fern Ave, Stanton, CA 90680	325611	417.86	4	24	4			
Pacific Chrome Services	Z-311396	603 E.Alton Ave, F Ste, Santa Ana, CA 92705	332813	433.17(a)	4	0	0			
Pacific Image Technology, Inc.	1-021070	1875 S.Santa Cruz St, Anaheim, CA 92805	334112	433.17(a)	4	26	8			
Pacific Western Container	1-511371	4044 W.Garry Ave, Santa Ana, CA 92704	322211	403.5(d)	3	12	5			
Parker Hannifin Corporation	1-141002	14300 Alton Pkwy, Irvine, CA 92618	332912	433.17(a)	3	0	0			Class 1 Permit Deactivated
Parker Hannifin Corporation	Z-600979	14300 Alton Pkwy, Irvine, CA 92618	332912	433.17(a)	3	0	0			New Zero Discharge Certification Issued
Patio and Door Outlet, Inc.	1-521783	410 W.Fletcher Ave, Orange, CA 92865	332812	433.17(a)	4	29	0		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Patriot Wastewater, LLC (Freedom CWT)	1-521861	314 W.Freedom Ave, Orange, CA 92865	562219	437.47(b)	5	33	45			
Patriot Wastewater, LLC (Freedom Non-CWT)	1-600147	314 W.Freedom Ave, Orange, CA 92865	562219	403.5(d)	4	22	16			
Performance Powder, Inc.	1-521805	2920 E.La Jolla St, Anaheim, CA 92806	332812	433.17(a)	4	26	8			
Petroprize Corporation	1-581180	319 20th St, Huntington Beach, CA 92648	211111	403.5(d)	4	17	4			
Pier Oil Company, Inc.	1-581178	201 2nd St, Huntington Beach, CA 92648	211111	403.5(d)	2	13	4			



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Pioneer Circuits, Inc.	1-011262	3010 S.Shannon St, Santa Ana, CA 92704	334412	433.17(a)	5	30	20			
Platinum Surface Coating, Inc.	1-521852	1173 N.Fountain Way, Anaheim, CA 92806	332813	433.17(a)	4	18	10			
Plegel Oil Company (Blattner/Joe Johnson)	1-521864	900 Mammoth Way, Placentia, CA 92870	211111	403.5(d)	4	16	4			
Plegel Oil Company - (A.H.A.)	1-021176	16801 Rumson St, Yorba Linda, CA 92886	211111	403.5(d)	3	12	4			
Porter Powder Coating, Inc.	Z-321817	510 S.Rose St, Anaheim, CA 92805	332812	433.17(a)	1	0	0			
Powdercoat Professionals Inc.	Z-600275	2905 E.Blue Star St, Anaheim, CA 92806	332812	433.17(a)	3	0	0			
Powdercoat Services, LLC (Bldg E / Plant 1)	1-600167	307 N.Euclid Way, E Bldg, Anaheim, CA 92801	332812	433.17(a)	4	18	8	pH		
Powdercoat Services, LLC (Bldg J / Plant 3)	1-600168	237 N.Euclid Way, J Bldg, Anaheim, CA 92801	332812	433.17(a)	4	18	8			
Power Distribution, Inc.	1-511400	4011 W.Carriage Dr, Santa Ana, CA 92704	335311	403.5(d)	4	23	5			
Powerdrive Oil & Gas Company, LLC (16th)	1-600246	613 16th St, Huntington Beach, CA 92648	211111	403.5(d)	4	2	0			
Powerdrive Oil & Gas Company, LLC (2nd)	1-600248	120 2nd St, Huntington Beach, CA 92648	211111	403.5(d)	4	17	3			
Powerdrive Oil & Gas Company, LLC (Surveyor)	1-600245	21632 Surveyor Cir, Huntington Beach, CA 92646	211111	403.5(d)	4	0	0			
Precious Metals Plating Co., Inc.	1-011265	2635 Orange Ave, Santa Ana, CA 92707	332813	433.17(a)	4	34	8			
Precision Anodizing & Plating, Inc.	1-521809	1601 N.Miller St, Anaheim, CA 92806	332813	433.17(a)	4	28	20			
Precision Circuits West, Inc.	1-011008	3310 W.Harvard St, Santa Ana, CA 92704	334412	433.17(a)	4	29	8			
Precision Resource, California Division	1-111002	5803 Engineer St, Huntington Beach, CA 92649	332710	403.5(d)	4	24	8			
Precon, Inc.	1-021581	3131 E.La Palma Ave, Anaheim, CA 92806	332721	403.5(d)	3	20	26			
Prima-Tex Industries Inc.	1-031036	6237 Descanso Cir, Buena Park, CA 90620	313310	403.5(d)	4	20	4			
Prudential Overall Supply	1-071235	16901 Aston St, Irvine, CA 92606	812332	403.5(d)	4	24	8			
Pulmuone Wildwood, Inc.	1-531397	2315 Moore Ave, Fullerton, CA 92833	311991	403.5(d)	4	21	0			
Q-Flex Inc.	1-600337	1301 E.Hunter Ave, Santa Ana, CA 92705	334418	433.17(a)	4	25	9	Copper		
Quality Aluminum Forge, LLC (Cypress North)	1-521833	814 N.Cypress St, Orange, CA 92867	332112	467.45	5	25	7		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Quality Aluminum Forge, LLC (Cypress South)	1-600272	794 N.Cypress St, Orange, CA 92867	332112	467.46	4	28	9		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	



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Quieturn Professional Screenprinting	1-521858	567 S.Melrose St, Placentia, CA 92870	333249	403.5(d)	4	19	2			
Rainbow Disposal Co., Inc. (Building A)	1-601086	17121 Nichols Ln, Huntington Beach, CA 92647	562111	403.5(d)	0	22	4	pH		New Class 1 Permit Issued
Rainbow Disposal Co., Inc. (Building F)	1-601087	17121 Nichols Ln, Huntington Beach, CA 92647	562111	403.5(d)	0	25	4	Copper, Lead, Zinc		New Class 1 Permit Issued
Rayne Dealership Corporation	1-571303	17835 Sky Park Cir, M Ste, Irvine, CA 92614	454390	403.5(d)	5	21	2			
RBC Transport Dynamics Corp.	1-011013	3131 W.Segerstrom Ave, Santa Ana, CA 92704	336413	433.17(a)	4	18	8			
Reid Metal Finishing	1-511376	3110 W.Harvard St, Santa Ana, CA 92704	332813	433.17(a)	4	26	30	Cadmium		
Remora Operating CA, LLC	1-581192	219 1st St, Huntington Beach, CA 92648	211111	403.5(d)	4	22	3			Class 1 Permit Deactivated
Republic Waste Services	1-521827	2727 Coronado St, Anaheim, CA 92806	56211	403.5(d)	7	36	19	Chromium, Copper, Lead, Nickel, Zinc	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s) and Reporting Violation(s)	
Republic Waste Services of So. Cal., LLC	1-021169	1235 N.Blue Gum St, Anaheim, CA 92806	562111	403.5(d)	4	24	6			
Rich Products Corporation (North)	1-601022	3401 W.Segerstrom Ave, Santa Ana, CA 92704	311812	403.5(d)	1	6	1			New Class 1 Permit Issued
Rich Products Corporation (South)	1-511404	3401 W.Segerstrom Ave, Santa Ana, CA 92704	311812	403.5(d)	4	16	4			Formerly listed as Rich Products Corporation
Rigiflex Technology, Inc.	1-021187	1166 N.Grove St, Anaheim, CA 92806	334418	433.17(a)	4	18	8			
Robinson Pharma, Inc. (Croddy)	1-511413	2632 S.Croddy Way, Santa Ana, CA 92704	325411	439.47	4	0	0			
Robinson Pharma, Inc. (Harbor North)	1-600126	2811 S.Harbor Blvd, Santa Ana, CA 92704	325412	439.47	4	25	18			
Robinson Pharma, Inc. (Harbor South)	1-511412	3330 S.Harbor Blvd, Santa Ana, CA 92704	325412	439.47	4	25	18		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Rolls-Royce HTC	1-600212	5730 Katella Ave, Cypress, CA 90630	541712	403.5(d)	4	12	6			
Rolls-Royce HTC (fume scrubber)	1-600213	5730 Katella Ave, Cypress, CA 90630	541712	403.5(d)	5	16	2			
Roto-Die Company, Inc.	1-021033	712 N.Valley St, B Ste, Anaheim, CA 92801	332710	433.17(a)	3	17	4			Class 1 Permit Deactivated
Rountree / Wright Enterprises, LLC	1-111028	114 14th St, 12&14/113 LotBlk, Huntington Beach, CA 92648	211111	403.5(d)	4	17	4			
RSS Manufacturing	Z-600635	1275 Logan Ave, Costa Mesa, CA 92626	332913	433.17(a)	1	0	0			New Zero Discharge Certification Issued
S & C Oil Co., Inc.	1-581175	18742 Goldenwest St, Huntington Beach, CA 92649	211111	403.5(d)	4	21	4			



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Safran Electronics & Defense, Avionics USA, LLC.	1-571304	3184 Pullman St, Costa Mesa, CA 92626	335931	433.17(a)	4	29	12			
Sanmina Corporation (Airway)	1-061008	2955 Airway Ave, Costa Mesa, CA 92626	334412	433.17(a)	4	37	20			
Sanmina Corporation (Redhill)	1-061009	2950 Red Hill Ave, Costa Mesa, CA 92626	334412	433.17(a)	4	32	20			
Santana Services	1-021016	1224 E.Ash Ave, Fullerton, CA 92831	332813	433.17(a)	4	18	8			
Schreiber Foods, Inc.	1-021049	1901 Via Burton None, Fullerton, CA 92831	311511	403.5(d)	3	13	0			
Scientific Spray Finishes, Inc.	1-031311	315 S.Richman Ave, Fullerton, CA 92832	332812	433.17(a)	4	26	8			
Semicoa	1-571313	333 McCormick Ave, Costa Mesa, CA 92626	334413	469.18(a)	4	24	10			
Serrano Water District	1-021137	5454 Taft Ave, Orange, CA 92867	221310	403.5(d)	3	6	4			
SFPP, LP	1-021619	1350 N.Main St, Orange, CA 92867	493190	403.5(d)	2	0	0			
Shepard Bros., Inc.	1-031034	503 S.Cypress St, La Habra, CA 90631	325611	417.166, 417.176	5	22	4			
Shur-Lok Company	1-600297	2541 White Rd, Irvine, CA 92614	332722	433.17(a)	4	1	0			
Simply Fresh, LLC	1-600709	6535 Caballero Blvd, Buena Park, CA 90620	311421	403.5(d)	5	20	9	pH	Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Sirco Industrial, Inc.	1-600706	5312 System Dr, Huntington Beach, CA 92649	423830	403.5(d)	4	24	8			
Soldermask, Inc.	1-031341	17905 Metzler Ln, Huntington Beach, CA 92647	334412	433.17(a)	4	26	20	Nickel		
South Coast Baking, LLC	1-600565	1711 Kettering St, Irvine, CA 92614	311821	403.5(d)	7	22	4	pH		
South Coast Circuits, Inc. (Bldg 3500 A)	1-011069	3500 W.Lake Center Dr, A Bldg, Santa Ana, CA 92704	334412	433.17(a)	4	26	20	Silver		
South Coast Circuits, Inc. (Bldg 3506 A)	1-011030	3506 W.Lake Center Dr, A Bldg, Santa Ana, CA 92704	334412	433.17(a)	4	25	8			
South Coast Circuits, Inc. (Bldg 3512 A)	1-511365	3512 W.Lake Center Dr, A Bldg, Santa Ana, CA 92704	334412	433.17(a)	4	26	20			
South Coast Circuits, Inc. (Bldg 3524 A)	1-011054	3524 W.Lake Center Dr, A Bldg, Santa Ana, CA 92704	334412	433.17(a)	4	30	8			
South Coast Water	1-511405	401 S.Santa Fe St, Santa Ana, CA 92705	333318	403.5(d)	4	19	5			
Southern California Edison #1 (Mt)	1-031014	7301 Fenwick Ln, Westminster, CA 92683	811310	403.5(d)	3	10	2			
Southern California Edison #2 (Das)	1-031015	7351 Fenwick Ln, Westminster, CA 92683	811310	403.5(d)	2	13	2			



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Southern California Edison #3 (Lars)	1-031016	7455 Fenwick Ln, Westminster, CA 92683	811310	403.5(d)	2	0	2			
Spectrum Paint And Powder, Inc.	Z-321822	1332 S.Allec St, Anaheim, CA 92805	332812	433.17(a)	1	0	0			
Speedy Metals, Inc. DBA Pacific Metal Cutting	1-600767	730 Monroe Way, Placentia, CA 92870	332710	403.5(d)	3	19	4			New Class 1 Permit Issued
SPS Technologies	1-011310	2701 S.Harbor Blvd, Santa Ana, CA 92704	332722	433.17(a), 471.34(a)	3	14	9			Class 1 Permit Deactivated
SPS Technologies LLC, DBA Cherry Aerospace	1-511381	1224 E.Warner Ave, Santa Ana, CA 92705	332722	433.17(a), 467.46, 471.34(a), 471.65(a)	4	37	40	Cadmium, Copper		
Stainless Micro-Polish, Inc.	1-021672	1286 N.Grove St, Anaheim, CA 92806	332813	433.17(a)	4	32	8			
Star Manufacturing LLC, dba Commercial Metal Forming	1-600653	341 W.Collins Ave, Orange, CA 92867	332119	403.5(d)	6	20	13	Oil & Grease minerals		
Star Powder Coating, Inc.	1-531425	7601 Park Ave, Garden Grove, CA 92841	332812	433.17(a)	4	26	8			
Statek Corporation (Gold/Nickel Plating)	Z-600201	512 N.Main St, Orange, CA 92868	334419	403.5(d)	0	0	0			
Statek Corporation (Main)	1-021664	512 N.Main St, Orange, CA 92868	334419	433.17(a), 469.26(a)	4	21	6			
Statek Corporation (Orange Grove)	1-521777	1449 W.Orange Grove Ave, B Ste, Orange, CA 92868	334419	469.28(a)	4	21	2			
Stepan Company	1-021674	1208 N.Patt St, Anaheim, CA 92801	325613	417.106, 417.96	5	21	7	1, 4-dioxane		
Stremicks Heritage Foods, LLC	1-021028	4002 Westminster Ave, Santa Ana, CA 92703	311511	405.16, 405.26, 405.76	7	33	0	pH		
Summit Interconnect, Inc.	1-600012	223 N.Crescent Way, Anaheim, CA 92801	334412	433.17(a)	4	30	20			
Summit Interconnect, Inc., Orange Division	1-600060	230 W.Bristol Ln, Orange, CA 92865	334412	433.17(a)	4	30	20			
Sunny Delight Beverages Co.	1-021045	1230 N.Tustin Ave, Anaheim, CA 92807	312111	403.5(d)	3	18	0			
Superior Plating	1-021090	1901 E.Cerritos Ave, Anaheim, CA 92805	332813	433.17(a)	8	28	55	Cyanide, Zinc	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s)	
Superior Processing	1-021403	1115 Las Brisas Pl, Placentia, CA 92870	334412	433.17(a)	7	35	8	Nickel	Published as Significantly Non-Compliant (SNC) for Discharge Violation(s)	
Tayco Engineering, Inc.	1-031012	10874 Hope St, Cypress, CA 90630	334513	433.17(a)	4	18	8			
Taylor-Dunn Manufacturing Company	1-021123	2114 Ball Rd, Anaheim, CA 92804	333924	433.17(a)	4	27	7			
Teva Parenteral Medicines, Inc.	1-141007	19 Hughes Unk, Irvine, CA 92618	325412	439.47	4	16	10			
Thermal-Vac Technology, Inc.	1-021282	1221 W.Struck Ave, Orange, CA 92867	332410	433.17(a)	4	22	17		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	



APPENDIX A
LISTS OF SIUs WITH MONITORING COMPLIANCE STATUS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

Facility	Permit No.	Address	NAICS Code	Regulation	No. of Inspections	Agency Samples	SMR Samples	Pollutant(s) in Discharge Violation	SNC Status	Comment
Thompson Energy Resources, LLC	1-521773	3351 E.Birch St, Brea, CA 92821	211111	403.5(d)	8	48	4	Oil & Grease minerals		
Timken Bearing Inspection, Inc.	1-531415	4422 Corporate Center Dr, Los Alamitos, CA 90720	336412	433.17(a)	4	20	10			
Tiodize Company, Inc.	1-111132	15701 Industry Ln, Huntington Beach, CA 92649	332813	433.17(a)	4	30	20			
Toyota Racing Development	1-071059	335 Baker St, Costa Mesa, CA 92626	336310	403.5(d)	4	18	21			
Transline Technology, Inc.	1-021202	1106 S.Technology Cir, Anaheim, CA 92805	334412	433.17(a)	4	28	8			
Tropitone Furniture Co., Inc.	1-141163	5 Marconi Unk, Irvine, CA 92618	337124	433.17(a)	5	29	9			
TTM Technologies North America, LLC. (Coronado)	1-521859	3140 E.Coronado St, Anaheim, CA 92806	334412	433.17(a)	4	27	20			
TTM Technologies North America, LLC. (Croddy)	1-511366	2645 Croddy Way, Santa Ana, CA 92704	334412	433.17(a)	4	37	20			
TTM Technologies North America, LLC. (Harbor)	1-511359	2640 S.Harbor Blvd, Santa Ana, CA 92704	334412	433.17(a)	4	32	20			
Ultra-Pure Metal Finishing, Inc.	1-021703	1764 N.Case St, Orange, CA 92865	332813	433.17(a)	3	22	13			Class 1 Permit Deactivated
United Pharma, LLC	1-531418	2317 Moore Ave, Fullerton, CA 92833	325412	403.5(d)	5	23	4			
Universal Alloy Corp.	1-021706	2871 La Mesa Ave, Anaheim, CA 92806	331318	467.35(c)	4	23	10			
Universal Molding Co.	1-521836	1551 E.Orangethorpe Ave, Fullerton, CA 92831	332812	433.17(a)	4	30	7			
UOP, LLC	1-521751	2100 E.Orangethorpe Ave, Anaheim, CA 92806	326113	403.5(d)	2	6	2			Class 1 Permit Deactivated
Van Law Food Products, Inc.	1-600810	2325 Moore Ave, Fullerton, CA 92833	311941	403.5(d)	4	22	0			
Vi-Cal Metals, Inc.	1-521846	1400 N.Baxter St, Anaheim, CA 92806	562920	403.5(d)	5	8	4		Published as Significantly Non-Compliant (SNC) for Reporting Violation(s)	
Vit-Best Nutrition, Inc.	1-600010	2832 Dow Ave, Tustin, CA 92780	325411	439.47	4	26	14			
Vit-Best Nutrition, Inc.	Z-600960	2802 Dow Ave, Tustin, CA 92780	325412	439.47	0	0	0			New Zero Discharge Certification Issued
Weartech	Z-600242	1177 N.Grove St, Anaheim, CA 92806	333992	403.5(d)	3	0	0			
Weber Precision Graphics	1-011354	2730 Shannon St, Santa Ana, CA 92704	323113	403.5(d)	4	13	4			
Weidemann Water Conditioners, Inc. (Fullerton)	1-021653	1702 E.Rossllyn Ave, Fullerton, CA 92831	333318	403.5(d)	4	19	4			Formerly listed as Weidemann Water Conditioners, Inc.
West Newport Oil Company	1-061110	1080 W.17th St, Costa Mesa, CA 92627	211111	403.5(d)	5	27	16			
Wilco-Placentia Oil Operator, LLC	1-521829	550 Richfield Rd, Placentia, CA 92870	211111	403.5(d)	4	22	4			



APPENDIX A
LISTS OF SIUs WITH MONITORING COMPLIANCE STATUS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

Facility	Permit No.	Address	NAICS Code	Regulation	No. of Inspections	Agency Samples	SMR Samples	Pollutant(s) in Discharge Violation	SNC Status	Comment
Winonics (Brea)	1-031035	660 N.Puente St, Brea, CA 92821	334412	433.17(a)	4	30	8			
Winonics, Inc.	1-021735	1257 State College Blvd, Fullerton, CA 92831	334412	433.17(a)	4	18	20			
Yakult USA, Inc.	1-521850	17235 Newhope St, Fountain Valley, CA 92708	311511	403.5(d)	3	18	12			

Notes:

NAICS North American Industry Classification System
 SIUs significant industrial users
 SMR self-monitoring report

**SUMMARY OF PRIORITY POLLUTANTS AND
TRACE CONSTITUENTS ANALYSES**



APPENDIX B

PRIORITY POLLUTANTS ANALYSES SUMMARY, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

