



2012 National Pretreatment and Pollution Prevention Workshop
Pensacola Beach, Florida
May 10, 2012

Local Limits and Beyond Panel
Response to the Local Limits section of a
Pretreatment Compliance Inspection (PCI) Report.



Presented by:
Paul D. Schmidtbauer
Industrial Waste Administrator
SOCWA

SOCWA is a JPA located in the Southern Section of Orange County, California.

10 Member Agencies

1. City of Laguna Beach
2. City of San Clemente
3. City of San Juan Capistrano
4. El Toro Water District
5. Emerald Bay Service District
6. Irvine Ranch Water district
7. Moulton Niguel Water District
8. Santa Margarita Water District
9. South Coast Water District
10. Trabuco Canyon Water District

220 square miles of service area.

550,000 in Population

2 Isolated Treatment Plants

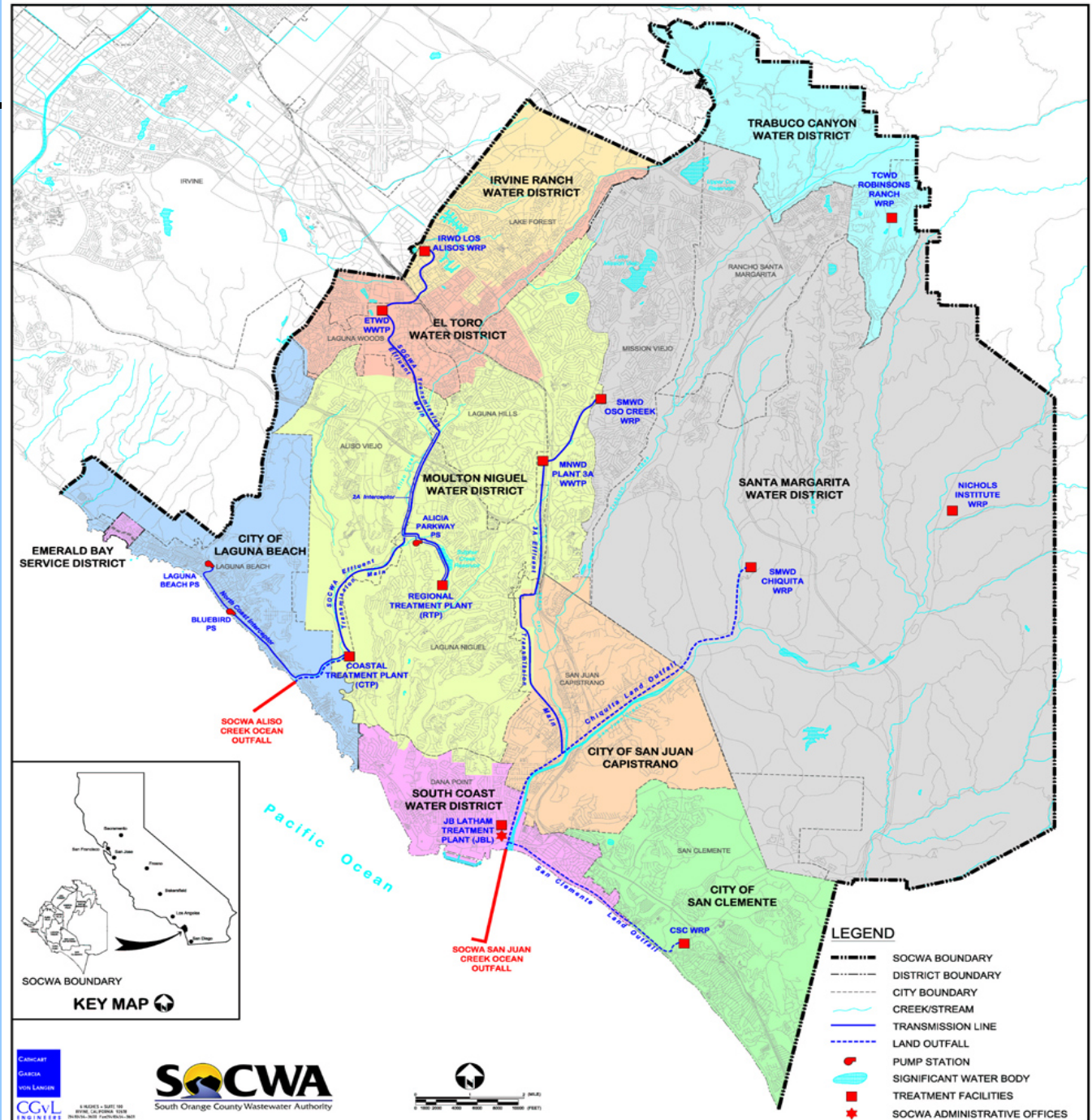
9 Treatment Plants connected to the ocean outfalls.