Monitoring Location	Analysis	Total Average Concentration	UNITS	Flow (MGD)	Mass (lbs/day)
EFF-001	As	2.52	µg/L	101	2.12
EFF-001	CN	4.07	µg/L	101	3.42
EFF-001	Cd	0.02	µg/L	101	0.017
EFF-001	Cr	1.07	µg/L	101	0.898
EFF-001	Cu	4.92	µg/L	101	4.13
EFF-001	Hg	5.14	ng/L	101	0.004
EFF-001	Ni	7.75	µg/L	101	6.51
EFF-001	ORG	17.4	µg/L	101	14.6
EFF-001	Pb	0.464	µg/L	101	0.39
EFF-001	Sb	1.32	µg/L	101	1.11
EFF-001	Se	5.81	µg/L	101	4.88
EFF-001	Zn	24.5	µg/L	101	20.6
INF-001	Ag	0.783	µg/L	119	0.777
INF-001	As	2.25	µg/L	119	2.23
INF-001	CN	1.84	µg/L	119	1.82
INF-001	Cd	0.42	µg/L	119	0.417
INF-001	Cr	5.69	µg/L	119	5.64
INF-001	Cu	100	µg/L	119	99.2
INF-001	Hg	168	ng/L	119	0.166
INF-001	Ni	9.64	µg/L	119	9.56
INF-001	ORG	127	ng/L	119	0.126
INF-001	ORG	37.4	µg/L	119	37
INF-001	Pb	2.69	µg/L	119	2.67
INF-001	Sb	1.25	µg/L	119	1.24
INF-001	Se	2.58	µg/L	119	2.56
INF-001	Zn	163	µg/L	119	162
INF-002	Ag	0.770	µg/L	69.4	0.446
INF-002	As	4.08	µg/L	69.4	2.36
INF-002	CN	2.34	µg/L	69.4	1.35
INF-002	Cd	0.504	µg/L	69.4	0.292
INF-002	Cr	9.44	µg/L	69.4	5.46
INF-002	Cu	85.5	µg/L	69.4	49.5
INF-002	Hg	122	ng/L	69.4	0.071
INF-002	Ni	9.32	µg/L	69.4	5.4
INF-002	ORG	17.5	µg/L	69.4	10.1
INF-002	Pb	2.79	µg/L	69.4	1.62
INF-002	Sb	1.3	µg/L	69.4	0.753
INF-002	Se	6.02	µg/L	69.4	3.48
INF-002	Zn	148	µg/L	69.4	85.7

Notes:

MGD million gallons per day
 lbs/day pounds per day
 µg/L microgram per liter
 ng/L nanogram per liter



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
EFF-001	Silver	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Arsenic	2.63	µg/L	2.77	µg/L	2.88	µg/L	2.92	µg/L	2.99	µg/L	2.79	µg/L
	Beryllium	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Cadmium	ND	µg/L	0.240	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Cyanide	4.35	µg/L	4.31	µg/L	5.18	µg/L	4.30	µg/L	4.83	µg/L	5.26	µg/L
	Chromium	1.02	µg/L	1.01	µg/L	1.23	µg/L	1.15	µg/L	1.18	µg/L	1.10	µg/L
	Copper	5.70	µg/L	4.89	µg/L	3.16	µg/L	3.35	µg/L	6.70	µg/L	6.29	µg/L
	Mercury	6.3	ng/L	4.3	ng/L	4.9	ng/L	5.4	ng/L	6.6	ng/L	4.2	ng/L
	Nickel	9.32	µg/L	8.36	µg/L	9.08	µg/L	8.19	µg/L	8.28	µg/L	8.24	µg/L
	1,1,1-Trichloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,1,2,2-Tetrachloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,1,2-Trichloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,1-Dichloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,2-Dichlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,2-Dichloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,2-Dichloropropane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,3-Dichlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,4-Dichlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2,3,7,8-Tetrachlorodibenzo-P-Dioxin	ND	pg/L				ND	pg/L					ND
	2,4,6-Trichlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2,4-Dichlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2,4-Dimethylphenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2,4-Dinitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2,4-Dinitrotoluene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2,6-Dinitrotoluene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2-Chloronaphthalene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2-Chlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2-Nitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2-Chloroethylvinylether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	3,3-Dichlorobenzidine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	2-Methyl-4,6-Dinitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	4-Bromophenyl-Phenyl Ether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	4-Chloro-3-Methylphenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	4-Chlorophenyl-Phenyl Ether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	4-Nitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Acenaphthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Acenaphthylene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Aldrin	ND	µg/L							ND			µg/L
	Anthracene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	1,2-Diphenylhydrazine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Benzo (a) Anthracene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Benzidine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Benzo (a) Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Benzo (b) Fluoranthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Benzo (g,h,i) Perylene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Benzo (k) Fluoranthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19		Aug-19		Sep-19		Oct-19		Nov-19		Dec-19		Jan-20		Feb-20		Mar-20		Apr-20		May-20		Jun-20			
EFF-001	Butyl Benzyl Phthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Chlordane	ND	µg/L											ND	µg/L												
	Chrysene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Di-n-Butyl Phthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Di-n-Octyl Phthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Dibenzo (a,h) Anthracene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Dieldrin	ND	µg/L											ND	µg/L												
	Diethylphthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	5.72	µg/L	5.72	µg/L
	Dimethylphthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Endosulfan	ND	µg/L											ND	µg/L												
	Endosulfan I	ND	µg/L											ND	µg/L												
	Endosulfan II	ND	µg/L											ND	µg/L												
	Endosulfan Sulfate	ND	µg/L											ND	µg/L												
	Endrin	ND	µg/L											ND	µg/L												
	Fluroanthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Fluorene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Heptachlor	ND	µg/L											ND	µg/L												
	Hexachlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Hexachlorobutadiene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Hexachlorocyclopentadiene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Hexachloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Indeno (1,2,3-cd) Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Isophorone	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Nitrobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	PCB - 1016	ND	µg/L											ND	µg/L												
	PCB - 1221	ND	µg/L											ND	µg/L												
	PCB - 1232	ND	µg/L											ND	µg/L												
	PCB - 1242	ND	µg/L											ND	µg/L												
	PCB - 1248	ND	µg/L											ND	µg/L												
	PCB - 1254	ND	µg/L											ND	µg/L												
	PCB - 1260	ND	µg/L											ND	µg/L												
	Pentachlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Phenanthrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Phenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Acrolein	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Acrylonitrile	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Alpha-BHC	ND	µg/L											ND	µg/L												
	Benzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Beta-BHC	ND	µg/L											ND	µg/L												
	Bis (2-Chloroethoxy) Methane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bis (2-Chloroethyl) Ether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bis (2-Ethylhexyl) Phthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bromodichloromethane	7.94	µg/L	7.87	µg/L	4.70	µg/L	7.99	µg/L	4.82	µg/L	6.99	µg/L	4.51	µg/L	ND	µg/L	3.22	µg/L	6.78	µg/L	4.32	µg/L	5.46	µg/L		
	Bromoform	1.37	µg/L	ND	µg/L	ND	µg/L	1.07	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
Bromomethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	
Carbon Tetrachloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20												
EFF-001	Chlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chloroform	8.94	µg/L	9.01	µg/L	6.78	µg/L	9.39	µg/L	7.90	µg/L	9.84	µg/L	12.7	µg/L	2.55	µg/L	5.67	µg/L	13.5	µg/L	9.43	µg/L	9.03	µg/L
	cis-1,3-Dichloropropene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Delta-BHC	ND	µg/L																						
	Dibromochloromethane	4.86	µg/L	3.81	µg/L	2.43	µg/L	4.12	µg/L	1.87	µg/L	2.37	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	2.23	µg/L	ND	µg/L	2.40	µg/L
	Ethylbenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Gamma-BHC	ND	µg/L											ND	µg/L										
	Methylene Chloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	N-Nitrosodiprophylamine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	N-Nitrosodimethylamine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	N-Nitrosodiphenylamine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	4,4'-DDD	ND	µg/L											ND	µg/L										
	4,4'-DDE	ND	µg/L											ND	µg/L										
	4,4'-DDT	ND	µg/L											ND	µg/L										
	Tetrachloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	1.58	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Toluene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	trans-1,2-Dichloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	trans-1,3-Dichloropropene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Trichloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Vinyl Chloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Lead	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	0.480	µg/L	0.510	µg/L	0.470	µg/L	1.24	µg/L	0.630	µg/L	0.880	µg/L	0.570	µg/L	0.790	µg/L
	Antimony	1.28	µg/L	1.36	µg/L	1.57	µg/L	1.20	µg/L	1.70	µg/L	1.39	µg/L	1.32	µg/L	0.790	µg/L	1.46	µg/L	1.76	µg/L	0.970	µg/L	1.03	µg/L
	Selenium	7.14	µg/L	7.87	µg/L	8.05	µg/L	6.49	µg/L	6.57	µg/L	6.54	µg/L	5.18	µg/L	3.15	µg/L	4.54	µg/L	5.23	µg/L	2.64	µg/L	6.35	µg/L
	Thallium	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Zinc	23.7	µg/L	25.5	µg/L	28.7	µg/L	24.5	µg/L	29.4	µg/L	29.8	µg/L	26.9	µg/L	18.4	µg/L	28.8	µg/L	20.9	µg/L	12.8	µg/L	24.5	µg/L
	INF-001	Silver	1.15	µg/L	0.840	µg/L	0.920	µg/L	1.00	µg/L	0.880	µg/L	0.740	µg/L	0.700	µg/L	0.850	µg/L	0.640	µg/L	0.570	µg/L	0.480	µg/L	0.620	µg/L
Arsenic		2.34	µg/L	2.16	µg/L	2.40	µg/L	2.42	µg/L	2.06	µg/L	2.03	µg/L	2.31	µg/L	2.04	µg/L	2.14	µg/L	2.10	µg/L	2.38	µg/L	2.67	µg/L
Beryllium		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
Cadmium		0.310	µg/L	0.440	µg/L	0.660	µg/L	0.380	µg/L	0.740	µg/L	0.300	µg/L	0.230	µg/L	0.290	µg/L	0.340	µg/L	0.360	µg/L	0.390	µg/L	0.600	µg/L
Cyanide		2.37	µg/L	2.14	µg/L	2.28	µg/L	1.91	µg/L	2.28	µg/L	2.71	µg/L	2.80	µg/L	ND	µg/L	2.00	µg/L	1.87	µg/L	ND	µg/L	1.66	µg/L
Chromium		5.88	µg/L	5.11	µg/L	7.62	µg/L	7.23	µg/L	5.88	µg/L	5.00	µg/L	5.37	µg/L	4.88	µg/L	4.74	µg/L	4.72	µg/L	6.21	µg/L	5.59	µg/L
Copper		98.3	µg/L	86.8	µg/L	116	µg/L	124	µg/L	109	µg/L	79.5	µg/L	85.1	µg/L	98.7	µg/L	154	µg/L	76.1	µg/L	91.2	µg/L	86.9	µg/L
Mercury		220	ng/L	150	ng/L	130	ng/L	140	ng/L	140	ng/L	190	ng/L	280	ng/L	160	ng/L	150	ng/L	88	ng/L	96	ng/L	270	ng/L
Nickel		11.9	µg/L	11.6	µg/L	8.12	µg/L	8.39	µg/L	14.3	µg/L	7.68	µg/L	10.7	µg/L	9.29	µg/L	7.58	µg/L	7.62	µg/L	10.2	µg/L	8.35	µg/L
1,1,1-Trichloroethane		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,1,2,2-Tetrachloroethane		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,1,2-Trichloroethane		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,1-Dichloroethane		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,2-Dichlorobenzene		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,2-Dichloroethane		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,2-Dichloropropane		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,3-Dichlorobenzene		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
1,4-Dichlorobenzene		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
2,4,6-Trichlorophenol		ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20												
INF-001	2,4-Dichlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2,4-Dimethylphenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2,4-Dinitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2,4-Dinitrotoluene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2,6-Dinitrotoluene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2-Chloronaphthalene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2-Chlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2-Nitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2-Chloroethylvinylether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	3,3-Dichlorobenzidine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	2-Methyl-4,6-Dinitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	4-Bromophenyl-Phenyl Ether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	4-Chloro-3-Methylphenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	4-Chlorophenyl-Phenyl Ether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	4-Nitrophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Acenaphthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Acenaphthylene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Aldrin	ND	µg/L						ND	µg/L															
	Anthracene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	1,2-Diphenylhydrazine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Benzo (a) Anthracene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Benzidine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Benzo (a) Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Benzo (b) Fluoranthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Benzo (g,h,i) Perylene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Benzo (k) Fluoranthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L												
	Butyl Benzyl Phthalate	2.68	µg/L	1.97	µg/L	2.63	µg/L	ND	µg/L	1.84	µg/L	1.64	µg/L	ND	µg/L	1.92	µg/L	ND	µg/L	2.59	µg/L	ND	µg/L		
	Chlordane	ND	µg/L								ND	µg/L													
	Chrysene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Di-n-Butyl Phthalate	1.16	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	1.29	µg/L	ND	µg/L	1.26	µg/L	ND	µg/L	ND	µg/L		
	Di-n-Octyl Phthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Dibenzo (a,h) Anthracene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Dieldrin	ND	µg/L								ND	µg/L													
	Diethylphthalate	3.17	µg/L	8.30	µg/L	3.11	µg/L	3.97	µg/L	3.14	µg/L	3.86	µg/L	2.56	µg/L	2.87	µg/L	3.73	µg/L	3.24	µg/L	3.18	µg/L	2.61	µg/L
	Dimethylphthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Endosulfan	ND	µg/L										ND	µg/L											
	Endosulfan I	ND	µg/L										ND	µg/L											
	Endosulfan II	ND	µg/L										ND	µg/L											
	Endosulfan Sulfate	ND	µg/L										ND	µg/L											
	Endrin	ND	µg/L										ND	µg/L											
	Fluoranthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Fluorene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
Heptachlor	ND	µg/L										ND	µg/L												
Hexachlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L			
Hexachlorobutadiene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L			
Hexachlorocyclopentadiene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L			
Hexachloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L			



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20												
INF-001	Indeno (1,2,3-cd) Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Isophorone	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Nitrobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	PCB - 1016	ND	µg/L							ND	µg/L														
	PCB - 1221	ND	µg/L							ND	µg/L														
	PCB - 1232	ND	µg/L							ND	µg/L														
	PCB - 1242	ND	µg/L							ND	µg/L														
	PCB - 1248	ND	µg/L							ND	µg/L														
	PCB - 1254	ND	µg/L							ND	µg/L														
	PCB - 1260	ND	µg/L							ND	µg/L														
	Pentachlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Phenanthrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Phenol	18.4	µg/L	16.0	µg/L	16.7	µg/L	18.0	µg/L	14.9	µg/L	17.0	µg/L	15.1	µg/L	16.1	µg/L	16.6	µg/L	11.8	µg/L	16.6	µg/L	15.4	µg/L
	Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Acrolein	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Acrylonitrile	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Alpha-BHC	ND	µg/L											ND	µg/L										
	Benzene	ND	µg/L	2.51	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Beta-BHC	ND	µg/L											ND	µg/L										
	Bis (2-Chloroethoxy) Methane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bis (2-Chloroethyl) Ether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bis (2-Ethylhexyl) Phthalate	8.11	µg/L	8.04	µg/L	8.04	µg/L	8.39	µg/L	7.00	µg/L	8.14	µg/L	7.61	µg/L	7.83	µg/L	8.40	µg/L	5.78	µg/L	7.97	µg/L	6.98	µg/L
	Bromodichloromethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bromoform	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bromomethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Carbon Tetrachloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chloroform	2.20	µg/L	2.96	µg/L	2.59	µg/L	2.48	µg/L	2.56	µg/L	3.90	µg/L	3.19	µg/L	2.01	µg/L	2.41	µg/L	2.17	µg/L	1.57	µg/L	1.75	µg/L
	cis-1,3-Dichloropropene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Delta-BHC	ND	µg/L											ND	µg/L										
	Dibromochloromethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Ethylbenzene	ND	µg/L	2.90	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Gamma-BHC	ND	µg/L											ND	µg/L										
	Methylene Chloride	1.10	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	1.10	µg/L	10.2	µg/L	ND	µg/L	ND	µg/L	4.44	µg/L	7.34	µg/L	9.56	µg/L	ND	µg/L
	N-Nitrosodiprophylamine	ND	µg/L	ND	µg/L	ND	ng/L	ND	µg/L	ND	ng/L	ND	µg/L	ND	ng/L	ND	µg/L	ND	µg/L	ND	ng/L	ND	ng/L	ND	µg/L
	N-Nitrosodimethylamine	ND	µg/L	ND	µg/L	127	ng/L	ND	µg/L	74.0	ng/L	ND	µg/L	225	ng/L	ND	µg/L	ND	µg/L	ND	µg/L	29.0	ng/L	ND	µg/L
	N-Nitrosodiphenylamine	ND	µg/L	ND	µg/L	ND	ng/L	ND	µg/L	ND	ng/L	ND	µg/L	ND	ng/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	ng/L	ND	µg/L
	4,4'-DDD	ND	µg/L											ND	µg/L										
	4,4'-DDE	ND	µg/L											ND	µg/L										
4,4'-DDT	ND	µg/L											ND	µg/L											
Tetrachloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	
Toluene	ND	µg/L	15.9	µg/L	2.36	µg/L	ND	µg/L	4.80	µg/L	1.85	µg/L	1.05	µg/L	1.06	µg/L	0.640	µg/L	1.93	µg/L	0.750	µg/L	0.750	µg/L	
trans-1,2-Dichloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	
trans-1,3-Dichloropropene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	
Trichloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	
Vinyl Chloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
INF-001	Lead	1.98 µg/L	1.85 µg/L	2.55 µg/L	2.64 µg/L	2.48 µg/L	1.92 µg/L	2.15 µg/L	2.27 µg/L	2.98 µg/L	5.21 µg/L	3.60 µg/L	2.63 µg/L
	Antimony	1.14 µg/L	1.03 µg/L	1.13 µg/L	1.28 µg/L	1.19 µg/L	1.19 µg/L	1.18 µg/L	1.10 µg/L	1.20 µg/L	2.05 µg/L	1.57 µg/L	0.990 µg/L
	Selenium	2.47 µg/L	3.74 µg/L	2.55 µg/L	3.14 µg/L	2.40 µg/L	1.83 µg/L	2.97 µg/L	1.90 µg/L	2.44 µg/L	1.92 µg/L	2.84 µg/L	2.74 µg/L
	Thallium	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	Zinc	161 µg/L	161 µg/L	214 µg/L	183 µg/L	185 µg/L	144 µg/L	143 µg/L	140 µg/L	158 µg/L	133 µg/L	171 µg/L	167 µg/L
INF-002	2,3,7,8-Tetrachlorodibenzo-P-Dioxin												ND pg/L
	Silver	0.530 µg/L	0.970 µg/L	0.780 µg/L	0.980 µg/L	1.46 µg/L	0.870 µg/L	0.690 µg/L	0.720 µg/L	0.620 µg/L	0.430 µg/L	0.500 µg/L	0.690 µg/L
	Arsenic	3.35 µg/L	4.17 µg/L	3.73 µg/L	3.93 µg/L	4.32 µg/L	3.90 µg/L	4.01 µg/L	4.58 µg/L	3.91 µg/L	4.82 µg/L	3.91 µg/L	4.35 µg/L
	Beryllium	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	Cadmium	0.520 µg/L	0.530 µg/L	0.560 µg/L	0.580 µg/L	0.560 µg/L	0.520 µg/L	0.470 µg/L	0.490 µg/L	0.500 µg/L	0.430 µg/L	0.420 µg/L	0.470 µg/L
	Cyanide	2.23 µg/L	3.47 µg/L	2.79 µg/L	2.10 µg/L	2.10 µg/L	2.97 µg/L	1.91 µg/L	1.91 µg/L	2.36 µg/L	1.87 µg/L	2.22 µg/L	2.09 µg/L
	Chromium	7.28 µg/L	10.5 µg/L	7.91 µg/L	7.67 µg/L	10.3 µg/L	7.35 µg/L	9.08 µg/L	8.50 µg/L	8.13 µg/L	6.03 µg/L	6.77 µg/L	23.8 µg/L
	Copper	76.6 µg/L	121 µg/L	80.8 µg/L	83.4 µg/L	96.7 µg/L	76.2 µg/L	95.5 µg/L	89.1 µg/L	105 µg/L	63.9 µg/L	59.3 µg/L	78.9 µg/L
	Mercury	110 ng/L	210 ng/L	86 ng/L	100 ng/L	150 ng/L	74 ng/L	140 ng/L	100 ng/L	130 ng/L	93 ng/L	160 ng/L	110 ng/L
	Nickel	8.70 µg/L	12.6 µg/L	8.55 µg/L	9.45 µg/L	9.36 µg/L	8.93 µg/L	9.83 µg/L	7.92 µg/L	7.81 µg/L	8.13 µg/L	6.17 µg/L	14.4 µg/L
	1,1,1-Trichloroethane	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,1,2,2-Tetrachloroethane	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,1,2-Trichloroethane	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,1-Dichloroethane	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,2-Dichlorobenzene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,2-Dichloroethane	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,2-Dichloropropane	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,3-Dichlorobenzene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,4-Dichlorobenzene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2,4,6-Trichlorophenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2,4-Dichlorophenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2,4-Dimethylphenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2,4-Dinitrophenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2,4-Dinitrotoluene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2,6-Dinitrotoluene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2-Chloronapthalene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2-Chlorophenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2-Nitrophenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2-Chloroethylvinylether	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	3,3-Dichlorobenzidine	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	2-Methyl-4,6-Dinitrophenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	4-Bromophenyl-Phenyl Ether	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	4-Chloro-3-Methylphenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	4-Chlorophenyl-Phenyl Ether	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	4-Nitrophenol	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	Acenaphthene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	Acenaphthylene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	Aldrin	ND µg/L							ND µg/L				
	Anthracene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	1,2-Diphenylhydrazine	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	Benzo (a) Anthracene	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L
	Benzidine	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L	ND µg/L



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20												
INF-002	Benzo (a) Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Benzo (b) Fluoranthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Benzo (g,h,i) Perylene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Benzo (k) Fluoranthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Butyl Benzyl Phthalate	1.41	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	1.68	µg/L	ND	µg/L	2.35	µg/L	ND	µg/L		
	Chlordane	ND	µg/L												ND	µg/L									
	Chrysene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Di-n-Butyl Phthalate	0.850	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Di-n-Octyl Phthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Dibenzo (a,h) Anthracene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Dieldrin	ND	µg/L												ND	µg/L									
	Diethylphthalate	3.00	µg/L	2.20	µg/L	1.51	µg/L	2.21	µg/L	1.89	µg/L	2.90	µg/L	1.65	µg/L	ND	µg/L	2.03	µg/L	3.73	µg/L	2.01	µg/L	1.86	µg/L
	Dimethylphthalate	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Endosulfan	ND	µg/L												ND	µg/L									
	Endosulfan I	ND	µg/L												ND	µg/L									
	Endosulfan II	ND	µg/L												ND	µg/L									
	Endosulfan Sulfate	ND	µg/L												ND	µg/L									
	Endrin	ND	µg/L												ND	µg/L									
	Fluroanthene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Fluorene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Heptachlor	ND	µg/L												ND	µg/L									
	Hexachlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Hexachlorobutadiene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Hexachlorocyclopentadiene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Hexachloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Indeno (1,2,3-cd) Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Isophorone	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Nitrobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	PCB - 1016	ND	µg/L												ND	µg/L									
	PCB - 1221	ND	µg/L												ND	µg/L									
	PCB - 1232	ND	µg/L												ND	µg/L									
	PCB - 1242	ND	µg/L												ND	µg/L									
	PCB - 1248	ND	µg/L												ND	µg/L									
	PCB - 1254	ND	µg/L												ND	µg/L									
	PCB - 1260	ND	µg/L												ND	µg/L									
	Pentachlorophenol	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Phenanthrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Phenol	6.22	µg/L	2.27	µg/L	4.38	µg/L	5.26	µg/L	6.14	µg/L	6.23	µg/L	3.51	µg/L	6.63	µg/L	9.47	µg/L	6.42	µg/L	2.83	µg/L	2.29	µg/L
	Pyrene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Acrolein	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Acrylonitrile	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L		
	Alpha-BHC	ND	µg/L												ND	µg/L									
Benzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L			
Beta-BHC	ND	µg/L												ND	µg/L										
Bis (2-Chloroethoxy) Methane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L			
Bis (2-Chloroethyl) Ether	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L			
Bis (2-Ethylhexyl) Phthalate	5.59	µg/L	7.36	µg/L	4.39	µg/L	5.44	µg/L	5.78	µg/L	4.29	µg/L	5.89	µg/L	5.63	µg/L	6.04	µg/L	4.44	µg/L	5.48	µg/L	4.78	µg/L	



APPENDIX B
PRIORITY POLLUTANTS ANALYSES RESULTS, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

MONITORING LOCATION	NAME	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20												
INF-002	Bromodichloromethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bromoform	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Bromomethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Carbon Tetrachloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chlorobenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chloroethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Chloroform	2.37	µg/L	1.81	µg/L	2.12	µg/L	2.71	µg/L	2.18	µg/L	2.15	µg/L	1.81	µg/L	2.44	µg/L	1.60	µg/L	3.18	µg/L	1.74	µg/L	1.91	µg/L
	cis-1,3-Dichloropropene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Delta-BHC	ND	µg/L											ND	µg/L										
	Dibromochloromethane	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Ethylbenzene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Gamma-BHC	ND	µg/L											ND	µg/L										
	Methylene Chloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	N-Nitrosodiprophylamine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	N-Nitrosodimethylamine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	N-Nitrosodiphenylamine	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	4,4'-DDD	ND	µg/L											ND	µg/L										
	4,4'-DDE	ND	µg/L											ND	µg/L										
	4,4'-DDT	ND	µg/L											ND	µg/L										
	Tetrachloroethene	ND	µg/L	ND	µg/L	ND	µg/L	1.68	µg/L	2.42	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Toluene	2.24	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	1.73	µg/L	1.36	µg/L	2.01	µg/L	0.920	µg/L	1.11	µg/L	10.7	µg/L	1.40	µg/L
	trans-1,2-Dichloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	trans-1,3-Dichloropropene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Trichloroethene	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Vinyl Chloride	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Lead	1.94	µg/L	2.92	µg/L	2.16	µg/L	2.20	µg/L	2.66	µg/L	2.90	µg/L	2.57	µg/L	3.13	µg/L	2.71	µg/L	4.13	µg/L	2.98	µg/L	3.14	µg/L
	Antimony	1.01	µg/L	1.47	µg/L	1.46	µg/L	1.45	µg/L	1.61	µg/L	1.07	µg/L	1.16	µg/L	1.48	µg/L	1.58	µg/L	1.34	µg/L	1.02	µg/L	0.960	µg/L
	Selenium	6.52	µg/L	7.70	µg/L	6.10	µg/L	6.24	µg/L	5.10	µg/L	5.65	µg/L	7.83	µg/L	6.16	µg/L	4.94	µg/L	4.49	µg/L	5.27	µg/L	6.22	µg/L
	Thallium	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L	ND	µg/L
	Zinc	131	µg/L	199	µg/L	151	µg/L	140	µg/L	157	µg/L	120	µg/L	171	µg/L	160	µg/L	150	µg/L	125	µg/L	131	µg/L	145	µg/L

Notes:

ND non-detect
 µg/L microgram per liter

PRIORITY POLLUTANTS



APPENDIX C

ORANGE COUNTY SANITATION DISTRICT

PRIORITY POLLUTANTS LIST

Elements

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Other Constituents

Asbestos
Cyanide

Pesticides and PCB's (EPA Method 608)

Aldrin
Alpha-BHC
Beta-BHC
Delta-BHC
Gamma-BHC
Chlordane
4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Heptachlor
Heptachlor Epoxide
PCB-1016
PCB-1221
PCB-1232
PCB-1242
PCB-1248
PCB-1254
PCB-1260
Toxaphene

Purgeable Organic Compounds (EPA Method 624)

Acrolein
Acrylonitrile
Benzene
Bromomethane
Bromodichloromethane
Bromoform
Carbon Tetrachloride
Chlorobenzene
2-Chloroethylvinylether
Chloroform
Chloromethane
Dibromochloromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
Trans-1,2-Dichloroethene
1,2-Dichloropropane
Cis-1,3-Dichloropropene
Trans-1,3-Dichloropropene
Ethylbenzene
Methylene Chloride
1,1,2,2-Tetrachloroethane
Tetrachloroethene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Toluene
Vinyl Chloride

Base/Neutral Extractable Organic Compounds (EPA Method 625)

Acenaphthene
Acenaphthylene
Anthracene
Benzidene
Benzo (a) Anthracene
Benzo (b) Fluoranthene
Benzo (k) Fluoroanthene
Benzoe (a) Pyrene
Benzo (g,h,i) Perylene
Bis (2-Chloroethyl) Ether
Bis (2-Chloroethoxy) Methane
Bis (2-Ethylhexyl) Phthalate
Bis (dichloroisopropyl) Ether
4-Bromophenyl-Phenyl Ether
Butyl Benzyl Phthalate

Base/Neutral Extractable Organic Compounds (Continued)

2-Chloronaphthalene
4-Chlorophenyl-Phenyl Ether
Chrysene
Dibenzo (a,h) Anthracene
Di-N-Butyl Phthalate
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
3,3-Dichlorobenzidine
Diethylphthalate
Dimethylphthalate
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-N-Octyl Phthalate
1,2-Diphenylhydrazine
Fluroanthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Hexachlorocyclopentadiene
Indeno (1,2,3-cd) Pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodiprophylamine
N-Nitrosodiphenylamine
Phenanthrene
Pyrene
2,3,7,8-Tetrachlordibenzo-P-Dioxin
1,2,4-Trichlorobenzene

Acid Extractable Organic Compounds (EPA Method 625)

4-Chloro-3-Methylphenol
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2-Methyl-4,6-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,4,6-Trichlorophenol

FEES/PENALTIES FOR NON-COMPLIANCES



APPENDIX D
FEES AND PENALTIES FOR NON-COMPLIANCES, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

Facility	Issue Date	Amount	Item	Enforcement ID
A & R Powder Coating, Inc.	08/08/2019	\$ 525	Notice of Violation	2019-00030533
Active Plating, Inc.	10/21/2019	\$ 650	Significant Non-Compliance Publication	2019-00032132
Active Plating, Inc.	04/08/2020	\$ 7,000	Administrative Complaint Settlement Agreement	2019-00032311
Advance Tech Plating, Inc.	08/21/2019	\$ 725	Notice of Violation	2019-00030946
Alliance Medical Products, Inc.	07/09/2019	\$ 707	Notice of Violation	2019-00030213
Allied International	02/25/2020	\$ 400	Notice of Violation	2020-00033863
Alloy Die Casting Co.	06/04/2020	\$ 200	Notice of Violation	2020-00035879
Aluminum Precision Products, Inc. (Susan)	11/26/2019	\$ 400	Notice of Violation	2019-00032571
Anchen Pharmaceuticals, Inc. (Fairbanks)	01/23/2020	\$ 707	Notice of Violation	2020-00033556
Anchen Pharmaceuticals, Inc. (Goodyear)	01/16/2020	\$ 400	Notice of Violation	2020-00033430
Arrowhead Products Corporation	04/30/2020	\$ 707	Notice of Violation	2020-00035112
Aseptic Technology, LLC	08/29/2019	\$ 185,000	Administrative Complaint Settlement Agreement	2019-00030568
Astech Engineered Products, Inc.	04/02/2020	\$ 507	Notice of Violation	2020-00034650
Bimbo Bakeries U.S.A, Inc.	05/07/2020	\$ 707	Notice of Violation	2020-00035391
Bodycote Thermal Processing	11/22/2019	\$ 725	Notice of Violation	2019-00032421
Brea Power II, LLC	08/12/2019	\$ 507	Notice of Violation	2019-00030882
Bristol Industries	08/12/2019	\$ 400	Notice of Violation	2019-00030703
Bristol Industries	08/12/2019	\$ 775	Notice of Violation	2019-00030883
Bristol Industries	08/12/2019	\$ 825	Notice of Violation	2019-00030891
Bristol Industries	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032134
Bristol Industries	12/30/2019	\$ 400	Notice of Violation	2019-00033052
Bristol Industries	01/13/2020	\$ 725	Notice of Violation	2020-00033350
Bristol Industries	02/10/2020	\$ 200	Notice of Violation	2019-00031943
Bristol Industries	02/10/2020	\$ 200	Notice of Violation	2019-00032433
Bristol Industries	02/10/2020	\$ 400	Notice of Violation	2020-00033777
Bristol Industries	02/18/2020	\$ 725	Notice of Violation	2020-00033941
Bristol Industries	02/18/2020	\$ 725	Notice of Violation	2020-00033952
Bristol Industries	02/19/2020	\$ 400	Notice of Violation	2020-00033981



**APPENDIX D
FEES AND PENALTIES FOR NON-COMPLIANCES, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT**

Facility	Issue Date	Amount	Item	Enforcement ID
Brothers International Desserts (North)	10/14/2019	\$ 507	Notice of Violation	2019-00031896
Brothers International Desserts (West)	07/10/2019	\$ 507	Notice of Violation	2019-00030388
Cadillac Plating, Inc.	08/12/2019	\$ 725	Notice of Violation	2019-00030466
Catalina Cylinders, A Div. of APP	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032135
City of Tustin - Maintenance Yard	06/18/2020	\$ 525	Notice of Violation	2020-00036194
Coast to Coast Circuits, Inc.	10/21/2019	\$ 707	Notice of Violation	2019-00031933
Coastline Metal Finishing Corp., A Division of Valence Surface	10/21/2019	\$ 815	Significant Non-Compliance Publication	2019-00032136
Corru-Kraft Buena Park	10/28/2019	\$ 507	Notice of Violation	2019-00031687
Corru-Kraft Buena Park	02/18/2020	\$ 507	Notice of Violation	2020-00033944
Corru-Kraft Buena Park	04/30/2020	\$ 507	Notice of Violation	2020-00035115
CP-Carrillo, Inc. (Armstrong)	12/10/2019	\$ 707	Notice of Violation	2019-00032809
Darling International, Inc.	07/09/2019	\$ 507	Notice of Violation	2019-00030218
Data Aire, Inc. #2	08/08/2019	\$ 507	Notice of Violation	2019-00030848
Dr. Smoothie Enterprises - DBA Bevolution Group	09/12/2019	\$ 707	Notice of Violation	2019-00031378
Dr. Smoothie Enterprises - DBA Bevolution Group	04/30/2020	\$ 707	Notice of Violation	2020-00035117
Electrolurgy, Inc.	10/14/2019	\$ 725	Notice of Violation	2019-00031911
Excello Circuits Manufacturing Corp.	03/12/2020	\$ 200	Notice of Violation	2020-00034385
Excello Circuits Manufacturing Corp.	04/02/2020	\$ 707	Notice of Violation	2020-00034648
Fabrication Concepts Corporation	04/30/2020	\$ 757	Notice of Violation	2020-00035118
Gemini Industries, Inc.	12/12/2019	\$ 725	Notice of Violation	2019-00032815
Golden State Pumping LLC	06/04/2020	\$ 707	Notice of Violation	2020-00035880
Golden State Pumping LLC	06/30/2020	\$ 200	Notice of Violation	2020-00036438
Graphic Packaging International, Inc.	05/14/2020	\$ 507	Notice of Violation	2020-00035513
Hartwell Corporation	10/21/2019	\$ 980	Significant Non-Compliance Publication	2019-00032137
Hartwell Corporation	04/08/2020	\$ 6,000	Administrative Complaint Settlement Agreement	2019-00032346
Hi Tech Solder	02/18/2020	\$ 525	Notice of Violation	2020-00033945
Hi Tech Solder	04/02/2020	\$ 200	Notice of Violation	2020-00034661
Hi Tech Solder	04/16/2020	\$ 725	Notice of Violation	2020-00034853



**APPENDIX D
FEES AND PENALTIES FOR NON-COMPLIANCES, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT**

Facility	Issue Date	Amount	Item	Enforcement ID
Hi Tech Solder	05/21/2020	\$ 400	Notice of Violation	2020-00035584
Hixson Metal Finishing	07/08/2019	\$ 400	Notice of Violation	2019-00030214
Hixson Metal Finishing	07/22/2019	\$ 725	Notice of Violation	2019-00030448
Hixson Metal Finishing	08/23/2019	\$ 400	Notice of Violation	2019-00030998
Hixson Metal Finishing	12/30/2019	\$ 725	Notice of Violation	2019-00032819
Hixson Metal Finishing	01/15/2020	\$ 400	Notice of Violation	2020-00033376
Hixson Metal Finishing	05/28/2020	\$ 400	Notice of Violation	2020-00035836
Howmet Global Fastening Systems Inc.	08/12/2019	\$ 725	Notice of Violation	2019-00030446
Howmet Global Fastening Systems Inc.	10/03/2019	\$ 400	Notice of Violation	2019-00031798
Howmet Global Fastening Systems Inc.	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032133
Howmet Global Fastening Systems Inc.	03/30/2020	\$ 821	Notice of Violation	2020-00034639
Independent Forge Company	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032138
JD Processing, Inc. (East)	10/21/2019	\$ 650	Significant Non-Compliance Publication	2019-00032139
Kenlen Specialities, Inc.	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032258
Kraft Heinz Company	10/21/2019	\$ 650	Significant Non-Compliance Publication	2019-00032259
Kraft Heinz Company	04/08/2020	\$ 4,000	Administrative Complaint Settlement Agreement	2019-00032577
Linco Industries, Inc.	11/26/2019	\$ 400	Notice of Violation	2019-00032352
LM Chrome Corporation	02/06/2020	\$ 200	Notice of Violation	2020-00033862
Manufactured Packaging Products	04/30/2020	\$ 525	Notice of Violation	2020-00035119
Maruchan, Inc. (Deere-South)	05/21/2020	\$ 507	Notice of Violation	2020-00035599
Mckenna Labs, Inc.	02/18/2020	\$ 725	Notice of Violation	2020-00033946
Meggitt, Inc.	08/20/2019	\$ 725	Notice of Violation	2019-00030940
National Construction Rentals	10/21/2019	\$ 650	Significant Non-Compliance Publication	2019-00032260
National Construction Rentals	11/14/2019	\$ 707	Notice of Violation	2019-00032368
National Construction Rentals	04/08/2020	\$ 22,000	Administrative Complaint Settlement Agreement	2019-00033958
Nor-Cal Beverage Co., Inc. (Main)	06/11/2020	\$ 507	Notice of Violation	2020-00036104
Nor-Cal Beverage Co., Inc. (NCB)	06/11/2020	\$ 507	Notice of Violation	2020-00036103
Only Cremations for Pets (Newport Beach)	02/18/2020	\$ 507	Notice of Violation	2020-00033947



**APPENDIX D
FEES AND PENALTIES FOR NON-COMPLIANCES, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT**

Facility	Issue Date	Amount	Item	Enforcement ID
Patio and Door Outlet, Inc.	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032262
Pioneer Circuits, Inc.	07/09/2019	\$ 725	Notice of Violation	2019-00030223
Powdercoat Services, LLC (Bldg E / Plant 1)	06/18/2020	\$ 507	Notice of Violation	2020-00036203
Prima-Tex Industries Inc.	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032263
Rainbow Disposal Co., Inc. (Building A)	01/15/2020	\$ 507	Notice of Violation	2020-00033427
Rainbow Disposal Co., Inc. (Building F)	03/09/2020	\$ 825	Notice of Violation	2020-00034361
Republic Waste Services	08/20/2019	\$ 925	Notice of Violation	2019-00030942
Republic Waste Services	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032264
Republic Waste Services	12/03/2019	\$ 725	Notice of Violation	2019-00032609
Simply Fresh, LLC	04/02/2020	\$ 507	Notice of Violation	2020-00034654
South Coast Baking, LLC	05/07/2020	\$ 507	Notice of Violation	2020-00035410
SPS Technologies LLC, DBA Cherry Aerospace	05/14/2020	\$ 725	Notice of Violation	2020-00035518
Star Manufacturing LLC, dba Commercial Metal Forming	08/12/2019	\$ 400	Notice of Violation	2019-00030880
Star Manufacturing LLC, dba Commercial Metal Forming	10/21/2019	\$ 485	Significant Non-Compliance Publication	2019-00032265
Star Manufacturing LLC, dba Commercial Metal Forming	04/09/2020	\$ 756	Notice of Violation	2020-00034789
Stepan Company	04/02/2020	\$ 1,030	Notice of Violation	2020-00034655
Stremicks Heritage Foods, LLC	12/30/2019	\$ 507	Notice of Violation	2019-00033070
Stremicks Heritage Foods, LLC	04/23/2020	\$ 707	Notice of Violation	2020-00034880
Superior Plating	09/12/2019	\$ 675	Notice of Violation	2019-00031379
Superior Plating	03/04/2020	\$ 400	Notice of Violation	2020-00033953
Superior Plating	03/10/2020	\$ 675	Notice of Violation	2020-00034363
Superior Plating	05/07/2020	\$ 400	Notice of Violation	2020-00035395
Superior Processing	08/21/2019	\$ 725	Notice of Violation	2019-00030945
Superior Processing	01/15/2020	\$ 725	Notice of Violation	2020-00033428
Superior Processing	05/14/2020	\$ 725	Notice of Violation	2020-00035520
Thompson Energy Resources, LLC	07/09/2019	\$ 756	Notice of Violation	2019-00030215
Thompson Energy Resources, LLC	10/28/2019	\$ 556	Notice of Violation	2019-00032096
Thompson Energy Resources, LLC	01/02/2020	\$ 400	Notice of Violation	2019-00033074



APPENDIX D
FEEES AND PENALTIES FOR NON-COMPLIANCES, FY 2019-2020
ORANGE COUNTY SANITATION DISTRICT

Facility	Issue Date	Amount	Item	Enforcement ID
TTM Technologies North America, LLC. (Coronado)	07/22/2019	\$ 200	Notice of Violation	2019-00030488
Vit-Best Nutrition, Inc.	07/09/2019	\$ 507	Notice of Violation	2019-00030370

**PUBLIC NOTICE OF SIGNIFICANTLY
NON-COMPLIANT INDUSTRIES**



APPENDIX E
PUBLIC NOTICE OF SIGNIFICANTLY NON-COMPLIANT INDUSTRIES

PROOF OF PUBLICATION

AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA,)

) ss.