5 Land Outfalls

2 Ocean Outfalls. 16-20 MGD Each.

Other Areas in Jurisdiction

City of Aliso Viejo
 City of Dana Point
 City of Laguna Hills
 City of Laguna Niguel
 City of Laguna Woods
 City of Lake Forest
 City of Mission Viejo
 City of Rancho Santa Margarita
 Coto de Caza
 Ladera Ranch
 Las Flores
 Talega



PCI conducted on January 25, 2011.

PCI report letter dated July 18, 2011.

Response by SOCWA due by
August 15, 2012.



Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board San Diego Region

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Arnold Schwarzenegger
Governor

July 18, 2011

Mr. Paul Schmidtbauer
Industrial Waste Administrator
South Orange County Wastewater Authority
34156 Del Obispo Street,
Dana Point, CA, 92629

Via email:

pschmidtbauer@socwa.com

In reply refer to:

CIWQS Place ID:257590 and
257592
WDID: 9 000000117 and
9 000000175

Dear Mr. Schmidtbauer:

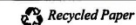
**SUBJECT: SOUTH ORANGE COUNTY WASTEWATER AUTHORITY, ORDER NO.
R9-2006-0055 (NPDES PERMIT NO. CA0107611) and R9-2005-0054
(NPDES PERMIT NO. CA0107417)**

Enclosed is a copy of the Pretreatment Compliance Report on the approved industrial pretreatment program for South Orange County Wastewater Authority (SOCWA). The Report documents that SOCWA's pretreatment program is generally consistent with USEPA regulations and appears to be an effective program. The Report, however, lists some deficiencies under Section 1.3, Summary of Compliance Inspection Findings. **Please review the Report and identify the measures taken or planned by SOCWA to address the deficiencies in a brief written response submitted to this office August 15, 2011.**

The PCI Summary Report, Waste Discharge Pretreatment and Source Control Program, Enforcement Response Plan, Example Interagency Agreement, Example Waste Discharge Permit, and Site Visit Data Sheets are enclosed with this letter. The entire PCA Report, including all of the attachments, is also available for review at our office.

7/18/11
PPS

California Environmental Protection Agency



Mr. Schmidbauer,
SOCWA
Pretreatment Compliance Inspection Report

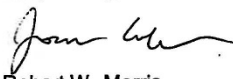
- 2 -

July 18, 2011

We appreciated you and your staff's assistance during the PCI. For questions pertaining to the subject matter, please contact Joann Cofrancesco at 858-637-5589 or jcofrancesco@waterboards.ca.gov.

PLEASE INCLUDE "257590 and 257592:JCOFRANCESCO" IN THE SUBJECT LINE OF FUTURE CORRESPONDENCE.

Respectfully,

for 
Robert W. Morris
Senior WRC Engineer

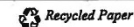
RWM:jlc

Enclosure:
PCI Summary Report
Attachments to PCI Summary Report

cc (by email):
Ms. Jenny Chen, SWRCB-DWQ
Mr. Keith Silva (WTR-7), USEPA Region 9

Order Nos.	R9-2006-0054 and R9-2006-0055
NPDES Nos.	CA0107417 and CA0107611
CIWQS Place IDs	257592 (San Juan Creek Ocean Outfall) , 257590 (Aliso Creek Ocean Outfall)
WDIDs	9 000000175 (San Juan Creek Ocean Outfall) and 9 000000117 (Aliso Creek Ocean Outfall)
CIWQS Reg. Measure Nos.	R9-2006-0054 (309059) and R9-2006-0055 (309084)
CIWQS Inspection ID:	5001857

California Environmental Protection Agency



PCI conducted by CDM.