County of Orange)

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of The Orange County Register, a newspaper of general circulation, published in the city of Santa Ana, County of Orange, and which news-paper has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, under the date of November 19, 1905, Case No. A-21046, that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

October 21, 2020

"I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct":

Executed at Santa Ana, Orange County, California, on

Date: October 21, 2020

Handwritten signature of Sandra Campos

Signature

The Orange County Register
2190 S. Towne Centre Pl.
Anaheim, CA 92806

PUBLIC NOTICE

In accordance with the public participation requirements of 40 CFR Part 25 in the enforcement of National Pretreatment Standards and as defined by 40 CFR 403.8(f)(2)(viii), the Orange County Sanitation District (OCSD) is hereby publishing the following list of permittees who, during July 1, 2019 through June 30, 2020, were identified as industries in significant non-compliance with wastewater discharge standards. An industry in significant non-compliance is defined as follows:

- % Chronic violations of discharge limits occurring when 66% or more of all measurements exceed the discharge limits for the same pollutant.
% Acute violations of discharge limits occurring when 33% or more of all measurements are a major violation of the discharge limits.
% Any other violation that OCSD determines has caused, alone or in combination with other discharges, interference or pass through.
% Any discharge of a pollutant that has caused imminent and endangerment to human health, welfare or to the environment or has resulted in OCSD's exercise of its emergency authority to halt or prevent such a discharge.
% Failure to meet, within 90 days after the schedule date, a compliance schedule milestone.
% Failure to provide required reports including, but not limited to, periodic self-monitoring reports and reports with compliance schedules within 45 days of the due date.
% Failure to accurately report noncompliance with discharge limits or any other requirements applicable to the user pursuant to OCSD's Wastewater Discharge Regulations (Ordinance).
% Any other violation or group of violations, which OCSD determines will adversely affect the implementation of the pretreatment program.

OCSD has taken enforcement action against these permittees. The majority of the permittees listed below have implemented adequate corrective actions and may be in compliance with the wastewater discharge standards as of the date of this publication.

Table with 4 columns: Company Name, Permit No., Category, City. It lists various industries such as Advance Tech Plating, Allied International, Bodycote Thermal Processing, etc., categorized by discharge violations and reporting violations.

ACKNOWLEDGEMENTS



APPENDIX F

ACKNOWLEDGEMENTS

The Resource Protection Division of the Orange County Sanitation District wishes to acknowledge the following people for their valuable contributions to this report:

OCSD Resource Protection Division

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APPENDIX F

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IRWD SAMPLING

APPENDIX G

2019/20 Irvine Ranch Water District (IRWD) Quarterly Priority Pollutant Monitoring

Sampling is performed quarterly by Regulatory Compliance personnel on the influent, effluent, and sludge. The results for MWRP influent, effluent, and sludge are shown in this appendix. Two types of sampling are performed:

1. Grab samples are collected at each location for Volatile Organic Priority Pollutants and cyanide.
2. Composite samples are collected for Base/Neutrals and Acids Extractables, Inorganic Priority Pollutants, Pesticides/Polychlorinated Biphenyls at each location. This sampling is performed with an automatic sampler that collects discrete, flow-paced samples over a 24-hour period. The composite samples are collected in 5-gallon glass bottles, and then distributed out into the appropriate glass or plastic bottle for preservation and storage.

The collection points for the samples are as follows:

- Influent: Collected at headworks before grit basins.
- Effluent: Collected at the end of the chlorine contact basin (CCB) but downstream of where the CCB effluent and ultraviolet (UV) disinfected effluent are combined, just prior to entering the recycled water distribution system.
- Sludge: Collected at the flow meter vault on the MPS-3 force main.

Samples are submitted to the IRWD Water Quality Laboratory where they are analyzed in-house or contracted to either Weck Laboratories located in the City of Industry, or Eurofins Test America Laboratory located in the City of Irvine. Collected samples are preserved, refrigerated, and shipped on ice as required to the specific lab for analysis. Each lab supplies their respective sample containers with the preservatives as required by the method.

The detection limits shown in the results are the limits for that particular sample. The detection limit may vary from the laboratory and from sample to sample based on QA/QC analysis and the degree of sample dilution.



APPENDIX G

SUMMARY OF INORGANIC PRIORITY POLLUTANT ANALYSES INFLUENT, EFFLUENT AND SLUDGE, FY 2019-2020 MICHELSON WATER RECYCLING PLANT (IRWD) (all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
INFLUENT							
Antimony	ND	ND	ND	ND	ND	0.19	0.50
Arsenic	1.95	1.72	1.88	2.28	1.96	0.62	1.00
Beryllium	ND	ND	ND	ND	ND	ND	0.50
Cadmium	ND	ND	ND	ND	ND	ND	0.25
Chromium	1.38	1.24	1.40	1.10	1.28	2.08	0.50
Copper	61.80	68.20	48.00	24.90	50.73	87.05	0.50
Lead	0.70	0.77	0.84	ND	0.58	0.35	0.50
Mercury	ND	0.01	ND	ND	0.002	0.05	0.01
Nickel	3.56	3.58	2.74	1.87	2.94	4.47	0.50
Selenium	1.80	2.06	1.66	2.70	2.06	2.87	0.50
Silver	0.32	0.26	0.28	ND	0.22	0.78	0.25
Thallium	ND	ND	ND	ND	ND	ND	1.00
Total Cyanide	18.00	25.00	17.00	9.30	17.33	3.50	5.00
Zinc	121.00	150.00	122.00	70.30	115.83	162.75	0.50
EFFLUENT							
Antimony	ND	ND	0.53	ND	0.13	ND	0.50
Arsenic	1.70	1.24	1.34	1.80	1.52	1.80	1.00
Beryllium	ND	ND	ND	ND	ND	ND	0.50
Cadmium	ND	ND	ND	ND	ND	ND	0.25
Chromium	0.51	ND	0.57	ND	0.27	0.27	0.50
Copper	7.96	5.73	5.91	8.25	6.96	6.36	0.50
Lead	ND	ND	ND	ND	ND	ND	0.50
Mercury	ND	ND	ND	ND	ND	ND	0.01
Nickel	6.08	2.55	1.55	1.35	2.88	4.04	0.50
Selenium	1.58	1.36	1.29	1.29	1.38	1.72	0.50
Silver	ND	ND	ND	ND	ND	ND	0.25
Thallium	ND	ND	ND	ND	ND	ND	1.00
Total Cyanide	1.10	2.60	ND	ND	0.93	3.25	5.00
Zinc	68.60	60.70	7.80	47.10	46.05	63.65	0.50
SLUDGE							
Antimony	ND	ND	2.72	ND	0.68	3.31	0.50
Arsenic	8.52	12.90	7.62	ND	7.26	30.75	1.00
Beryllium	ND	ND	ND	ND	ND	ND	0.50
Cadmium	1.02	2.05	0.96	ND	1.01	1.74	0.25
Chromium	12.20	22.40	8.90	35.20	19.68	64.78	0.50
Copper	712.00	1960.00	511.00	896.00	1019.75	2420.00	0.50
Lead	7.13	39.30	5.31	14.60	16.59	35.13	0.50
Mercury	ND	1.04	0.04	0.60	0.42	1.31	0.01
Nickel	39.00	46.80	21.60	81.90	47.33	119.28	0.50
Selenium	15.80	21.50	13.30	17.10	16.93	59.18	0.50
Silver	3.44	8.06	2.46	ND	3.49	18.18	0.25
Thallium	ND	ND	ND	ND	ND	ND	1.00
Total Cyanide	31.00	ND	ND	ND	7.75	2.50	5.00



APPENDIX G

SUMMARY OF INORGANIC PRIORITY POLLUTANT ANALYSES INFLUENT, EFFLUENT AND SLUDGE, FY 2019-2020 MICHELSON WATER RECYCLING PLANT (IRWD) (all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
Zinc	731.00	2120.00	602.00	1550.00	1250.75	3587.50	0.50

Notes:

- ML method limit
- ND non-detect
- NA not analyzed
- µg/L microgram per liter
- * estimated concentration



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
INFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
VOLATILE PRIORITY POLLUTANTS:							
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	0.50
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
Acrolein	ND	ND	ND	ND	ND	ND	5.00
Acrylonitrile	ND	ND	ND	ND	ND	ND	2.00
Benzene	ND	ND	ND	ND	ND	ND	0.50
Bromodichloromethane	ND	ND	ND	ND	ND	ND	0.50
Bromoform	ND	ND	ND	ND	ND	ND	0.50
Bromomethane	ND	ND	ND	ND	ND	ND	0.50
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	0.50
Chlorobenzene	ND	ND	ND	ND	ND	ND	0.50
Chloroethane	ND	ND	ND	ND	ND	ND	0.50
Chloroform	1.20	1.35	1.34	1.25	1.29	1.06	0.50
Chloromethane	ND	ND	ND	ND	ND	ND	0.50
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	0.50
Dibromochloromethane	ND	0.62	ND	ND	0.16	0.37	0.50
Ethylbenzene	ND	ND	ND	ND	ND	ND	0.50
Methylene chloride	ND	ND	ND	ND	ND	ND	2.00
Tetrachloroethene	ND	ND	2.21	ND	0.55	ND	0.50
Toluene	1.44	1.03	2.24	1.43	1.54	1.01	0.50
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	0.50
Trichloroethylene	ND	ND	ND	ND	ND	ND	0.50
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	0.50
Vinyl chloride	ND	ND	ND	ND	ND	ND	0.50
VOLATILE POLLUTANTS - HAZARDOUS SUBSTANCES:							
2-Hexanone	ND	ND	ND	ND	ND	ND	10.00
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	10.00
Acetone	76.70	149.10	386.00	106.00	179.45	141.90	2.00
Carbon disulfide	ND	ND	8.52	ND	2.13	ND	1.00
m+p-Xylenes	ND	ND	ND	ND	ND	ND	0.50
Methyl ethyl ketone	2.44	2.35	2.88	2.70	2.59	1.72	2.00
o-Xylene	ND	ND	ND	ND	ND	ND	0.50
Styrene	ND	ND	ND	ND	ND	ND	0.50
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	10.00
Vinyl acetate	ND	ND	ND	ND	ND	ND	0.05



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
INFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
BASE/NEUTRAL EXTRACTABLE PRIORITY POLLUTANTS:							
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	10.00
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	5.00
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	10.00
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	10.00
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	10.00
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	25.00
4-Bromophenyl phenyl	ND	ND	ND	ND	ND	ND	10.00
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	10.00
Acenaphthene	ND	ND	ND	ND	ND	ND	5.00
Acenaphthylene	ND	ND	ND	ND	ND	ND	10.00
Anthracene	ND	ND	ND	ND	ND	ND	10.00
Benzidine	ND	ND	ND	ND	ND	ND	25.00
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	10.00
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	10.00
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	10.00
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	20.00
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	10.00
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND	ND	10.00
Bis(2-Chloroethyl) ether	ND	ND	ND	ND	ND	1.55	5.00
Bis(2-Chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	10.00
Bis(2-Ethylhexyl) phthalate	ND	ND	ND	ND	ND	ND	25.00
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	10.00
Chrysene	ND	ND	ND	ND	ND	ND	10.00
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	20.00
Diethyl phthalate	ND	ND	ND	ND	ND	ND	10.00
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	10.00
Di-N-Butylphthalate	ND	ND	ND	ND	ND	ND	10.00
Di-N-Octylphthalate	ND	ND	ND	ND	ND	ND	10.00
Fluoranthene	ND	ND	ND	ND	ND	ND	5.00
Fluorene	ND	ND	ND	ND	ND	ND	10.00
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	5.00
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	5.00
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	25.00
Hexachloroethane	ND	ND	ND	ND	ND	ND	5.00
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	20.00
Isophorone	ND	ND	ND	ND	ND	ND	5.00
Naphthalene	ND	ND	ND	ND	ND	ND	5.00
Nitrobenzene	ND	ND	ND	ND	ND	ND	5.00
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	10.00
N-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	10.00
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	5.00
Phenanthrene	ND	ND	ND	ND	ND	ND	10.00
Pyrene	ND	ND	ND	ND	ND	ND	10.00



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
INFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
ACID EXTRACTABLE PRIORITY POLLUTANTS:							
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	10.00
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	10.00
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	10.00
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	25.00
2-Chlorophenol	ND	ND	ND	ND	ND	ND	10.00
2-Nitrophenol	ND	ND	ND	ND	ND	ND	10.00
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	25.00
4-Nitrophenol	ND	ND	ND	ND	ND	ND	50.00
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	5.00
Pentachlorophenol	ND	ND	ND	ND	ND	ND	10.00
Phenol	8.77	6.68	12.30	ND	6.94	3.68	5.00
BNA EXTRACTABLE POLLUTANTS - HAZARDOUS SUBSTANCES							
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	25.00
2-Methylnaphthalene	ND	ND	NA	NA	ND	ND	25.00
2-Methylphenol	ND	ND	ND	ND	ND	ND	25.00
2-Nitroaniline	ND	ND	NA	NA	ND	ND	50.00
3-Nitroaniline	ND	ND	NA	NA	ND	ND	100.00
4-Chloroaniline	ND	ND	NA	NA	ND	ND	25.00
3&4-Methylphenol	26.40	87.90	58.00	11.20	45.88	37.37	5.00
4-Nitroaniline	ND	ND	NA	NA	ND	ND	100.00
Aniline	ND	ND	NA	NA	ND	ND	25.00
Benzoic acid	ND	ND	NA	NA	ND	ND	250.00
Benzyl alcohol	ND	ND	NA	NA	ND	ND	25.00
Dibenzofuran	ND	ND	NA	NA	ND	ND	25.00
PRIORITY POLLUTANT PESTICIDES:							
4,4'-DDD	ND	ND	ND	ND	ND	ND	0.01
4,4'-DDE	ND	ND	ND	ND	ND	ND	0.01
4,4'-DDT	ND	ND	ND	ND	ND	ND	0.01
Aldrin	ND	ND	ND	ND	ND	ND	0.05
Alpha-BHC	ND	ND	ND	ND	ND	ND	0.10
Beta-BHC	ND	ND	ND	ND	ND	ND	0.05
Chlordane	ND	ND	ND	ND	ND	ND	1.00
Delta-BHC	ND	ND	ND	ND	ND	ND	0.05
Dieldrin	ND	ND	ND	ND	ND	ND	0.10
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	0.25
Endosulfan-I	ND	ND	ND	ND	ND	ND	0.20
Endosulfan-II	ND	ND	ND	ND	ND	ND	0.10
Endrin	ND	ND	ND	ND	ND	ND	0.10
Endrin aldehyde	ND	ND	ND	ND	ND	ND	0.10
Heptachlor	ND	ND	ND	ND	ND	ND	0.10
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	0.10
Lindane	ND	ND	ND	ND	ND	ND	0.20
Methoxychlor	ND	NA	NA	NA	ND	ND	0.25
PCB-1016	ND	ND	ND	ND	ND	ND	5.00
PCB-1221	ND	ND	ND	ND	ND	ND	5.00
PCB-1232	ND	ND	ND	ND	ND	ND	5.00
PCB-1242	ND	ND	ND	ND	ND	ND	5.00
PCB-1248	ND	ND	ND	ND	ND	ND	5.00
PCB-1254	ND	ND	ND	ND	ND	ND	5.00



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
INFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
 (all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
PCB-1260	ND	ND	ND	ND	ND	ND	5.00
Toxaphene	ND	ND	ND	ND	ND	ND	5.00

Notes:

- ML method limit
- ND non-detect
- NA not analyzed
- µg/L microgram per liter
- * estimated concentration



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
FINAL EFFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
VOLATILE PRIORITY POLLUTANTS:							
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	0.50
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
Acrolein	ND	ND	ND	ND	ND	ND	5.00
Acrylonitrile	ND	ND	ND	ND	ND	ND	2.00
Benzene	ND	ND	ND	ND	ND	ND	0.50
Bromodichloromethane	40.30	27.10	19.30	33.60	30.08	23.88	0.50
Bromoform	ND	0.56	ND	0.64	0.30	0.14	0.50
Bromomethane	ND	ND	ND	ND	ND	ND	0.50
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	0.50
Chlorobenzene	ND	ND	ND	ND	ND	ND	0.50
Chloroethane	ND	ND	ND	ND	ND	ND	0.50
Chloroform	167.00	93.80	60.40	85.80	101.75	73.58	0.50
Chloromethane	ND	ND	ND	ND	ND	ND	0.50
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	0.50
Dibromochloromethane	9.68	8.27	6.06	10.40	8.60	6.24	0.50
Ethylbenzene	ND	ND	ND	ND	ND	ND	0.50
Methylene chloride	ND	ND	ND	ND	ND	ND	2.00
Tetrachloroethene	ND	ND	ND	ND	ND	ND	0.50
Toluene	ND	ND	ND	ND	ND	ND	0.50
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	0.50
Trichloroethylene	ND	ND	ND	ND	ND	ND	0.50
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	0.50
Vinyl chloride	ND	ND	ND	ND	ND	ND	0.50
VOLATILE POLLUTANTS - HAZARDOUS SUBSTANCES:							
2-Hexanone	ND	ND	ND	ND	ND	ND	10.00
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	10.00
Acetone	3.82	ND	2.80	3.08	2.43	0.53	2.00
Carbon disulfide	ND	ND	ND	ND	ND	ND	1.00
m+p-Xylenes	ND	ND	ND	ND	ND	ND	0.50
Methyl ethyl ketone	ND	ND	ND	ND	ND	ND	2.00
o-Xylene	ND	ND	ND	ND	ND	ND	0.50
Styrene	ND	ND	ND	ND	ND	ND	0.50
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	10.00
Vinyl acetate	ND	ND	ND	ND	ND	ND	0.05



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
FINAL EFFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
BASE/NEUTRAL EXTRACTABLE PRIORITY POLLUTANTS:							
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	2.00
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	1.00
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	2.00
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	2.00
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	2.00
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	5.00
4-Bromophenyl phenyl	ND	ND	ND	ND	ND	ND	2.00
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	2.00
Acenaphthene	ND	ND	ND	ND	ND	ND	1.00
Acenaphthylene	ND	ND	ND	ND	ND	ND	2.00
Anthracene	ND	ND	ND	ND	ND	ND	2.00
Benzidine	ND	ND	ND	ND	ND	ND	5.00
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	2.00
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	2.00
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	2.00
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	4.00
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	2.00
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND	ND	2.00
Bis(2-Chloroethyl) ether	ND	ND	ND	ND	ND	ND	1.00
Bis(2-Chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	2.00
Bis(2-Ethylhexyl) phthalate	ND	ND	ND	ND	ND	ND	5.00
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	2.00
Chrysene	ND	ND	ND	ND	ND	ND	2.00
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	4.00
Diethyl phthalate	ND	ND	ND	ND	ND	ND	2.00
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	2.00
Di-N-Butylphthalate	ND	ND	ND	ND	ND	ND	2.00
Di-N-Octylphthalate	ND	ND	ND	ND	ND	ND	2.00
Fluoranthene	ND	ND	ND	ND	ND	ND	1.00
Fluorene	ND	ND	ND	ND	ND	ND	2.00
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	1.00
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	1.00
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	5.00
Hexachloroethane	ND	ND	ND	ND	ND	ND	1.00
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	4.00
Isophorone	ND	ND	ND	ND	ND	ND	1.00
Naphthalene	ND	ND	ND	ND	ND	ND	1.00
Nitrobenzene	ND	ND	ND	ND	ND	ND	1.00
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	2.00
N-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	2.00
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	1.00
Phenanthrene	ND	ND	ND	ND	ND	ND	2.00
Pyrene	ND	ND	ND	ND	ND	ND	2.00



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
FINAL EFFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
ACID EXTRACTABLE PRIORITY POLLUTANTS:							
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	2.00
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	2.00
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	2.00
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	5.00
2-Chlorophenol	ND	ND	ND	ND	ND	ND	2.00
2-Nitrophenol	ND	ND	ND	ND	ND	ND	2.00
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	5.00
4-Nitrophenol	ND	ND	ND	ND	ND	ND	10.00
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	1.00
Pentachlorophenol	ND	ND	ND	ND	ND	ND	2.00
Phenol	ND	ND	ND	ND	ND	ND	1.00
BNA EXTRACTABLE POLLUTANTS - HAZARDOUS SUBSTANCES							
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	5.00
2-Methylnaphthalene	ND	ND	NA	NA	ND	ND	5.00
2-Methylphenol	ND	ND	ND	ND	ND	ND	5.00
2-Nitroaniline	ND	ND	NA	NA	ND	ND	10.00
3-Nitroaniline	ND	ND	NA	NA	ND	ND	20.00
4-Chloroaniline	ND	ND	NA	NA	ND	ND	5.00
3&4-Methylphenol	ND	ND	ND	ND	ND	ND	1.00
4-Nitroaniline	ND	ND	NA	NA	ND	ND	20.00
Aniline	ND	ND	NA	NA	ND	ND	5.00
Benzoic acid	ND	ND	NA	NA	ND	ND	50.00
Benzyl alcohol	ND	ND	NA	NA	ND	ND	5.00
Dibenzofuran	ND	ND	NA	NA	ND	ND	5.00
PRIORITY POLLUTANT PESTICIDES:							
4,4'-DDD	ND	ND	ND	ND	ND	ND	0.05
4,4'-DDE	ND	ND	ND	ND	ND	ND	0.05
4,4'-DDT	ND	ND	ND	ND	ND	ND	0.01
Aldrin	ND	ND	ND	ND	ND	ND	0.01
Alpha-BHC	ND	ND	ND	ND	ND	ND	0.01
Beta-BHC	ND	ND	ND	ND	ND	ND	0.01
Chlordane	ND	ND	ND	ND	ND	ND	0.10
Delta-BHC	ND	ND	ND	ND	ND	ND	0.01
Dieldrin	ND	ND	ND	ND	ND	ND	0.01
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	0.03
Endosulfan-I	ND	ND	ND	ND	ND	ND	0.02
Endosulfan-II	ND	ND	ND	ND	ND	ND	0.01
Endrin	ND	ND	ND	ND	ND	ND	0.01
Endrin aldehyde	ND	ND	ND	ND	ND	ND	0.01
Heptachlor	ND	ND	ND	ND	ND	ND	0.01
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	0.01
Lindane	ND	ND	ND	ND	ND	ND	0.02
Methoxychlor	ND	NA	NA	NA	ND	ND	0.05
PCB-1016	ND	ND	ND	ND	ND	ND	0.50
PCB-1221	ND	ND	ND	ND	ND	ND	0.50
PCB-1232	ND	ND	ND	ND	ND	ND	0.50
PCB-1242	ND	ND	ND	ND	ND	ND	0.50
PCB-1248	ND	ND	ND	ND	ND	ND	0.50
PCB-1254	ND	ND	ND	ND	ND	ND	0.50



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
FINAL EFFLUENT, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
 (all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
PCB-1260	ND	ND	ND	ND	ND	ND	0.50
Toxaphene	ND	ND	ND	ND	ND	ND	0.50

Notes:

- ML method limit
- ND non-detect
- NA not analyzed
- µg/L microgram per liter
- * estimated concentration



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
SLUDGE, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
VOLATILE PRIORITY POLLUTANTS:							
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	0.50
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	0.50
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	0.50
Acrolein	ND	ND	ND	ND	ND	ND	5.00
Acrylonitrile	ND	ND	ND	ND	ND	ND	2.00
Benzene	ND	ND	ND	ND	ND	ND	0.50
Bromodichloromethane	2.68	ND	0.80	ND	0.87	ND	0.50
Bromoform	ND	ND	ND	ND	ND	ND	0.50
Bromomethane	ND	ND	ND	ND	ND	ND	0.50
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	0.50
Chlorobenzene	ND	ND	ND	ND	ND	ND	0.50
Chloroethane	ND	0.53	2.71	ND	0.81	ND	0.50
Chloroform	10.40	2.47	8.59	3.26	6.18	2.40	0.50
Chloromethane	ND	ND	ND	ND	ND	ND	0.50
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	0.50
Dibromochloromethane	0.77	ND	ND	ND	0.19	ND	0.50
Ethylbenzene	ND	ND	ND	ND	ND	ND	0.50
Methylene chloride	ND	ND	ND	ND	ND	ND	2.00
Tetrachloroethene	ND	ND	ND	ND	ND	ND	0.50
Toluene	9.02	10.40	2.43	22.90	11.19	3.46	0.50
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.50
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	0.50
Trichloroethylene	ND	ND	ND	ND	ND	ND	0.50
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	0.50
Vinyl chloride	ND	ND	ND	ND	ND	ND	0.50
VOLATILE POLLUTANTS - HAZARDOUS SUBSTANCES:							
2-Hexanone	ND	ND	ND	ND	ND	ND	10.00
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	10.00
Acetone	ND	73.80	52.20	161.00	71.75	40.63	2.00
Carbon disulfide	ND	11.60	24.80	90.30	31.68	118.75	1.00
m+p-Xylenes	ND	ND	ND	ND	ND	ND	0.50
Methyl ethyl ketone	ND	2.95	2.59	3.05	2.15	ND	2.00
o-Xylene	ND	ND	ND	ND	ND	ND	0.50
Styrene	ND	ND	ND	ND	ND	ND	0.50
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	10.00
Vinyl acetate	ND	ND	ND	ND	ND	ND	0.05



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
SLUDGE, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
BASE/NEUTRAL EXTRACTABLE PRIORITY POLLUTANTS:							
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	20.00
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	10.00
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	20.00
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	20.00
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	20.00
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	50.00
4-Bromophenyl phenyl	ND	ND	ND	ND	ND	ND	20.00
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	20.00
Acenaphthene	ND	ND	ND	ND	ND	ND	10.00
Acenaphthylene	ND	ND	ND	ND	ND	ND	20.00
Anthracene	ND	ND	ND	ND	ND	ND	20.00
Benzidine	ND	ND	ND	ND	ND	ND	50.00
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	20.00
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	20.00
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	20.00
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	40.00
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	20.00
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND	ND	20.00
Bis(2-Chloroethyl) ether	ND	ND	ND	ND	ND	ND	10.00
Bis(2-Chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	20.00
Bis(2-Ethylhexyl) phthalate	ND	149.00	ND	ND	37.25	33.93	50.00
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	20.00
Chrysene	ND	ND	ND	ND	ND	ND	20.00
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	40.00
Diethyl phthalate	ND	ND	ND	ND	ND	ND	20.00
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	20.00
Di-N-Butylphthalate	ND	ND	ND	ND	ND	ND	20.00
Di-N-Octylphthalate	ND	ND	ND	ND	ND	ND	20.00
Fluoranthene	ND	ND	ND	ND	ND	ND	10.00
Fluorene	ND	ND	ND	ND	ND	ND	20.00
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	10.00
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	10.00
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	50.00
Hexachloroethane	ND	ND	ND	ND	ND	ND	10.00
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	40.00
Isophorone	ND	ND	ND	ND	ND	ND	10.00
Naphthalene	ND	ND	ND	ND	ND	ND	10.00
Nitrobenzene	ND	ND	ND	ND	ND	ND	10.00
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	20.00
N-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	20.00
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	10.00
Phenanthrene	ND	ND	ND	ND	ND	ND	20.00
Pyrene	ND	ND	ND	ND	ND	ND	20.00



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
SLUDGE, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
(all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
ACID EXTRACTABLE PRIORITY POLLUTANTS:							
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	20.00
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	20.00
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	20.00
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	50.00
2-Chlorophenol	ND	ND	ND	ND	ND	ND	20.00
2-Nitrophenol	ND	ND	ND	ND	ND	ND	20.00
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	50.00
4-Nitrophenol	ND	ND	ND	ND	ND	ND	100.00
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	10.00
Pentachlorophenol	ND	ND	ND	ND	ND	ND	20.00
Phenol	ND	32.10	ND	42.50	18.65	2.75	10.00
BNA EXTRACTABLE POLLUTANTS - HAZARDOUS SUBSTANCES							
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	50.00
2-Methylnaphthalene	ND	ND	NA	NA	ND	ND	50.00
2-Methylphenol	ND	ND	ND	ND	ND	ND	50.00
2-Nitroaniline	ND	ND	NA	NA	ND	ND	100.00
3-Nitroaniline	ND	ND	NA	NA	ND	ND	200.00
4-Chloroaniline	ND	ND	NA	NA	ND	ND	50.00
3&4-Methylphenol	ND	542.00	ND	85.80	156.95	17.67	5.00
4-Nitroaniline	ND	ND	NA	NA	ND	ND	200.00
Aniline	ND	ND	NA	NA	ND	ND	50.00
Benzoic acid	ND	ND	NA	NA	ND	ND	500.00
Benzyl alcohol	ND	ND	NA	NA	ND	ND	50.00
Dibenzofuran	ND	ND	NA	NA	ND	ND	50.00
PRIORITY POLLUTANT PESTICIDES:							
4,4'-DDD	ND	ND	ND	ND	ND	ND	0.01
4,4'-DDE	ND	ND	ND	ND	ND	ND	0.01
4,4'-DDT	ND	ND	ND	ND	ND	ND	0.01
Aldrin	ND	ND	ND	ND	ND	ND	0.03
Alpha-BHC	ND	ND	ND	ND	ND	ND	0.05
Beta-BHC	ND	ND	ND	ND	ND	ND	0.03
Chlordane	ND	ND	ND	ND	ND	ND	0.50
Delta-BHC	ND	ND	ND	ND	ND	ND	0.03
Dieldrin	ND	ND	ND	ND	ND	ND	0.05
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	0.03
Endosulfan-I	ND	ND	ND	ND	ND	ND	0.10
Endosulfan-II	ND	ND	ND	ND	ND	ND	0.05
Endrin	ND	ND	ND	ND	ND	ND	0.05
Endrin aldehyde	ND	ND	ND	ND	ND	ND	0.05
Heptachlor	ND	ND	ND	ND	ND	ND	0.05
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	0.05
Lindane	ND	ND	ND	ND	ND	ND	0.10
Methoxychlor	ND	NA	NA	NA	ND	ND	0.50
PCB-1016	ND	ND	ND	ND	ND	ND	2.50
PCB-1221	ND	ND	ND	ND	ND	ND	2.50
PCB-1232	ND	ND	ND	ND	ND	ND	2.50
PCB-1242	ND	ND	ND	ND	ND	ND	2.50
PCB-1248	ND	ND	ND	ND	ND	ND	2.50
PCB-1254	ND	ND	ND	ND	ND	ND	2.50



APPENDIX G
SUMMARY OF ORGANIC PRIORITY POLLUTANT ANALYSES
SLUDGE, FY 2019-2020
MICHELSON WATER RECYCLING PLANT (IRWD)
 (all test results in µg/L except as noted)



Quarter	1	2	3	4	AVERAGE	AVERAGE	ML
Sample Date	7/10/2019	10/9/2019	1/14/2020 1/23/2020	4/15/2020	2019-2020	2018-2019	
PCB-1260	ND	ND	ND	ND	ND	ND	2.50
Toxaphene	ND	ND	ND	ND	ND	ND	2.50

Notes:

- ML method limit
- ND non-detect
- NA not analyzed
- µg/L microgram per liter
- * estimated concentration

**SANTA ANA WATERSHED PROJECT AUTHORITY
(SAWPA) REPORTS, DATA, SNC NOTICE**



APPENDIX H
SANTA ANA WATERSHED PROJECT AUTHORITY (SAWPA) JULY 1, 2019 - JUNE 30, 2020
LIST OF SIUs WITH MONITORING COMPLIANCE STATUS



Facility Name	Member/ Contract Agency	Direct / Indirect Discharger	Permit No.	Physical Address	NAICS Code	Classification	Regulation	TTO Waiver Issued	No. of Inspections	Agency Samples	SMR Samples	Pollutant(s) in Discharge Violation	SNC Status	Comment
Anita B. Smith Treatment Facility	WMWD	Direct	D1074-4	2100 Fleetwood Drive Jurupa Valley, CA 92509	221310	SIU	403.5(d)	-	4	6	4			
Aramark Uniform & Career Apparel, LLC	WMWD	Direct	D1004-1	1135 Hall Avenue Riverside, CA 92509	812332	SIU	403.5(d)	-	4	13	19	pH (Local)		
C.C. Graber Company	IEUA	Indirect	I1005-2.1	315 E. 4th Street Ontario, CA 91764	311421	CIU	407(f)	-	1	0	0			Permit Closed
California Institution for Men	IEUA	Direct	D1006-3	5997 Edison Avenue Chino, CA 91710	922140	SIU	403.5(d)	-	4	11	29			
Chino I Desalter	SAWPA	Direct	D1081-4	6905 Kimball Avenue Chino, CA 91709	221310	SIU	403.5(d)	-	4	8	4			
Chino II Desalter	SAWPA	Direct	D1010-4	11251 Harrel Street, Jurupa Valley, CA 91752	221310	SIU	403.5(d)	-	4	16	8			
City of Colton - Agua Mansa Power Plant	VALLEY	Direct	D1002-4	2040 W. Agua Mansa Road, Colton, CA 92324	221122	SIU	403.5(d)	-	4	16	20			
City of Corona Ion Exchange Treatment Plant	WMWD	Direct	D1125-2	410 Rimpau Avenue Corona, CA 92882	221310	SIU	403.5(d)	-	4	8	4			
City of Corona's Water Reclamation Facility No.1	WMWD	Direct - Emergency	E1013-2.1	2205 Railroad Street Corona, CA 92880	221320	SIU	403.5(d)	-	1	0	0			
Dart Container Corporation	WMWD	Direct	D1019-3	150 S. Maple Street Corona, CA 92880	326140	SIU	403.5(d)	-	4	24	4			
Del Real, LLC	JCSD	Direct	D1021-3	11041 Inland Avenue, Jurupa Valley, CA 91752	311991	SIU	403.5(d)	-	5	32	36	FOG (Local)		
EMWD Collection Station	SAWPA	Direct	D1055-2.2	29541 Murrieta Road, Menifee, CA 92586	221310	SIU	403.5(d)	-	1	2	2			Permit Closed
EMWD Energy Dissipater	SAWPA	Direct - Emergency	E1068-2.1	636 Minthorn Street, Lake Elsinore, CA 92530	221320	SIU	403.5(d)	-	2	0	4			
EMWD Perris & Menifee Desalination Facility	SAWPA	Direct	D1061-3	29541 Murrieta Road, Menifee, CA 92586	221310	SIU	403.5(d)	-	4	8	4			
EMWD Railroad Canyon Pipeline	SAWPA	Direct - Emergency	E1067-3.1	Railroad Canyon Road, Canyon Lake, CA 92587	221320	SIU	403.5(d)	-	2	0	0			
Giuliano & Sons Briners, Inc.	WMWD	Indirect	I1031-3	10380 Alder Avenue, Bloomington, CA 92316	311421	SIU	403.5(d)	-	2	4	20			SIU Permit Issued
IEUA Collection Station	SAWPA	Direct	D1035-3.1	16400 El Prado Road, Chino, CA 91710	221320	SIU	403.5(d)	-	1	2	0			Permit Closed
IEUA Los Serranos	SAWPA	Direct - Emergency	E1037-2.1	6075 Kimball Avenue, Chino, CA 91708	221320	SIU	403.5(d)	-	2	0	0			



APPENDIX H
SANTA ANA WATERSHED PROJECT AUTHORITY (SAWPA) JULY 1, 2019 - JUNE 30, 2020
LIST OF SIUs WITH MONITORING COMPLIANCE STATUS



Facility Name	Member/ Contract Agency	Direct / Indirect Discharger	Permit No.	Physical Address	NAICS Code	Classification	Regulation	TTO Waiver Issued	No. of Inspections	Agency Samples	SMR Samples	Pollutant(s) in Discharge Violation	SNC Status	Comment
Infineon Technologies Americas Corporation	EMWD	Indirect	I1039-3	41915 Business Park, Drive Temecula, CA 92590	334413	CIU	469.18	Y	4	8	9	pH (Local)		
Inland Empire Energy Center	EMWD	Direct	D1036-3	26226 Antelope Road, Menifee, CA 92585	221112	CIU	423.17	-	3	14	12			Permit Closed
JCSD Archibald Metering Station	SAWPA	Direct - Emergency	E1041-2.1	6990 Archibald Avenue, Eastvale, CA 92880	221320	SIU	403.5(d)	-	2	0	0			
JCSD Celebration Metering Station	SAWPA	Direct - Emergency	E1042-2.1	5972 Hamner Avenue, Eastvale, CA 92880	221320	SIU	403.5(d)	-	2	0	0			
JCSD Chandler Lift Station	SAWPA	Direct - Emergency	E1043-2.1	14087 Chandler Street, Eastvale, CA 92880	221320	SIU	403.5(d)	-	2	0	6			
JCSD Etiwanda Metering Station	SAWPA	Direct	D1044-4	Etiwanda Ave. and north of Bellegrave Ave., Jurupa Valley, CA 91752	221320	SIU	403.5(d)	-	4	34	20			
JCSD Hamner Lift Station	SAWPA	Direct - Emergency	E1046-2.3	7302 Hamner Avenue, Eastvale, CA 92880	221320	SIU	403.5(d)	-	2	0	0			
JCSD Hamner Metering Station	SAWPA	Direct	D1045-4	5410 Hamner Avenue, Eastvale, CA 91752	221320	SIU	403.5(d)	-	4	8	18			
JCSD Harrison Metering Station	SAWPA	Direct - Emergency	E1047-2.3	6998 Harrison Avenue, Eastvale, CA 92880	221320	SIU	403.5(d)	-	2	0	0			
JCSD Roger D. Teagarden Ion Exchange Water Treatment Plant	SAWPA	Direct	D1070-4	4150 Etiwanda Avenue, Mira Loma, CA 91752	221310	SIU	403.5(d)	-	4	2	9			
JCSD Scholar Way Metering Station	SAWPA	Direct - Emergency	E1113-1.1	6980 Scholar Way Eastvale, CA 92880	221320	SIU	403.5(d)	-	2	0	0			
JCSD Wells 17 & 18 Ion Exchange Treatment Facility	SAWPA	Direct	D1040-4	3474 De Forest Circle, Jurupa Valley, CA 91752	221310	SIU	403.5(d)	-	4	6	5			
JCSD Wineville Metering Station	SAWPA	Direct	D1048-4	5101 Wineville Avenue, Jurupa Valley, CA 91752	221320	SIU	403.5(d)	-	4	14	20			
Metal Container Corporation	JCSD	Direct	D1056-3	10980 Inland Avenue, Jurupa Valley, CA 91752	332431	CIU	465.45(d)	-	4	30	24			
Mission Linen Supply	IEUA	Direct	D1057-4	5400 Alton Street, Chino, CA 91710	812332	SIU	403.5(d)	-	4	46	44			
Mountainview Generating Station	VALLEY	Direct	D1058-2	2492 W. San Bernardino Ave., Redlands, CA 92374	221112	CIU	423.17	-	4	22	24			
OLS Energy	IEUA	Direct	D1059-3	5601 Eucalyptus Avenue, Chino, CA 91710	221112	CIU	423.17	-	4	38	57	pH (Local)		
Rayne Water Conditioning	SBMWD	Indirect	I1066-2.1	939 W. Reece Street, San Bernardino, CA 92411	561990	SIU	403.5(d)	-	6	26	6			



APPENDIX H
SANTA ANA WATERSHED PROJECT AUTHORITY (SAWPA) JULY 1, 2019 - JUNE 30, 2020
LIST OF SIUs WITH MONITORING COMPLIANCE STATUS



Facility Name	Member/ Contract Agency	Direct / Indirect Discharger	Permit No.	Physical Address	NAICS Code	Classification	Regulation	TTO Waiver Issued	No. of Inspections	Agency Samples	SMR Samples	Pollutant(s) in Discharge Violation	SNC Status	Comment
Repet, Inc.	IEUA	Direct	D1069-4	14207 Monte Vista Avenue, Chino, CA 91710	423930	SIU	403.5(d)	-	4	38	42	pH (Local)		
SBMWD Collection Station	SAWPA	Direct	D1076-3.1	399 Chandler Place, San Bernardino, CA 92408	221310	SIU	403.5(d)	-	1	2	2			Permit Closed
SBMWD Water Reclamation Plant	SAWPA	Direct - Emergency	E1075-2.2	399 Chandler Place, San Bernardino, CA 92408	221320	SIU	403.5(d)	-	2	0	0			
ShawCor Pipe Protection, LLC	IEUA	Indirect	I1077-3	14000 San Bernardino Avenue, Fontana, CA 92335	332812	CIU	433.17	N	2	17	24			Permit Closed
Stringfellow Pretreatment Facility	SAWPA	Direct	D1079-3	3400 Pyrite Street, Jurupa Valley, CA 92509	562910 562211	SIU	403.5(d)	-	4	34	271			
Temescal Desalter	WMWD	Direct	D1012-3	745 Public Safety Way, Corona, CA 92880	221310	SIU	403.5(d)	-	4	8	4			
WMWD Arlington Desalter	SAWPA	Direct	D1088-4	11611 Sterling Avenue, Riverside, CA 92503	221310	SIU	403.5(d)	-	4	8	4			
WMWD Collection Station	SAWPA	Direct	D1087-3.1	2205 Railroad Street, Corona, CA 92880	221320	SIU	403.5(d)	-	1	2	0			Permit Closed
WRCRWA South Regional Pumping Station	SAWPA	Direct - Emergency	E1089-2.1	671 N. Lincoln Ave., Corona, CA 92880	221320	SIU	403.5(d)	-	2	0	0			
YVWD Henry Wochholz Regional Water Recycling Facility	SAWPA	Direct	D1090-3	880 W. County Line, Road Calimesa, CA 92320	221310 221320	SIU	403.5(d)	-	4	8	8			