Pretreatment Compliance Inspection

Summary Report

Publicly Owned Treatment Works:	South Orange County Wastewater Authority
Location:	34156 Del Obispo Street, Dana Point, CA 92629
Contacts:	Paul Schmidtbauer, Industrial Waste Administrator
Inspection Dates:	January 25, 2011
Inspected By:	Greg Roy, CDM Kevin Trott, CDM
Report Submitted:	Draft March 21, 2011 Final June 14, 2011

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Attachments:

Attachment A	Waste Discharge Pretreatment and Source Control Program
Attachment B	Enforcement Response Plan
Attachment C	Example Interagency Agreement
Attachment D	Example Waste Discharge Permit
Attachment E	Industrial User Site Visit

South Orange County Wastewater Authority Pretreatment Compliance Inspection

Executive Summary

South Orange County Wastewater Authority's (Authority) pretreatment program was inspected on January 25, 2011. Overall, the inspection found that the Authority's pretreatment program is well managed and in compliance with EPA's pretreatment program requirements. The Authority's documents and filing system are up to date and very well organized. The Authority has updated its Waste Discharge Pretreatment and Source Control Program (Pretreatment Ordinance) and Enforcement Response Plan. However, several of its member agencies need to comply with the Streamlining Rule. The regulated significant industrial users industries are in compliance with their permits. Enforcement of the pretreatment permits has been conducted properly. The Authority has implemented procedures to identify and permit new industries. The Authority also provides adequate resources to operate and maintain the pretreatment program.

1. Introduction

A Pretreatment Compliance Inspection was conducted by Greg Roy and Kevin Trott of Camp Dresser and McKee, Inc. on January 25, 2011. The last inspection of the Authority's pretreatment program was conducted on February 19, 2009. The inspectors interviewed the Industrial Waste Administrator (Administrator), reviewed the pretreatment program files, and conducted a site inspection visit of one permitted industry. During the interview, the Administrator described the size and scope of the pretreatment program and provided relevant documents. The file review consisted of a review of the Pretreatment Ordinance, the Enforcement Response Plan, and selected Categorical Industrial User files to provide an overview of the pretreatment program. The inspectors conducted a site inspection visit at Applied Medical Resources. This report presents the findings of the Pretreatment Compliance Inspection.

1.1 Description of the Pretreatment Program

The Authority's pretreatment program includes the 10 member agencies which discharge to its facilities. The ten contributing member agencies of the Authority are:

- City of Laguna Beach
- City of San Clemente
- City of San Juan Capistrano
- El Toro Water District
- Emerald Bay Service District

- Irvine Ranch Water District
- Moulton Niguel Water District
- Santa Margarita Water District
- South Coast Water District
- Trabuco Canyon Water District

The Authority conducts the daily operations of the pretreatment program for most of the member agencies and coordinates with staff and provides information on significant industrial user/industrial user inspections, monitoring, and compliance activities in accordance with interagency agreements. Several member agencies, including City of San Clemente, El Toro Water District, and Trabuco Canyon Water District, conduct their own pretreatment program with the Authority's administrative oversight. Fats Oils, and Grease programs and other pollution prevention programs are administered primarily by the individual member agencies.

The Authority issues multiple classes of permits to regulate industries within its service area:

- Class I - Businesses that discharge wastewaters from a process subject to EPA Categorical or Significant Discharger standards (Significant Industrial Users).
- Class II - Businesses that discharge wastewaters containing toxic or hazardous substances, but are not subject to EPA Standards.
- Class III - Businesses which discharge wastewaters containing compatible pollutants in a quantity or manner that impacts sewage collection and treatment facilities.
- Class IV - Special Wastewater Dischargers. This includes groundwater, surface runoff, unpolluted water, etc.
- NIWD Form - Non-Industrial Wastewater Discharger Form. This form is issued to businesses/industries that have any "waste of concern" removed from their facility instead of discharging it to the sewer system.

The following table provides the number of dischargers that the authority oversees:

List of SIU/CIU in the SOCWA Service Area.

Table 1 - Total Industries Surveyed by the Authority

Industry/Commercial Classification	Number of Dischargers
Class I	7
Class II	23
Class III	0
Class IV	26
NIWD	409
Food Service Establishments	1452
Other Surveyed Establishments	6598

The Authority regulates a total of seven Significant Industrial Users, all of which are Categorical Industries. The following table presents the Significant Industrial Users:

Table 2 - Significant Industrial Users

Industry	40 CFR	Category	Member Agency
South Coast Fashion Jewelry	433	Metal Finishing	City of San Clemente
Meggitt PLC	433	Metal Finishing	City of San Juan Capistrano
Dynacast Inc.	464	Metal Molding and Casting	Irvine Ranch Water District
Robbins Bros.	433	Metal Finishing	Moulton Niguel Water District
Applied Medical Resources, Inc.	428	Rubber Manufacturing	Santa Margarita Water District
Applied Medical Resources, Inc.	433	Metal Finishing	Santa Margarita Water District
Orchard NPS	433	Metal Finishing	Santa Margarita Water District

In addition to the significant industrial users, the Authority issues a variety of other permits, as shown in Table 1. The Class II permitted dischargers are industrial users that discharge wastes of concern to the Authority, but do not fall under the Significant Industrial User classification of Title 40 Code of Federal Regulations (40 CFR) Section 403.3 (v). The class II permitted dischargers in the City of San Clemente and Trabuco Canyon Water District are inspected by the Pretreatment Inspectors under the jurisdiction of the Member Agency. The Authority offers guidance of the permitting process and the Member Agency Pretreatment Inspectors utilize the Authority's resources.

The Class IV permitted dischargers consist of eighteen diversion structure permits and eight groundwater treatment operation permits. Diversion structures route dry weather urban runoff to the sewer system during the dry season to reduce pollutants entering the ocean. During storm events, the structures discharge directly to the ocean so that the sanitary sewer system is not overloaded. The groundwater treatment operations consist of pumping groundwater through granulated activated carbon filters and pH adjustment before discharging to the sewer system. These operations are conducted mostly by gas stations that have had leaking fuel storage tanks. One of the operations treats water from a sump pump in an underground garage, which is near a refinery.

1.2 Description of Publicly Owned Treatment Works

The Authority operates two wastewater treatment plants, which discharge to the ocean through two separate outfalls and are regulated by two separate NPDES

Five findings of the PCI Section 1.3.

1. **Suggested** that SOCWA **consider** consolidation of all pretreatment activities.
2. SOCWA **must require** its MAs to update PT Ord and ERP to implement the streamlining rules.
3. SOCWA's current local limits are thirteen years old and **should** be updated.
4. SOCWA **should** create an inventory of dentists in the service area.
5. SOCWA **should** initiate a pharmaceutical take back program.

Only one requirement?

One suggestion.

Three should do items (not shall).

permits. There are also multiple water reclamation facilities within the Authority's service area. The following treatment facilities are operated by the Authority:

- Regional Treatment Plant (12 mgd)
- Jay B. Latham Treatment Plant (13 mgd)
- Coastal Treatment Plant (6.7 mgd)
- 3A Treatment Plant (6 mgd)

The Aliso Creek Outfall (NPDES No. CA0107611) discharges to the ocean from the Coastal Treatment Plant. The San Juan Creek Outfall (NPDES No. CA0107417) discharges water from the Jay B. Latham Treatment Plant. Member agencies operate an additional five facilities within the sewerage system. One of the facilities does not have a solids handling process and discharges solids back to the sewer system to be treated by the Authority. The Authority does not operate the wastewater collection systems.