APPENDIX H

SAWPA PRETREATMENT PROGRAM FY 2019-2020 PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechelating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other
I1003-4	Angelica Textile Services	IU 40 CFR 403.5(d)	N/A									X																	
D1074-4	Anita B. Smith Treatment Facility	SIU 40 CFR 403.5(d)	0.030									X																	
D1004-1	Aramark Uniform & Career Apparel, LLC	SIU 40 CFR 403.5(d)	0.010																										
I1005-3	C.C. Graber Company	IU 40 CFR 403.5(d)	N/A										X																Sand Filters, Catridge Filters
D1006-3	California Institution for Men	SIU 40 CFR 403.5(d)	0.194										X																
D1007-3	California Institution for Women	IU 40 CFR 403.5(d)	0.400											X															Grease Interceptors and Sewage Grinder
D1081-4	Chino I Desalter	SIU 40 CFR 403.5(d)	2.050										X																
D1010-4	Chino II Desalter	SIU 40 CFR 403.5(d)	2.020										X																
D1002-4	City of Colton - Agua Mansa Power Plant	SIU 40 CFR 403.5(d)	0.062														X												Ultra-Filtration & Reverse Osmosis



APPENDIX H

SAWPA PRETREATMENT PROGRAM FY 2019-2020 PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechelating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other	
D1125-2	City of Corona's Ion Exchange Treatment Plant	SIU 40 CFR 403.5(d)	0.200									X																		
E1013-2.1	City of Corona Water Reclamation Facility No. 1	SIU 40 CFR 403.5(d)	N/A									X																		
I1016-4	Corona Regional Medical Center	IU 40 CFR 403.5(d)	N/A									X																		
D1019-3	Dart Container Corporation	SIU 40 CFR 403.5(d)	0.030								X		X							X	X									
I1020-3	Decra Roofing Systems	IU 40 CFR 403.5(d)	N/A								X		X								X	X			X					
D1021-3	Del Real Foods, LLC	SIU 40 CFR 403.5(d)	0.190			X					X		X	X						X		X								DAF & Automated Chemical Feed
I1024-2.1	Eastside Water Treatment Plant	IU 40 CFR 403.5(d)	N/A									X																		
D1055-2.2	EMWD Collection Station	SIU 40 CFR 403.5(d)	2.500									X																		Permit Closed 11/5/2019
E1068-2.1	EMWD Energy Dissipater	SIU 40 CFR 403.5(d)	9.500									X																		



APPENDIX H
SAWPA PRETREATMENT PROGRAM FY 2019-2020
PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechlorating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other
D1061-3	EMWD Perris & Menifee Desalination Facility	SIU 40 CFR 403.5(d)	9.500									X																	Filtration, Green Sand for Iron & Manganese
E1067-3.1	EMWD Railroad Canyon Pipeline	SIU 40 CFR 403.5(d)	9.500									X																	
I1026-2.1	Farmdale Creamery, Inc.	IU 40 CFR 403.5(d)	N/A									X																	Permit Closed 12/14/2019
D1029-3	Frutarom USA	IU 40 CFR 403.5(d)	2.150							X		X				X				X	X								
I1031-3	Giuliano & Sons Briners	SIU 40 CFR 403.5(d)	0.010								X		X							X	X		X						
D1032-3	Green River Golf Club	IU 40 CFR 403.5(d)	0.020											X															Grease Interceptor
I1121-2	Hidden Villa Ranch	IU 40 CFR 403.5(d)	N/A									X																	
D1035-3.1	IEUA Collection Station	SIU 40 CFR 403.5(d)	2.500									X																	Permit Closed 11/5/2019
E1037-2.1	IEUA Los Serranos	SIU 40 CFR 403.5(d)	N/A									X																	
I1039-3	Infineon Technologies Americas Corporation	CIU 40 CFR 469.18	N/A										X							X					X				



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SAWPA PRETREATMENT PROGRAM FY 2019-2020
PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechelating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other
D1036-3	Inland Empire Energy Center	CIU 40 CFR 423.17	1.200														X												Permit Closed 2/26/2020
E1041-2.1	JCSD Archibald Metering Station	SIU 40 CFR 403.5(d)	1.115									X																	
E1042-2.1	JCSD Celebration Metering Station	SIU 40 CFR 403.5(d)	0.170									X																	
E1043-2.1	JCSD Chandler Lift Station	SIU 40 CFR 403.5(d)	1.115									X																	
D1044-4	JCSD Etiwanda Metering Station	SIU 40 CFR 403.5(d)	1.155									X																	
E1046-2.3	JCSD Hamner Lift Station	SIU 40 CFR 403.5(d)	0.940									X																	
D1045-4	JCSD Hamner Metering Station	SIU 40 CFR 403.5(d)	1.155									X																	
E1047-2.3	JCSD Harrison Metering Station	SIU 40 CFR 403.5(d)	0.940									X																	
D1070-4	JCSD Roger D. Teagarden Ion Exchange Water Treatment Plant	SIU 40 CFR 403.5(d)	0.300							X																			
E1113-1.1	JCSD Scholar Way Metering Station	SIU 40 CFR 403.5(d)	1.115									X																	



APPENDIX H
SAWPA PRETREATMENT PROGRAM FY 2019-2020
PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechelating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other	
D1040-4	JCSD Wells 17 & 18 Ion Exchange Treatment Facility	SIU 40 CFR 403.5(d)	0.300									X																		
D1048-4	JCSD Wineville Metering Station	SIU 40 CFR 403.5(d)	1.155									X																		
I1050-4	La Sierra University	IU 40 CFR 403.5(d)	N/A									X																		
I1051-2.1	Loma Linda University Power Plant	IU 40 CFR 403.5(d)	N/A									X																	TDS Meter and Diversion Valve	
I1052-4	Loma Linda Veterans Medical Center	IU 40 CFR 403.5(d)	N/A									X																		
D1053-3	Magnolia Foods	IU 40 CFR 403.5(d)	0.004											X						X									Grease Interceptor	
D1056-3	Metal Container Corporation	CIU 40 CFR 465.45(d)	0.165								X		X				X					X	X			X	X		Oil Skimming	
D1057-4	Mission Linen Supply	SIU 40 CFR 403.5(d)	0.713								X		X										X			X			Shaker Screens	
D1058-2	Mountainview Generating Station	CIU 40 CFR 423.17	0.432			X							X				X			X			X						Filtration	
I1114-1.1	Niagra Bottling, LLC (IEUA)	IU 40 CFR 403.5(d)	N/A									X																		



APPENDIX H
SAWPA PRETREATMENT PROGRAM FY 2019-2020
PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechelating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other
I1111-1.2	Niagra Bottling, LLC (SBMWD)	IU 40 CFR 403.5(d)	N/A									X																	
D1059-3	OLS Energy - Chino	CIU 40 CFR 423.17	0.130										X				X												
I1062-4	Prudential Overall Supply	IU 40 CFR 403.5(d)	N/A									X																	
I1064-4	Qualified Mobile, Inc.	IU 40 CFR 403.5(d)	N/A										X							X	X								
I1066-2.1	Rayne Water Conditioning	SIU 40 CFR 403.5(d)	N/A			X																							EC Meter and Diversion Valve
D1069-4	Repet, Inc.	SIU 40 CFR 403.5(d)	0.043								X		X							X		X	X		X	X			GEM., Drum & Shaker Screens
I1096-3	San Antonio Regional Hospital	IU 40 CFR 403.5(d)	N/A									X																	
I1128-1	Saratoga Foods, Inc.	IU 40 CFR 403.5(d)	N/A									X																	
D1076-3.1	SBMWD Collection Station	SIU 40 CFR 403.5(d)	0.250									X																	Permit Closed 11/5/2019
E1075-2.2	SBMWD Water Reclamation Plant	SIU 40 CFR 403.5(d)	2.500																						X				



APPENDIX H
SAWPA PRETREATMENT PROGRAM FY 2019-2020
PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechelating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other
I1077-3	ShawCor Pipe Protection, LLC	CIU 40 CFR 433.17	N/A										X									X	X	X	X	X			Permit Closed 2/27/2020
I1078-5	Sierra Aluminum Company, Inc.	IU 40 CFR 403.5(d)	N/A									X																	
D1079-3	Stringfellow Pretreatment Facility	SIU 40 CFR 403.5(d)	0.259								X		X					X							X				Air Strippers, Pesticide Co- Precipitation, Im nline Cloth Filters, Granualated Activate Carbon Absorbtion
D1012-3	Temescal Desalter	SIU 40 CFR 403.5(d)	2.150									X																	
D1086-3	Wellington Foods, Inc.	IU 40 CFR 403.5(d)	0.020								X		X							X	X								
D1088-4	WMWD Arlington Desalter	SIU 40 CFR 403.5(d)	1.400									X																	
D1087-3.1	WMWD Collection Station	SIU 40 CFR 403.5(d)	N/A									X																	Permit Closed 11/5/2019



APPENDIX H
SAWPA PRETREATMENT PROGRAM FY 2019-2020
PERMITTEES WITH PRETREATMENT EQUIPMENT



Permit Number	Permittees	Category	Flow Base (MGD)	Aluminum Chip Reactor	Cyanide Destruction	Ion Exchange	Final Polishing Filter	Electroless Nickel Dechelating	Hex. Chrome Reduction	Cross-flow Filtration (Memtek)	Equalization	None	pH Adjustment	Below Ground Clarifier	Electrowinning/Plate-out	Ozone Treatment Reactor	Oil/Water-Separator	Carbon Adsorption	Centrifugation	Final pH Adjust	Batch Treatment	Clarifier/lamella Setting	Coagulation/Flocculation	Hydroxide Precipitation	Filter Press	Sludge Thickening Tank	Sorption Filter (Lancy)	Air Floatation	Other
E1089-2.1	WRCRWA South Regional Pumping Station	SIU 40 CFR 403.5(d)	N/A									X																	Chlorination
D1090-3	YVWD – Henry Wochholz Regional Water Recycling Facility	SIU 40 CFR 403.5(d)	0.595									X																	Reverse Osmosis

QA/QC ANALYSIS RESULTS



APPENDIX I

QA/QC ANALYSIS RESULTS FOR JULY 2019

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2157308	0.02	0.02	0.02	0.02	0.02	0.05	
	2157307	0.02	0.02	0.02	0.02	0.02	0.05	
	2153706	0.02	0.02	0.02	0.02	0.02	0.04	
Sampler B	2157305	0.02	0.02	0.02	0.02	0.02	0.04	
	2157304	0.02	0.02	0.02	0.02	0.02	0.05	
	2157303	0.02	0.02	0.02	0.02	0.02	0.04	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.43	Avg. Deviation
Results at or above the RL are shown in bold font.							0.07	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	Relative % Difference
52-1-836	2157264		0.02	0.10	0.02	0.02	0.02	0.02	
		2119354	0.10	0.10	0.02	0.02	0.02	0.03	
1-071051	2157266		0.02	0.02	0.06	0.02	0.02	0.05	
		2118517	0.10	0.02	0.06	0.02	0.02	0.06	
1-021703	2157272		0.02	<i>0.24</i>	0.03	0.02	0.02	2.38	
		2119425	0.10	<i>0.22</i>	0.03	0.02	0.02	2.50	
				10.57			4.92	Relative % Difference	
1-111132	2157270		0.02	0.04	0.03	0.08	0.05	0.09	
		2118845	0.10	0.04	0.03	0.08	0.05	0.08	
								Relative % Difference	
			0%	11%	0%	0%	0%	5%	Analyte Avg. RPD
							0.03	Table Average RPD	

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR AUGUST 2019

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2165179	0.02	0.02	0.02	0.02	0.02	0.02	
	2165181	0.02	0.02	0.02	0.02	0.02	0.02	
	2165180	0.02	0.02	0.02	0.02	0.02	0.02	
Sampler B	2165182	0.02	0.02	0.02	0.02	0.02	0.03	
	2165183	0.02	0.02	0.02	0.02	0.02	0.03	
	2165184	0.02	0.02	0.02	0.02	0.02	0.03	
Analysis results are reported in mg/L.		0.0	0.0	0.0	0.0	0.0	0.4	Avg. Deviation
Results at or above the RL are shown in bold font.							0.1	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	
1-521861	2164652		0.02	0.02	0.02	0.049	0.02	0.031	
		2129891	0.1	0.02	0.05	0.02	0.09	0.275	Relative % Difference
								159.5	
1-011064	2124211		0.02	0.02	0.02	0.382	0.02	0.082	
		2124211	0.1	0.02	0.02	0.373	0.02	0.068	Relative % Difference
						2.4			
1-111089	2164653		0.02	0.02	0.502	1.01	0.026	0.224	
		2123993	0.1	0.02	0.499	1.02	0.02	0.192	Relative % Difference
					0.6	1.0		15.4	
1-531404	2164654		0.031	0.178	0.02	0.883	0.02	0.02	
		2124395	0.1	0.179	0.02	0.9	0.02	0.02	Relative % Difference
				0.6		1.9			
			0%	1%	1%	2%	0%	87%	Analyte Avg. RPD
							15%		Table Average RPD

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR SEPTEMBER 2019

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2165913	0.02	0.02	0.02	0.02	0.02	0.07	
	2165914	0.02	0.02	0.02	0.02	0.02	0.07	
	2165915	0.02	0.02	0.02	0.02	0.02	0.07	
Sampler B	2165916	0.02	0.02	0.02	0.02	0.02	0.05	
	2165917	0.02	0.02	0.02	0.02	0.02	0.05	
	2165918	0.02	0.02	0.02	0.02	0.02	0.06	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.85	Avg. Deviation
Results at or above the RL are shown in bold font.							0.14	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	Relative % Difference
1-031102	2165919		0.02	0.02	0.05	0.02	0.02	0.07	
		2130294	0.10	0.02	0.05	0.02	0.02	0.07	
1-021253	2165920		<i>0.11</i>	<i>0.39</i>	<i>0.85</i>	<i>0.14</i>	0.03	<i>4.20</i>	
		2138138	0.10	<i>0.36</i>	<i>0.89</i>	<i>0.14</i>	0.03	<i>4.41</i>	
			6.76	8.86	5.07	0.74		4.88	Relative % Difference
1-071037	2165921		0.02	0.02	0.02	0.02	0.02	0.02	
		2132652	0.10	0.02	0.02	0.02	0.02	0.02	
									Relative % Difference
1-021381	2165922		0.02	0.04	<i>0.13</i>	0.04	0.02	<i>0.31</i>	
		2138002	0.02	0.04	<i>0.13</i>	0.04	0.02	<i>0.28</i>	
					0.00			12.29	Relative % Difference
			7%	9%	3%	1%	0%	9%	Analyte Avg. RPD
							5%		Table Average RPD

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR OCTOBER 2019

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	
Sampler A	2176949	0.02	0.02	0.02	0.02	0.02	0.06	
	2176948	0.02	0.02	0.02	0.02	0.02	0.08	
	2176947	0.02	0.02	0.02	0.02	0.02	0.06	
Sampler B	2176946	0.02	0.02	0.02	0.02	0.02	0.04	
	2176945	0.02	0.02	0.02	0.02	0.02	0.04	
	2176944	0.02	0.02	0.02	0.02	0.02	0.04	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	1.23	Avg. Deviation
Results at or above the RL are shown in bold font.							0.21	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	
1-600766	2176960		0.02	0.02	0.02	0.02	0.02	<i>0.14</i>	
		2138322	0.02	0.02	0.02	0.02	0.02	<i>0.15</i>	Relative % Difference
								9.19	
1-511359	2176962		0.02	0.02	<i>0.12</i>	0.02	0.02	0.07	
		2139755	0.02	0.02	<i>0.13</i>	0.02	0.02	0.07	Relative % Difference
								12.05	
1-521777	2176966		0.02	0.02	0.04	0.02	0.02	0.05	
		2140708	0.02	0.02	0.04	0.02	0.02	0.05	Relative % Difference
1-521793	2176968		0.02	0.02	<i>1.36</i>	0.02	0.02	0.05	
		2144513	0.02	0.02	<i>1.36</i>	0.02	0.02	0.06	Relative % Difference
								0.00	
			0%	0%	6%	0%	0%	9%	Analyte Avg. RPD
								3%	Table Average RPD

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR NOVEMBER 2019

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2182727	0.02	0.02	0.02	0.02	0.02	0.04	
	2182728	0.02	0.02	0.02	0.02	0.02	0.04	
	2182729	0.02	0.02	0.02	0.02	0.02	0.05	
Sampler B	2182730	0.02	0.02	0.02	0.02	0.02	0.03	
	2182731	0.02	0.02	0.02	0.02	0.02	0.04	
	2182732	0.02	0.02	0.02	0.02	0.02	0.03	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.33	Avg. Deviation
Results at or above the RL are shown in bold font.							0.06	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	Relative % Difference
1-571295	2184805		0.02	0.04	0.07	0.02	0.02	0.10	
		2145758	0.02	0.03	0.07	0.02	0.02	0.09	
1-600212	2184807		0.02	1.00	0.21	1.09	0.02	0.09	
		2145320	0.02	0.93	0.21	1.02	0.02	0.08	
				6.94	1.92	6.64			Relative % Difference
1-600006	2184775		0.02	0.18	0.17	0.68	0.49	0.05	
		2145780	0.02	0.18	0.17	0.67	0.46	0.04	
				1.12	0.59	1.34	7.13	Relative % Difference	
1-521850	2184773		0.02	0.02	0.02	0.02	0.02	0.14	
		2145761	0.02	0.02	0.02	0.02	0.02	0.12	
							19.85	Relative % Difference	
			0%	4%	1%	4%	7%	20%	Analyte Avg. RPD
							6%	Table Average RPD	

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



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QA/QC ANALYSIS RESULTS FOR DECEMBER 2019

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2190542	0.02	0.02	0.02	0.02	0.02	0.04	
	2190543	0.02	0.02	0.02	0.02	0.02	0.02	
	2190544	0.02	0.02	0.02	0.02	0.02	0.02	
Sampler B	2190545	0.02	0.02	0.02	0.02	0.02	0.02	
	2190546	0.02	0.02	0.02	0.02	0.02	0.02	
	2190547	0.02	0.02	0.02	0.02	0.02	0.02	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.64	Avg. Deviation
Results at or above the RL are shown in bold font.							0.11	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	
1-071172	2191399		0.02	0.02	0.02	0.02	0.02	0.10	
		2150617	0.02	0.02	0.02	0.02	0.02	0.09	Relative % Difference
1-021403	2191413		0.02	0.02	0.07	0.13	0.02	0.03	
		2148341	0.02	0.02	0.06	0.12	0.02	0.05	Relative % Difference
						9.45			
1-021399	2191415		0.02	0.09	0.28	0.02	0.02	0.05	
		2148485	0.02	0.09	0.27	0.02	0.02	0.06	Relative % Difference
						5.11			
1-011046	2191424		0.02	0.07	0.02	0.03	0.02	0.02	
		2144720	0.02	0.08	0.02	0.03	0.02	0.03	Relative % Difference
			0%	0%	5%	9%	0%	0%	Analyte Avg. RPD
							2%		Table Average RPD

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



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QA/QC ANALYSIS RESULTS FOR JANUARY 2020

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	
Sampler A	2198248	0.02	0.02	0.02	0.02	0.02	0.02	
	2198249	0.02	0.02	0.02	0.02	0.02	0.02	
	2198250	0.02	0.02	0.02	0.02	0.02	0.02	
Sampler B	2198245	0.02	0.02	0.02	0.02	0.02	0.03	
	2198246	0.02	0.02	0.02	0.02	0.02	0.03	
	2198247	0.02	0.02	0.02	0.02	0.02	0.03	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.45	Avg. Deviation
Results at or above the RL are shown in bold font.							0.08	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	
1-061009	2198259		0.02	0.02	<i>0.14</i>	0.02	0.02	0.02	
		2163962	0.02	0.02	<i>0.14</i>	0.02	0.02	0.02	Relative % Difference
					5.71				
1-021171	2198264		0.02	0.02	0.05	0.02	0.02	0.07	
		2164458	0.02	0.02	0.05	0.02	0.02	0.08	Relative % Difference
1-521827	2198252		0.02	0.02	<i>2.27</i>	0.02	0.02	<i>0.34</i>	
		2165073	0.02	0.02	<i>2.09</i>	0.02	0.02	<i>0.34</i>	Relative % Difference
					8.26			1.47	
1-021253	2198258		0.03	<i>0.15</i>	<i>0.26</i>	0.05	0.02	<i>1.77</i>	
		2164208	0.02	<i>0.14</i>	<i>0.24</i>	0.04	0.02	<i>1.59</i>	Relative % Difference
				8.11	4.80			10.71	
				0%	8%	6%	0%	0%	Analyte Avg. RPD
							3%	Table Average RPD	

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



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QA/QC ANALYSIS RESULTS FOR FEBRUARY 2020

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2203928	0.02	0.02	0.02	0.02	0.02	0.03	
	2203929	0.02	0.02	0.02	0.02	0.02	0.02	
	2203930	0.02	0.02	0.02	0.02	0.02	0.02	
Sampler B	2203931	0.02	0.02	0.02	0.02	0.02	0.03	
	2203932	0.02	0.02	0.02	0.02	0.02	0.03	
	2203933	0.02	0.02	0.02	0.02	0.02	0.03	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.42	Avg. Deviation
Results at or above the RL are shown in bold font.							0.07	Table Average Deviation

Archive Sample Evaluation															
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn							
1-521833	2203922		0.02	0.22	0.06	0.02	0.02	0.03							
		2164467	0.02	0.22	0.06	0.02	0.02	0.03							
			1.39				Relative % Difference								
1-061110	2203923		0.02	0.02	0.02	0.02	0.02	0.04							
		2165101	0.02	0.02	0.02	0.02	0.02	0.04							
							Relative % Difference								
1-061115	2203924		0.10	1.00	0.28	1.37	0.02	0.09							
		2165064	0.10	1.00	0.27	1.36	0.02	0.09							
			2.99	0.50	4.07	0.73	Relative % Difference								
1-600708	2203921		0.02	0.05	0.17	0.19	0.02	0.12							
		2164309	0.02	0.05	0.16	0.19	0.02	0.11							
							1.22	0.54	7.08	Relative % Difference					
		3%		1%		3%		1%		0%		7%		Analyte Avg. RPD	
										2%		Table Average RPD			

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR MARCH 2020

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	
Sampler A	2206329	0.02	0.02	0.02	0.02	0.02	0.02	
	2206330	0.02	0.02	0.02	0.02	0.02	0.02	
	2206331	0.02	0.02	0.02	0.02	0.02	0.02	
Sampler B	2206332	0.02	0.02	0.02	0.02	0.02	0.03	
	2206333	0.02	0.02	0.02	0.02	0.02	0.03	
	2206334	0.02	0.02	0.02	0.02	0.02	0.03	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.33	Avg. Deviation
Results at or above the RL are shown in bold font.							0.06	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	
1-071056	2207442		0.02	0.02	0.07	0.02	0.02	0.13	
		2178022	0.02	0.02	0.07	0.02	0.02	0.13	Relative % Difference
								1.57	
1-021171	2207434		0.02	0.02	0.10	0.02	0.02	0.21	
		2174046	0.02	0.02	0.07	0.02	0.02	0.16	Relative % Difference
								27.96	
1-600060	2207436		0.02	0.02	0.29	0.03	0.02	0.04	
		2178205	0.02	0.02	0.30	0.03	0.02	0.04	Relative % Difference
								3.44	
1-021121	2207435		0.02	0.02	0.08	0.02	0.02	0.05	
		2178701	0.02	0.02	0.08	0.02	0.02	0.04	Relative % Difference
			0%	0%	3%	0%	0%	15%	Analyte Avg. RPD
								3%	Table Average RPD

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR APRIL 2020

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	
Sampler A	2213142	0.02	0.02	0.02	0.02	0.02	0.02	
	2213143	0.02	0.02	0.02	0.02	0.02	0.02	
	2213144	0.02	0.02	0.02	0.02	0.02	0.02	
Sampler B	2213145	0.02	0.02	0.02	0.02	0.02	0.02	
	2213146	0.02	0.02	0.02	0.02	0.02	0.02	
	2213147	0.02	0.02	0.02	0.02	0.02	0.02	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.00	Avg. Deviation
Results at or above the RL are shown in bold font.							0.00	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	
1-521809	2213138		0.02	<i>0.20</i>	0.02	0.04	0.02	<i>0.21</i>	
		2178328	0.02	<i>0.17</i>	0.02	0.04	0.02	<i>0.23</i>	Relative % Difference
				14.29				8.93	
1-031137	2213140		0.02	<i>0.45</i>	<i>0.14</i>	1.15	0.02	<i>0.23</i>	
		2177214	0.02	<i>0.39</i>	<i>0.14</i>	1.00	0.02	<i>0.23</i>	Relative % Difference
				14.90	1.44	14.35		0.00	
1-021393	2213139		0.02	0.02	0.02	0.02	0.02	0.02	
		2178250	0.02	0.02	0.02	0.02	0.02	0.03	Relative % Difference
1-061009	2213141		0.02	0.02	<i>0.18</i>	0.02	0.02	0.02	
		2178360	0.02	0.02	<i>0.17</i>	0.02	0.02	0.02	Relative % Difference
				0.57					
			0%	15%	1%	14%	0%	4%	Analyte Avg. RPD
							6%		Table Average RPD

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR MAY 2020

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2224686	0.02	0.02	0.02	0.02	0.02	0.05	
	2224687	0.02	0.02	0.02	0.02	0.02	0.05	
	2224688	0.02	0.02	0.02	0.02	0.02	0.04	
Sampler B	2224689	0.02	0.02	0.02	0.02	0.02	0.03	
	2224690	0.02	0.02	0.02	0.02	0.02	0.03	
	2224691	0.02	0.02	0.02	0.02	0.02	0.04	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.73	Avg. Deviation
Results at or above the RL are shown in bold font.							0.12	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	Relative % Difference
1-021123	2225126		0.02	0.02	0.02	0.02	0.02	0.07	
		2190464	0.02	0.02	0.02	0.02	0.02	0.07	
1-521783	2225128		0.02	0.02	0.02	0.02	0.02	0.04	
		2186305	0.02	0.02	0.02	0.02	0.02	0.04	
1-031049	2225129		0.02	0.02	1.11	0.04	0.10	0.04	
		2187052	0.02	0.02	1.07	0.05	0.10	0.03	
					3.67		1.00	Relative % Difference	
1-021681	2225130		0.02	0.02	0.36	0.02	0.02	0.32	
		2191489	0.02	0.02	0.39	0.02	0.02	0.27	
					6.69		15.59	Relative % Difference	
			0%	0%	5%	0%	1%	16%	Analyte Avg. RPD
							4%	Table Average RPD	

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

QA/QC ANALYSIS RESULTS FOR JUNE 2020

ORANGE COUNTY SANITATION DISTRICT

Equipment Blank Evaluation								
Equipment	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	Reporting Limit (RL) (mg/L)
		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Sampler A	2227987	0.02	0.02	0.02	0.02	0.02	0.02	
	2227990	0.02	0.02	0.02	0.02	0.02	0.02	
	2227991	0.02	0.02	0.02	0.02	0.02	0.02	
Sampler B	2227988	0.02	0.02	0.02	0.02	0.02	0.03	
	2227989	0.02	0.02	0.02	0.02	0.02	0.02	
	2227992	0.02	0.02	0.02	0.02	0.02	0.02	
Analysis results are reported in mg/L.		0.00	0.00	0.00	0.00	0.00	0.31	Avg. Deviation
Results at or above the RL are shown in bold font.							0.05	Table Average Deviation

Archive Sample Evaluation									
Permit #	Archive #	Original #	Cd	Cr	Cu	Ni	Pb	Zn	Relative % Difference
1-531428	2227998		0.02	0.02	0.02	0.02	0.02	0.05	
		2198220	0.02	0.02	0.02	0.02	0.02	0.05	
1-021672	2228004		0.02	0.09	0.02	0.09	0.02	0.04	
		2198735	0.02	0.09	0.02	0.09	0.02	0.05	
1-511365	2228002		0.02	0.02	0.03	0.02	0.02	0.02	
		2198661	0.02	0.02	0.03	0.02	0.02	0.02	
1-011142	2227999		0.02	0.02	0.93	0.05	0.02	0.02	
		2198762	0.02	0.02	0.90	0.05	0.02	0.03	
					3.83			Relative % Difference	
			0.00	0.00	0.04	0.00	0.00	0.00	Analyte Avg. RPD
							0.01	Table Average RPD	

Results and RLs reported in mg/L. Results at or below the Reporting Limits are shown as the RLs. Bold numbers are results at or above the RLs. Italic bold numbers are greater than 20 times the RLs. Comparisons are made only for results greater than 5 times the Reporting Limit.



APPENDIX I

SAMPLE COLLECTION CHECK RESULTS, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

SAMPLE COLLECTION CHECK RESULTS, JUL-SEP 2019									
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler A	2168072	0.02	0.02	0.07	0.02	0.02	0.12	13.0	2168053
	2166395	0.02	0.02	0.07	0.02	0.02	0.12	13.0	2166391
	2166396	0.02	0.02	0.07	0.02	0.02	0.12	11.0	2166392
	2166397	0.02	0.02	0.07	0.02	0.02	0.12	12.0	2166393
	2166398	0.02	0.02	0.07	0.02	0.02	0.13	12.0	2166394
	Average Range	0.02	0.02	0.07	0.02	0.02	0.12	12.2	Average Range
Sampler Avg. Deviation							0.27	0.6	
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler B	2167027	0.02	0.02	0.07	0.02	0.02	0.11	12.0	2167022
	2167028	0.02	0.02	0.07	0.02	0.02	0.11	12.0	2167023
	2167029	0.02	0.02	0.07	0.02	0.02	0.11	11.0	2167024
	2167030	0.02	0.02	0.07	0.02	0.02	0.12	12.0	2167025
	2167031	0.02	0.02	0.07	0.02	0.02	0.11	14.0	2167026
	Average Range	0.02	0.02	0.07	0.02	0.02	0.11	12.2	Average Range
Sampler Avg. Deviation							0.20	0.7	
Site Relative Percent Difference		Cd	Cr	Cu	Ni	Pb	Zn	TSS	
Reporting Limits		0.02	0.02	0.02	0.02	0.02	0.02	6.40	0.0
								1.0	

SAMPLE COLLECTION CHECK RESULTS, OCT - DEC 2019									
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler A	2186108	0.02	0.02	0.09	0.02	0.02	0.15	63.0	2186091
	2186062	0.02	0.02	0.08	0.03	0.02	0.16	63.0	2186092
	2186063	0.02	0.02	0.09	0.03	0.02	0.16	63.0	2186093
	2186064	0.02	0.02	0.09	0.03	0.02	0.16	62.0	2186094
	2186070	0.02	0.02	0.09	0.02	0.02	0.19	63.0	2186096
	Average Range	0.02	0.02	0.09	0.03	0.02	0.16	62.8	Average Range
Sampler Avg. Deviation							1.02	0.3	
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler B	2186091	0.02	0.02	0.10	0.03	0.02	0.20	70.0	2186095
	2186092	0.02	0.02	0.10	0.03	0.02	0.20	65.0	2186098
	2186093	0.02	0.02	0.09	0.03	0.02	0.19	67.0	2186097
	2186094	0.02	0.02	0.10	0.03	0.02	0.20	66.0	2186099
	2186096	0.02	0.02	0.08	0.02	0.02	0.14	67.0	2186100
	Average Range	0.02	0.02	0.09	0.03	0.02	0.18	67.0	Average Range
Sampler Avg. Deviation							1.64	1.2	
Site Relative Percent Difference		Cd	Cr	Cu	Ni	Pb	Zn	TSS	
Reporting Limits		0.02	0.02	0.02	0.02	0.02	0.02	11.86	6.5
								1.0	

Results are shown only for results greater than 5 times the Reporting Limit. Bold numbers are results at or above the RLs. Results and RLs are reported in mg/L.



APPENDIX I

SAMPLE COLLECTION CHECK RESULTS, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

SAMPLE COLLECTION CHECK RESULTS, JAN - MAR 2020									
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler A	2203568	0.02	0.02	0.18	0.06	0.02	0.03	4.1	2203565
	2203465	0.02	0.02	0.18	0.05	0.02	0.03	4.5	2203475
	2203467	0.02	0.02	0.19	0.06	0.02	0.03	5.7	2203474
	2203468	0.02	0.02	0.19	0.05	0.02	0.03	4.2	2203476
	2203466	0.02	0.02	0.19	0.06	0.02	0.04	4.7	2203477
	Average	0.02	0.02	0.19	0.06	0.02	0.03	4.6	Average
Range	0.00	0.00	0.01	0.00	0.00	0.01	1.6	Range	
Sampler Avg. Deviation				0.32					
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler B	2203469	0.02	0.02	0.19	0.06	0.02	0.03	6.3	2203478
	2203470	0.02	0.02	0.20	0.06	0.02	0.03	5.2	2203479
	2203471	0.02	0.02	0.20	0.06	0.02	0.03	7.0	2203480
	2203472	0.02	0.02	0.19	0.05	0.02	0.03	7.5	2203481
	2203473	0.02	0.02	0.20	0.06	0.02	0.03	8.0	2203483
	Average	0.02	0.02	0.19	0.06	0.02	0.03	6.8	Average
Range	0.00	0.00	0.01	0.00	0.00	0.00	2.8	Range	
Sampler Avg. Deviation				0.31					
Site Relative Percent Difference		Cd	Cr	Cu	Ni	Pb	Zn	TSS	
				4.42				37.8	
Reporting Limits		0.02	0.02	0.02	0.02	0.02	0.02	1.0	

SAMPLE COLLECTION CHECK RESULTS, APR - JUN 2020									
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler A	2213611	0.02	0.02	0.40	0.02	0.09	0.04	26.0	2213603
	2213610	0.02	0.02	0.40	0.02	0.09	0.04	26.0	2213602
	2213612	0.02	0.02	0.40	0.02	0.09	0.04	27.0	2213600
	2213766	0.02	0.02	0.42	0.02	0.09	0.04	29.0	2213601
	2213609	0.02	0.02	0.39	0.02	0.09	0.04	28.0	2213765
	Average	0.02	0.02	0.41	0.02	0.09	0.04	27.2	Average
Range	0.00	0.00	0.03	0.00	0.00	0.00	3.0	Range	
Sampler Avg. Deviation				0.01					
	Sample #	Cd	Cr	Cu	Ni	Pb	Zn	TSS	Sample #
Sampler B	2213616	0.02	0.02	0.39	0.02	0.09	0.04	23.0	2213608
	2213617	0.02	0.02	0.38	0.02	0.09	0.04	26.0	2213607
	2213615	0.02	0.02	0.38	0.02	0.09	0.04	26.0	2213606
	2213614	0.02	0.02	0.38	0.02	0.09	0.04	26.0	2213605
	2213613	0.02	0.02	0.37	0.02	0.09	0.04	25.0	2213604
	Average	0.02	0.02	0.38	0.02	0.09	0.04	25.2	Average
Range	0.00	0.00	0.02	0.00	0.00	0.00	3.0	Range	
Sampler Avg. Deviation				0.01					
Site Relative Percent Difference		Cd	Cr	Cu	Ni	Pb	Zn	TSS	
				7.14				7.6	
Reporting Limits		0.02	0.02	0.02	0.02	0.02	0.02	1.0	

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**PERMITTEES WITH PRETREATMENT
EQUIPMENT**



APPENDIX J

PERMITTEES WITH PRETREATMENT EQUIPMENT, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

Facility Name	Permit No.	Regulation																												
			Anion Exchange	Carbon Filtration	Cation Exchange	Chelate Breaking Tank	Chemical Precipitation	Chromium Reduction	Clarification	Clarification eop	Clarification neop	Coagulation/Flocculation	Cross Flow Filter (Memtek)	Cyanide Destruct 1 Stage	Cyanide Destruct 2 Stage	Effluent pH Adjustment	Electrowinning/Plateout	Equalization tank	Holding Tank	Mixed-Bed Ion Exchange	Multi-Purpose Tank 1	Multi-Purpose Tank 2	O/W Sep	Other Pressure Filtration Device	pH Adjust Tank-No Heavy Metals	Plate & Frame Filter Press	Polishing Filter	Sludge Thickening Tank	Other	
9W Halo Western opCo, L.P.	1-600378	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
A & G Electropolish	1-531422	433.17(a)	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
A & R Powder Coating, Inc.	1-021088	433.17(a)	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Accurate Circuit Engineering	1-011138	433.17(a)	.	.	X	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	X	.	.
Active Plating, Inc.	1-011115	433.17(a)	X	.	.	X	X	X	X	.	.
Advance Tech Plating, Inc.	1-021389	433.17(a)	.	.	.	.	X	X	.	.	X	.	.	.	.	.	X	.	.	X	.	.	.	X	.	.	X	.	.
Air Industries Company, A PCC Company (Chapman)	1-031013	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	X	.	.	.	.
Air Industries Company, A PCC Company (Knott)	1-531404	433.15(a), 471.64(a), 471.65(a)	.	.	X	.	X	X	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	X	.	X
Alexander Oil Company	1-581185	403.5(d)	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
All Metals Processing of O.C., Inc.	1-031110	433.17(a)	.	.	.	.	.	X	.	.	X	.	.	X	.	.	X	X	.	X	.	.	.	.	.	X	X	.	X
Allied Electronics Services, Inc.	1-011073	433.17(a)	.	.	.	.	X	.	.	.	X	X	.	.	.	.	X	X	.	.	.	.	X	.	.	X	.	.	.
Alloy Die Casting Co.	1-531437	464.15(a), 464.15(b), 464.15(c), 464.15(h), 464.45(a), 464.45(b), 464.45(d)	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	X	X	X	.	.	.	.	X	X	.
Alloy Tech Electropolishing, Inc.	1-011036	433.17(a)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	X	.	X
AlSCO, Inc.	1-021656	403.5(d)	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.
Aluminum Forge - Div. of Alum. Precision	1-071035	467.46	.	.	.	.	X	.	.	.	X	.	.	.	.	.	X	X	.	.	.	.	.	X	.	X	X	.	.



APPENDIX J

PERMITTEES WITH PRETREATMENT EQUIPMENT, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

Facility Name	Permit No.	Regulation																												
			Anion Exchange	Carbon Filtration	Cation Exchange	Chelate Breaking Tank	Chemical Precipitation	Chromium Reduction	Clarification	Clarification eop	Clarification neop	Coagulation/Flocculation	Cross Flow Filter (Memtek)	Cyanide Destruct 1 Stage	Cyanide Destruct 2 Stage	Effluent pH Adjustment	Electrowinning/Plateout	Equalization tank	Holding Tank	Mixed-Bed Ion Exchange	Multi-Purpose Tank 1	Multi-Purpose Tank 2	O/W Sep	Other Pressure Filtration Device	pH Adjust Tank-No Heavy Metals	Plate & Frame Filter Press	Polishing Filter	Sludge Thickening Tank	Other	
Aluminum Precision Products, Inc. (Central)	1-011038	467.45	X	X	.
Aluminum Precision Products, Inc. (Susan)	1-011100	467.45, 467.46	.	.	.	.	X	.	X	X	.	.	.	.	.	X	.	X	.	.	.	.	.	X	.	.	X	.	.
American Circuit Technology, Inc.	1-021249	433.17(a)	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	X	.	X	.	.	X	.	.	X	X	X	.
Amerimax Building Products, Inc.	1-021102	465.35	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ameripecc, Inc.	1-031057	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.
Anaheim Extrusion Co., Inc.	1-021168	467.35(c)	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	X	X	.
Andres Technical Plating	1-521798	433.17(a)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	X	.	.
AnoChem Coatings	1-600295	433.17(a)	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.
Anodyne, Inc.	1-511389	433.17(a)	.	.	X	X	X	X	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	X
Anomil Ent. Dba Danco Metal Surfacing	1-011155	433.17(a)	.	.	X	.	X	X	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	X	.	.
APCT Orange County	1-600503	433.17(a)	.	.	X	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	X	.	.
ARO Service	1-021192	433.17(a)	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Arrowhead Operating Inc.	1-601062	403.5(d)	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
Arrowhead Products Corporation	1-031137	433.17(a)	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
Aseptic Technology LLC	1-600716	403.5(d)	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Astech Engineered Products, Inc.	1-571295	433.17(a)	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.
Auto-Chlor System of Washington, Inc.	1-511384	417.166	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.