1.3 Summary of Compliance Inspection Findings

The following is a summary of the findings of the compliance inspection:

- The Authority monitors categorical industries for the entire program but relies on the member agencies to monitor non- categorical industries. This practice could lead to inconsistencies and confusion in program implementation without continued strong management and oversight by the Authority. It is suggested that the Authority consider long-term consolidation of all pretreatment monitoring and enforcement by a single agency.
- The Authority must require its member agencies to update their Sewer Use Ordinances to implement the Streamlining Rule. Seven of the ten member agencies have not updated their sewer use ordinances to implement the Streamlining Rule (see Section 11.2 Streamlining Rule).
- The Authority's current local limits are thirteen years old and should be updated (See Section 4 Local Limits).
- The Authority should create an inventory of the dentists located within its service area (see Section 11.3 Mercury from Dentist).
- The Authority should initiate a pharmaceutical take back program (see Section 11.4 Pharmaceutical Take Back Program).

2. Pretreatment Program Modifications

According to 40 CFR Section 403.18, a Control Authority is required to modify its program when there is a significant change in its operation and the Control Authority

The local limits are 13 years old, are not technically based, but have provided adequate protection for the POTWs.

Remember that anything before the “but” does not count.

However, SOCWA must provide a written technical evaluation of the need to revise local limits under 40 CFR 122.44 (j)(2)(ii).

Written as “must provide” and not “shall provide”. Is it a recommendation or a requirement?

is required to submit changes to the Regional Water Quality Control Board (Regional Board). The Authority submitted a new Pretreatment Ordinance and Enforcement Response Plan to the Regional Board for approval in 2009. A response to this request has not yet been received and the Authority proceeded with local approval with the understanding that the changes were acceptable. The Authority’s new Pretreatment Ordinance and Enforcement Response Plan have been modified for the Streamlining Rule changes.

3. Local Limits

According to 40 CFR Section 403.5, publicly owned treatment works are required to develop and enforce local limits to prevent pass through or interference of the treatment works. Also, upon renewal of the NPDES permit, the Authority is required to provide a written technical evaluation to assess the need for revising the Local Limits, under 40 CFR section 122.44 (j)(2)(ii).

The Authority’s current local limits were originally developed in 1996 and approved in December 1997. As required under their 2006 NPDES permits, SOCWA completed a technical review of its local limits in 2008. SOCWA determined that its local limits did not require revision and it continues to use the 1997 local limits.

The Authority’s list of pollutants of concern is taken from the EPA priority pollutant list with concentrations that appear to be from categorical limits. The current list of pollutants of concern and their limits may be insufficient since portions of the POTW’s sludge cake are being composted, which commonly leads to more stringent pollutant limitations. For example, selenium and molybdenum are listed as constituents to monitor for during biosolids disposal but are not listed as a pollutant of concern for the Authority.

Upon review of the available local limits documentation, the limits are 13 years old, are not technically based, but have provided adequate protection for the POTW. Local limits are based on a combination of the lowest requirements of each member agency upon establishment of SOCWA. Inspectors noted that the Authority informally evaluates the need to update their local limits. The Authority stated that silver, zinc, copper, and nickel are measurable but do not exceed 60 percent of the NPDES permit limit. It appears that an update of the local limits may not be necessary for the Authority. However, the authority must provide a written technical evaluation of the need to revise local limits under 40 CFR section 122.44 (j)(2)(ii).

4. Nondomestic Discharger Characterization

The Authority is required to “develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program”, under 40 CFR 403.8 (f)(v)(2). The Authority has methods in place for tracking new industries that might require inclusion in this program.

The Administrator conducts windshield surveys (drive abouts) and maintains general knowledge about the status of each facility. The Administrator maintains a list of all

businesses within the service area and receives notice of potential permitted industries from the member agencies. It is recommended that the Administrator add to its current protocol to keep informed on its industrial users by reviewing building and business permits on a continuous basis. The current method provides a reasonable means for keeping current with industrials to be monitored but a review of permits will provide greater protection for the Authority.