APPENDIX J

PERMITTEES WITH PRETREATMENT EQUIPMENT, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

Facility Name	Permit No.	Regulation																													
			Anion Exchange	Carbon Filtration	Cation Exchange	Chelate Breaking Tank	Chemical Precipitation	Chromium Reduction	Clarification	Clarification eop	Clarification neop	Coagulation/Flocculation	Cross Flow Filter (Memtek)	Cyanide Destruct 1 Stage	Cyanide Destruct 2 Stage	Effluent pH Adjustment	Electrowinning/Plateout	Equalization tank	Holding Tank	Mixed-Bed Ion Exchange	Multi-Purpose Tank 1	Multi-Purpose Tank 2	O/W Sep	Other Pressure Filtration Device	pH Adjust Tank-No Heavy Metals	Plate & Frame Filter Press	Polishing Filter	Sludge Thickening Tank	Other		
Aviation Equipment Processing	1-071037	433.17(a)	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	X	X	X
B. Braun Medical, Inc. (West/Lake)	1-541183	439.47, 463.16, 463.26, 463.36	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Basic Electronics, Inc.	1-031094	433.17(a)	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bazz Houston Co.	1-031010	403.5(d)	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Beckman Coulter, Inc.	1-521824	433.17(a)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
Beo-Mag Plating	1-511370	433.17(a)	.	.	.	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	X	.	X	.	X	.	.	.
Bimbo Bakeries U.S.A, Inc.	1-521838	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Black Oxide Industries, Inc.	1-021213	433.17(a)	.	.	.	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	X	.	X	.	X	.	X	X
Blue Lake Energy	1-521785	403.5(d)	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.
Bodycote Thermal Processing	1-031120	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
Boeing Company (Graham)	1-111018	433.17(a)	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.
Brasstech, Inc	1-600316	433.17(a)	X
Brea Power II, LLC	1-521837	403.5(d)	X
Bridge Energy, LLC	1-600398	403.5(d)	X
Bridgemark Corporation	1-521844	403.5(d)	X	X	X
Brindle/Thomas - Bradley	1-531428	403.5(d)	X
Brindle/Thomas - Brooks & Kohlbush	1-531429	403.5(d)	X	X
Brindle/Thomas - Catalina & Copeland	1-531430	403.5(d)	X	X
Brindle/Thomas-Dabney & Patton	1-531427	403.5(d)	X	X



APPENDIX J

PERMITTEES WITH PRETREATMENT EQUIPMENT, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

Facility Name	Permit No.	Regulation																												
			Anion Exchange	Carbon Filtration	Cation Exchange	Chelate Breaking Tank	Chemical Precipitation	Chromium Reduction	Clarification	Clarification eop	Clarification neop	Coagulation/Flocculation	Cross Flow Filter (Memtek)	Cyanide Destruct 1 Stage	Cyanide Destruct 2 Stage	Effluent pH Adjustment	Electrowinning/Plateout	Equalization tank	Holding Tank	Mixed-Bed Ion Exchange	Multi-Purpose Tank 1	Multi-Purpose Tank 2	O/W Sep	Other Pressure Filtration Device	pH Adjust Tank-No Heavy Metals	Plate & Frame Filter Press	Polishing Filter	Sludge Thickening Tank	Other	
Bristol Industries	1-021226	433.17(a), 467.36(c), 471.35(dd), 471.35(ee), 471.35(ff), 471.35(i), 471.35(r), 471.35(s), 471.35(t), 471.35(u), 471.35(v)	.	.	.	.	X	X	.	.	X	.	.	X	X	.	.	X	.	.	.	.	.	X	.	.	X	X	X	
Brothers International Desserts (North)	1-600583	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
Brothers International Desserts (West)	1-600582	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
Burlington Engineering, Inc.	1-521770	433.17(a)	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	X	.	.	X	.	.	.	.	.	.	X	.	.
Cadillac Plating, Inc.	1-021062	433.17(a)	.	.	.	.	X	X	.	.	X	.	.	.	.	.	.	X	.	X	.	.	X	.	.	.	X	.	.	.
Cal-Aurum Industries, Inc.	1-111089	433.17(a)	.	.	.	.	.	.	.	X	.	.	.	X	.	X	.	.	X	.	.	.	.	.	.	.	.	X	X	.
California Gasket and Rubber Corporation	1-521832	428.66(a)	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cannery Hamilton Properties, LLC.	S-600807	403.5(d)	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.
Catalina Cylinders, A Div. of APP	1-031021	467.46	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CD Video, Inc.	1-511076	433.17(a)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X
Central Powder Coating	1-021189	433.17(a)	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	X	.	.	.
Ceradyne, Inc., a 3M Company	1-600691	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.
Chromadora, Inc.	1-511414	433.17(a)	X	X	X	X	.	.	.	X	X	.	.	X	.	.	.
Circuit Technology, Inc.	1-521821	433.17(a)	X



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PERMITTEES WITH PRETREATMENT EQUIPMENT, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

Facility Name	Permit No.	Regulation																													
			Anion Exchange	Carbon Filtration	Cation Exchange	Chelate Breaking Tank	Chemical Precipitation	Chromium Reduction	Clarification	Clarification eop	Clarification neop	Coagulation/Flocculation	Cross Flow Filter (Memtek)	Cyanide Destruct 1 Stage	Cyanide Destruct 2 Stage	Effluent pH Adjustment	Electrowinning/Plateout	Equalization tank	Holding Tank	Mixed-Bed Ion Exchange	Multi-Purpose Tank 1	Multi-Purpose Tank 2	O/W Sep	Other Pressure Filtration Device	pH Adjust Tank-No Heavy Metals	Plate & Frame Filter Press	Polishing Filter	Sludge Thickening Tank	Other		
Cirtech, Inc.	1-600689	433.17(a)	X	.	X	X	X	X	.	.	.	X	.	X	X	.	.	.
City of Huntington Beach (Warner and Edgewater Manhole)	S-600763	403.5(d)	X
City of Huntington Beach (Warner Sinkhole)	S-601113	403.5(d)	X
City of Huntington Beach Fire Department	1-111015	403.5(d)	X	X	X
City of Newport Beach (West Coast Hwy - Oil Extraction)	1-600584	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.	.	.	.	.	.
Coast to Coast Circuits, Inc.	1-111129	433.17(a)	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	X	.	.	.	.	.
Columbine Associates	1-521784	403.5(d)	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.
Continuous Coating Corporation	1-021290	433.17(a), 465.15	.	.	.	.	X	.	.	X	X	.	.	.	X	.	X	X	.	.	.	.	.	X	.	.	X	.	X	X
Crest Coating, Inc.	1-021289	433.17(a)	.	.	.	.	X	.	.	X	X	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	X	.	.
Custom Enamellers, Inc.	1-021297	433.17(a)	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cytec Engineered Materials, Inc.	Z-600005	433.17(a)	.	.	.	.	X	X	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
DAH Oil, LLC	1-581173	403.5(d)	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Darling International, Inc.	1-511378	403.5(d)	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	X	.	.	X
Data Aire, Inc. #2	1-021379	433.17(a)	.	.	.	.	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
Data Electronic Services, Inc.	1-011142	433.17(a)	.	.	X	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	X	.	X	X
Data Solder, Inc.	1-521761	433.17(a)	.	.	.	.	X	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	X	.	.	.	.
Dayton Flavors, LLC	1-600038	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.



APPENDIX J

PERMITTEES WITH PRETREATMENT EQUIPMENT, FY 2019-2020

ORANGE COUNTY SANITATION DISTRICT

Facility Name	Permit No.	Regulation																												
			Anion Exchange	Carbon Filtration	Cation Exchange	Chelate Breaking Tank	Chemical Precipitation	Chromium Reduction	Clarification	Clarification eop	Clarification neop	Coagulation/Flocculation	Cross Flow Filter (Memtek)	Cyanide Destruct 1 Stage	Cyanide Destruct 2 Stage	Effluent pH Adjustment	Electrowinning/Plateout	Equalization tank	Holding Tank	Mixed-Bed Ion Exchange	Multi-Purpose Tank 1	Multi-Purpose Tank 2	O/W Sep	Other Pressure Filtration Device	pH Adjust Tank-No Heavy Metals	Plate & Frame Filter Press	Polishing Filter	Sludge Thickening Tank	Other	
DCOR, LLC	1-111013	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.	.	.	.	.	.
Dr. Smoothie Enterprises - DBA Revolution Group	1-600131	403.5(d)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
DRS Network & Imaging Systems, LLC	1-531405	469.18(a)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.	.
Ducommun Aerostructures, Inc.	1-021105	433.17(a)	.	.	.	.	X	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	X	X	.	X	.	X	.	.
Dunham Metal Plating Inc.	1-601023	433.17(a)	.	.	.	.	X	X	.	X	X	.	.	.	.	.	X	.	.	X	.	.	X	.	.	.	X	.	X	.
Dunham Metal Processing	1-021325	433.17(a)	.	.	.	.	X	X	.	X	.	.	.	.	.	.	X	X	.	.	.	.	X	.	.	X	.	X	.	.
E&B Natural Resources- Angus Petroleum Corporation	1-600254	403.5(d)	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.
Earth Friendly Products	1-600739	417.166, 417.86	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
EFT Fast Quality Service, Inc.	1-011064	433.17(a)	X	.	X	.	X	.	.	.	.	.	.	.	.	X	.	.	X	.	.	.	.	X	.	.	X	.	.	.
Electro Metal Finishing Corporation	1-021158	433.17(a)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.
Electrolurgy, Inc.	1-071162	433.17(a)	.	.	X	.	.	X	.	.	X	.	.	X	X	.	.	.	X	.	X	.	.	X	.	.	X	.	.	.
Electron Plating Inc.	1-021336	433.17(a)	.	.	.	.	X	X	.	.	X	.	.	.	.	.	X	X	.	.	.	.	X	.	.	X	.	.	X	.
Electronic Precision Specialties, Inc.	1-021337	433.17(a)	X	.	X	.	.	.	.	.	X	.	.	.	.	X	.	X	.	.	.	.	.	X	.	.	.	.	.	.
Embee Processing (Anodize)	1-600456	413.14(c), 413.54(c), 413.64(c), 433.17(a)	X	X	X	X	.	.	X
Embee Processing (Plate)	1-600457	413.14(c), 413.54(c), 413.64(c), 413.74(c), 433.17(a)	X



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Expo Dyeing and Finishing, Inc.	1-031322	403.5(d)	X	X
Fabrication Concepts Corporation	1-011068	433.17(a)	X	X
Fineline Circuits & Technology, Inc.	1-021121	433.17(a)	.	.	X	X	.	X	X	.	.	X	.	.
FMH Aerospace Corp.	1-600585	433.17(a), 467.16, 471.65(m), 471.65(n), 471.65(p), 471.65(q), 471.65(w)	X	X
G & M Oil Company, Inc. - Station #50	S-053293	403.5(d)	X
Gallade Chemical, Inc.	1-011257	403.5(d)	X	.	X	X	.	.	.
Gallade Chemical, Inc.	S-051243	403.5(d)	.	X
Gemini Industries, Inc.	1-071172	415.24, 421.265(a)	X	.	.	X	X	X	.	.
Gemtech Coatings	Z-600544	433.17(a)	X
General Container Corporation	1-031042	403.5(d)	X	.	X	X	.	.
GKN Aerospace Transparency Systems	1-531401	403.5(d)	X
Golden State Pumping LLC	1-600975	403.5(d)	X	.	X	.	.	.	X	.	X	.	.	X
Guadalajara Tire Service	S-600976	403.5(d)	.	X	X	X	X
Harbor Truck Bodies, Inc.	1-021286	433.17(a)	X	.	.	X	X	X	X	.	.	X	.	.	.
Harry's Dye & Wash, Inc.	1-521746	403.5(d)	X	X
Hartwell Corporation	1-021381	403.5(d)	X



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Hellman Properties, LLC	1-600273	403.5(d)	X
Hi Tech Solder	1-521790	433.17(a)	X	.	.	.	X	X	X	X	.	.
Hightower Plating & Manufacturing Co.	1-021185	433.17(a)	X	.	X	.	X	X	.	.	X	.	.	X	X	.	.	X	X	X	.	.	X	.	X
Hixson Metal Finishing	1-061115	413.14(c), 413.14(g), 413.24(c), 413.24(g), 413.44(c), 413.44(g), 413.54(c), 413.54(g), 413.64(c), 413.64(g), 433.17(a)	.	.	.	X	X	X	.	.	X	X	.	X	X	X	.	X	X	.	.	X	.	.
House Foods America Corporation (East)	1-600906	403.5(d)	X
Howmet Aerospace	S-000790	403.5(d)	X
Howmet Global Fastening Systems Inc.	1-021081	433.15(a), 433.17(a), 467.46, 471.65(i), 471.65(j), 471.65(m), 471.65(n), 471.65(o), 471.65(p), 471.65(q), 471.65(r), 471.65(s), 471.65(w), 471.65(x)	X	X	.	.	X	.	.	X	.	.	.	X	X	X	.	.	X	X	X
Ideal Anodizing, Inc.	1-021041	433.17(a)	X	X	.	X	X	.	.	X	.	.
Ikon Powder Coating, Inc.	1-521756	433.17(a)	X
Image Technology, Inc.	1-521755	417.86	X	X	.



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Imperial Plating	1-031106	433.17(a)	X	.	.	.	X	X	.	.	.	X	.	.	X	.	.	.
Independent Forge Company	1-021401	467.45	X	X	.	.	.	X	.	.	X	.	.	.
Independent Forge Company	Z-601008	467.45	X	X	.	.	.	X	.	.	X	.	.	.
Industrial Metal Finishing, Inc.	1-521828	403.5(d)	X	X	.	.	X	.	.	.
Intec Products, Inc.	1-021399	403.5(d)	X	X	.	.	.	
Integral Aerospace, LLC	1-600243	433.17(a)	X	.	X	X	.	X	X	X	.
International Paper Company (Anaheim)	1-521820	403.5(d)	X	.	X	X	X	.	.
International Paper Company (Buena Park Bag)	1-531419	403.5(d)	X	.	X	X	.	.	.
International Paper Company (Buena Park Container)	1-031171	403.5(d)	X	X	X	.	.	X	.	.	.
J & R Metal Finishing Co.	1-521823	403.5(d)	X	X	.	.	.	X	.	.	.	X	.	.	X	.	.	.
J&J Marine Acquisition Co., LLC	1-551152	403.5(d)	.	X	X	X	X	.	.	.	X	X	.	.	X	.	.
JD Processing, Inc. (East)	1-511407	433.17(a)	X	.	X	.	.	X	X	X	.	.	X	.	.	.
Jellco Container, Inc.	1-021402	403.5(d)	X
John A. Thomas- Bolsa Oil	1-031065	403.5(d)	X	X	X
Kinsbursky Brothers Supply, Inc.	1-021424	403.5(d)	X	.	.	X	.	X	X	.	X	.
Kirkhill, Inc. (North)	1-600608	428.76(a)	X
Kirkhill, Inc. (South)	1-600609	428.76(a)	X



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Patriot Wastewater, LLC (Freedom CWT)	1-521861	437.47(b)	X	X	.	.	X	.	X	.	X	.	X	.	.	.	X
Patriot Wastewater, LLC (Freedom Non-CWT)	1-600147	403.5(d)	X	X	X
Performance Powder, Inc.	1-521805	433.17(a)	X
Petroprize Corporation	1-581180	403.5(d)	X
Pier Oil Company, Inc.	1-581178	403.5(d)	X	X
Pioneer Circuits, Inc.	1-011262	433.17(a)	X	.	X	.	.	.	X	X	.	X	X	.	X	X	.	X	.	X	.	X	.	X
Platinum Surface Coating, Inc.	1-521852	433.17(a)	X	.	X	X	X	.	.
Powdercoat Professionals Inc.	Z-600275	433.17(a)	X
Power Distribution, Inc.	1-511400	403.5(d)	X
Powerdrive Oil & Gas Company, LLC (16th)	1-600246	403.5(d)	X
Powerdrive Oil & Gas Company, LLC (2nd)	1-600248	403.5(d)	X
Powerdrive Oil & Gas Company, LLC (Surveyor)	1-600245	403.5(d)	X
Precious Metals Plating Co., Inc.	1-011265	433.17(a)	.	.	X	X	.	X	.	.	X
Precision Anodizing & Plating, Inc.	1-521809	433.17(a)	X	X	.	.	X	X	.	.	X	.	.
Precision Circuits West, Inc.	1-011008	433.17(a)	X	.	.	.	X	X	.	.	X	.	.	X	.	X	.	X	.	X
Precision Resource, California Division	1-111002	403.5(d)	X	X



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Precon, Inc.	1-021581	403.5(d)	X	X	X
Prima-Tex Industries Inc.	1-031036	403.5(d)	X	X
Quality Aluminum Forge, LLC (Cypress North)	1-521833	467.45	X	.	X	X	X	X	.	.	X	.	.	
Quality Aluminum Forge, LLC (Cypress South)	1-600272	467.46	X	X	.	.	X	X	.	.
RBC Transport Dynamics Corp.	1-011013	433.17(a)	X	.	.	.	X	X
Reid Metal Finishing	1-511376	433.17(a)	X	X	.	X	.	.	X	X	X	.	X	X	.	.	X	X	.
Remora Operating CA, LLC	1-581192	403.5(d)	X	X	X
Republic Waste Services	1-521827	403.5(d)	X
Republic Waste Services of So. Cal., LLC	1-021169	403.5(d)	X
Rigiflex Technology, Inc.	1-021187	433.17(a)	X	.	X	X	X	.	.	.
Rolls-Royce HTC	1-600212	403.5(d)	X	.	.	.
Roto-Die Company, Inc.	1-021033	433.17(a)	X
Rountree / Wright Enterprises, LLC	1-111028	403.5(d)	X	X	X
S & C Oil Co., Inc.	1-581175	403.5(d)	X	X
Sabic Innovative Plastics, US, LLC	S-057284	403.5(d)	X	X	X	.
Safran Electronics & Defense, Avionics USA, LLC.	1-571304	433.17(a)	X
Sanmina Corporation (Airway)	1-061008	433.17(a)	.	.	X	.	X	.	.	.	X	X	X	.	.



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Sanmina Corporation (Redhill)	1-061009	433.17(a)	X	X	.	X	.	.	.	X	X	.	.
Santana Services	1-021016	433.17(a)	X	
Scientific Spray Finishes, Inc.	1-031311	433.17(a)	X	
Semicoa	1-571313	469.18(a)	X	
Serrano Water District	1-021137	403.5(d)	X	X	X	.	.	.	
SFPP, LP	1-021619	403.5(d)	X	.	.	X	.	X	.	X	.	.	.	
Shepard Bros., Inc.	1-031034	417.166, 417.176	X	X	.	X	
Sirco Industrial, Inc.	1-600706	403.5(d)	X	X	X	X	X	.	
Soldermask, Inc.	1-031341	433.17(a)	X	X	
South Coast Circuits, Inc. (Bldg 3500 A)	1-011069	433.17(a)	X	
South Coast Circuits, Inc. (Bldg 3506 A)	1-011030	433.17(a)	X	.	.	.	X	X	X	X	X	X	.	.	
South Coast Circuits, Inc. (Bldg 3512 A)	1-511365	433.17(a)	.	X	X	.	.	X	X	X	.	.	X	.	.	
South Coast Circuits, Inc. (Bldg 3524 A)	1-011054	433.17(a)	X	X	X	.	.	X	X	X	.	.	
South Coast Water	1-511405	403.5(d)	X	
Southern California Edison #1 (Mt)	1-031014	403.5(d)	X	
Southern California Edison #2 (Das)	1-031015	403.5(d)	X	



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Tiodize Company, Inc.	1-111132	433.17(a)	X	X	.	X	X	.	X	X	.	.	X	.	X
Toyota Racing Development	1-071059	403.5(d)	X	
Transline Technology, Inc.	1-021202	433.17(a)	.	.	X	.	X	X	.	X	X	.	.	X	.	.	
Tri Pointe Homes, Inc.	S-600887	403.5(d)	X	
Tropitone Furniture Co., Inc.	1-141163	433.17(a)	X	
TTM Technologies North America, LLC. (Croddy)	1-511366	433.17(a)	X	.	.	.	X	X	.	.	.	X	.	X	.	.	X	.	X	
TTM Technologies North America, LLC. (Harbor)	1-511359	433.17(a)	X	.	.	.	X	X	.	.	.	X	.	X	.	.	X	.	X	
Ultra-Pure Metal Finishing, Inc.	1-021703	433.17(a)	X	X	.	X	X	X	.	.	X	.	X	.	X	.	.	X	.	X
United Pharma, LLC	1-531418	403.5(d)	X	
Universal Alloy Corp.	1-021706	467.35(c)	X	.	
Universal Molding Co.	1-521836	433.17(a)	X	X	.	X	X	X	.	.	
Vi-Cal Metals, Inc.	1-521846	403.5(d)	X	
Weber Precision Graphics	1-011354	403.5(d)	.	X	X	
Wilco-Placentia Oil Operator, LLC	1-521829	403.5(d)	X	X	
Winonics (Brea)	1-031035	433.17(a)	X	.	.	.	X	X	.	.	.	X	.	X	.	.	X	.	X	
Winonics, Inc.	1-021735	433.17(a)	X	.	.	.	X	X	.	.	.	X	.	X	.	.	X	.	.	