5. Control Mechanisms

Under 40 CFR 403.8 (f)(1), the Authority is required to control the discharges from nondomestic dischargers using control mechanisms. The Authority has a Pretreatment Ordinance in place that adequately defines the pretreatment program requirements. In addition, according to Authority staff, each member agency has their own pretreatment ordinance that it follows, or is more stringent than, the Authority's ordinance, with exception to the Streamlining Rule requirements. The 10 member agency pretreatment ordinances were not reviewed during the inspection. The Authority also has an enforcement response plan and issues industrial permits. All of the Authority's control documents were recently updated to include Streamlining Rule changes.

6. Application of Pretreatment Standards and Requirements

Under 40 CFR 403.8 (f)(1), the Authority is required to have the legal authority to require compliance with its pretreatment standards. The Authority is required to ensure compliance with its pretreatment program by issuing permits. The Inspection found that the Authority is in compliance with 40 CFR 403.8 (f)(1). The issued permits enable the Authority to monitor compliance with its pretreatment standards.

Class I permitted industries are significant industrial users as defined by 40 CFR 403.3 (v), which were the focus of this Inspection. There are a total of seven significant industrial users within the Authority's service area.

The Authority has not issued Notice of Violations for non-compliance with categorical industrial limits within the last year.

7. Compliance Monitoring

The Authority is required to "Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by the Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and Requirements by the Industrial Users" under 40 CFR 403.8 (f)(2)(v). In addition, the Authority is required to investigate instances of noncompliance and enforce the regulations under 40 CFR 403.8 (f)(2)(vi). The Authority has been in compliance with the NPDES permit limits with no violations that could be attributed to industrial discharges. The existing permit is due to expire on October 1, 2011 and the Authority is currently preparing a renewal application. Under 40 CFR 122.44

(j)(2)(ii), the Authority should conduct a technical evaluation of the need to improve its local limits (see section 3 Local Limits). It is suggested that the Authority complete the "Reassessment of Technically Based Industrial Discharge Limits Checklist" as contained in Appendix X of the EPA Local Limits Development Guidance Manual, July 2004.

Three of the ten member agencies have their own Pretreatment Coordinators, who are responsible for compliance enforcement of non-categorical significant industrial users: City of San Clemente, El Toro Water District, and Trabuco Canyon Water District. All categorical significant industrial users in the Authority's service area are monitored and controlled by the Authority's Administrator.

7.1 File Review of Permitted Industrial Users

The Authority maintains a filing system within the Administrator's office. The filing system is organized by the categorical users and contains over three years worth of data. In addition to its hard copies, the Authority maintains electronic copies of documents. The inspection noted that the industry files reviewed were in compliance with the pretreatment ordinance and industry permits. The inspection paid particular attention to Applied Medical Resources, which had violations in 2009. The violation was for monthly average monitoring since the industry failed to sample in the month of April. Applied Medical Resources had one sample in August 2010 that exceeded the Chromium monthly average limit of 2.0 mg/L, but did not exceed the daily maximum of 2.77 mg/L. Further sampling indicated that the industry was in compliance. For these reasons, Applied Medical Resources was chosen to be inspected.

7.2 Compliance Inspections

Under 40 CFR 403.8 (f)(2)(v), the Control Authority is required to inspect all permitted significant industrial users at least once a year. The Authority performs compliance inspections of all permitted significant industrial users at least once a year. The Authority also conducts compliance sampling at least once a year of all Significant Industrial Users and is therefore in compliance with 40 CFR 403.8 (f)(2)(v).

7.3 Industry Site Inspection

On January 25, 2011, an industrial inspection was conducted at Applied Medical Resources, which is currently permitted as a significant industrial user under the Authority's pretreatment program. Applied Medical Resources is a manufacturer of medical devices. It is regulated as a CFR 40 433 Metal Finishing categorical industrial user and its discharges are monitored for both local and categorical limits. The inspections noted the following concerns and observations at this facility.

- The chemical wash station has a spill containment berm with a spent liquid transfer pump that is located outside the berm. The pump should be located within the berm or within a separate containment for the pump.

- The chemical wash station generates liquids that are trucked offsite for disposal. A manifest for disposal of all these liquids must be provided to the Authority.
- The industry should consider adding a standard operating procedure for the annual inspection of the neutralization batch tank. Inspections would focus on tank integrity and observation of any cracks or failures in the structure.

7.4 Slug Discharge Control Plans

Under 40 CFR 403.8 (f)(2)(v), the Authority is required to assess for the need to develop a slug control plan for all significant industrial users. The Inspection found that all categorical significant industrial users have been previously assessed by the Administrator and were found not to require a slug control plan. The Authority has developed a Slug Control Assessment Form that has been completed and placed in all categorical industrial files. It is unclear whether non- categorical significant industrial users have also been assessed for this requirement since they are regulated by member agency pretreatment coordinators. The inspection noted that this is an example of where the Authority should be responsible for monitoring of all permitted industries and not multiple agencies. The Authority should confirm that all permitted industrial users have been assessed for slug control.

8. Enforcement

The Authority is required to develop "Statement of applicable civil and criminal penalties for violation of Pretreatment Standards and requirements, and any applicable compliance schedule" under 40 CFR 403.8 (f)(5). The Authority recently updated its Enforcement Response Plan in 2009. The Enforcement Response Plan is consistent with the Pretreatment Ordinance (See Section 6 Control Mechanism).

The Authority has issued notice of violations for non-compliance with local and categorical industrial limits. None of these violations have escalated to a level higher than a notice of violation since all required corrective measures were subsequently implemented to the satisfaction of the Authority and in compliance with the current regulations.

The Authority monitors categorical industries for the entire program but relies on the member agencies to monitor non categorical industries. This practice could lead to inconsistencies and confusion in program implementation without continued strong management and oversight by the Authority. It is suggested that the Authority consider long-term consolidation of all pretreatment monitoring and enforcement by a single agency.

9. Program Resources, Funding and Continuing Education

The Administrator has responsibility for pretreatment compliance within the entire service area. In addition, each member agency has a Pretreatment Coordinator with responsibility for non-categorical industries in their respective collection systems. The

Authority has direct responsibility for all of the categorical industries within the entire service area. Therefore, the individual pretreatment programs have two enforcement authorities. This is unusual and can lead to inconsistent pretreatment program compliance enforcement. The inspection noted that a single compliance enforcement authority should have overall responsibility for all permitted industries within a member agency collection system. This will avoid inconsistencies in enforcement of local and federal pretreatment regulations.

The entire program is funded proportionally by the member agencies. The Administrator tracks time (hourly) spent on each program and at year end develops a summary of time per agency which provides the basis for apportioning the fees for the following year. The funding mechanism appears sufficient and appropriate for this pretreatment program. The program has sufficient resources to perform their duties and has budgeted for the purchase of addition resources, like samplers and flow gauges.

The Administrator receives annual training and continuing education units. He attends annual pretreatment and California Water Environment Association conferences. In addition, the Administrator mentors and trains other staff regarding pretreatment program procedures.

10. Focus Topics

The inspection included assessment of the Authority's status relative to the following focus topics: streamlining rule compliance, pharmaceutical take backs, mercury control at dentists, industrial laundries, performance measures, potential cleanups, and possible criminal violations.

10.1 Significant Industrial Users in Significant Noncompliance

The inspection did not identify any significant industrial users in significant noncompliance. The Administrator noted that he has not had an industrial user in significant noncompliance in more than seven years.

10.2 Streamlining Rule

The Authority's current pretreatment ordinance was updated and approved by the local governing board in 2009 to address the Streamlining Rule and then sent to state and federal regulators for approval. In the absence of a formal response, the Authority has assumed that their ordinance is now in compliance with the Streamlining Rule, under 40 CFR 403.12 (d)(2).

As previously mentioned, the Authority includes 10 member agencies with their own pretreatment ordinances, which also have to be revised for the Streamlining Rule. The Administrator has initiated actions to get all member agencies into compliance with the rule. To date, only three member agencies have completed this update and it is unclear whether these have received local and regulatory approval. The remaining seven member agencies are not in compliance with this rule but several are attempting to make these changes. Since the Authority includes all member agencies,

Dental Facilities Discussion. Addressed in Section 3.1.

Pharmaceutical take back program. Addressed in Section 3.1.

it is not fully in compliance with the EPA Streamlining Rule. The Authority should become more aggressive with member agencies and attempt to have all ordinance changes completed.

10.3 Mercury from Dental Facilities

During the inspection, information was provided explaining the EPA's proposed rulemaking to begin permitting dental facilities for discharges of mercury waste from dental amalgams. Information was also provided on the draft rule, which will be issued in October 2011 for public comment. The draft rule includes preliminary requirements for the installation of an amalgam separator to collect mercury from dental procedures. The separators will have to meet 98 percent removal and will need to be continuously maintained by the dentists. Until the rule is final, EPA encourages dental facilities to voluntarily install amalgam separators. The inspection included discussion of a two-tier voluntary program used by other agencies in order to be proactive at controlling mercury discharges. The first tier includes a survey to locate and catalog all dental facilities within the Authority's service area. A more proactive measure would be to permit those dentists using best management practices and to issue permits with the requirement to install amalgam separators. The Administrator has begun an inventory of all dentists and will consider permitting these industries.

10.4 Pharmaceutical Take Back Program

Pharmaceutical waste in effluent can have a detrimental effect on the environmental health of receiving waters. Pharmaceutical take back events have proven to be a simple and effective way of reducing these harmful effects on the environment. The inspection included discussions with the Authority on pharmaceutical take back programs. This program promotes a formal means to collect and properly dispose of pharmaceuticals that are currently being flushed into the sanitary sewer system and discharged to municipal wastewater treatment facilities and, in some cases, eventually being discharged to the environment without treatment. To date, the Authority does not conduct a pharmaceutical take back program and has not coordinated this issue with its member agencies. The Administrator agreed to explore and initiate a pharmaceutical collection and disposal program. It is suggested that the Authority coordinate the program with its member agencies, local law enforcement, pharmacies and any other interested parties (like senior centers). Recently, Orange County Law Enforcement Agencies had a successful drug take back day on September 24, 2011. As such, there are already local efforts being implemented that the Authority may help with or become a part of.

10.5 Industrial Laundries

There are no industrial laundries within the Authority's service area. If a laundry becomes permitted, it will be encouraged to participate in EPA's Safe Detergents Stewardship. There are no additional improvements required.

10.6 Performance Measures

One of the goals of a Pretreatment Program is to reduce corrosion and blockages of sewer pipes. The Authority does not monitor performance measures because they are not responsible for collection systems in the service area. However, the Authority does have an oil and grease local limit and therefore has a comprehensive Fats, Oils, and Grease (FOG) control and reduction program. This program has shown many improvements in the collection system. The current FOG limit is at 300 mg/L but continuous monitoring has proven this limit to be sufficient for the Authority. The program is being implemented by a private contractor.

10.7 Potential Cleanups

The inspection did not identify any potential cleanups requiring public funding or any industrial facilities that appear to have knowingly violated a pretreatment or other environmental requirement.

10.8 Potential Criminal Violations

The inspection did not identify any potential criminal violations by Industrial Users.



South Orange County Wastewater Authority

August 9, 2011

Mr. Robert W. Morris
Senior WRC Engineer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123-4353

Certified Mail
7009 1680 0002 3289 5327
Return Receipt Requested

Refer to:
CIWQS Place ID:257590 and 257592
WDID: 9 000000117 and 9 000000175

Subject: Response to the Pretreatment Compliance Inspection (PCI) Report
Dated July 18, 2011
257590 and 257592:JCOFRANESCO

Dear Mr. Morris:

The following are the brief responses to the listed deficiencies contained in Section 1.3, Summary of Compliance Inspection Findings, contained in the PCI Report letter dated July 18, 2011 on the SOCWA Approved Pretreatment Program:

Requirement No. 1 – SOCWA must require its member agencies to update their Pretreatment Ordinances to implement the Streamlining Rules. To date, five member agencies have updated their Pretreatment Ordinance, which incorporate the Streamlining Rule. On July 26, 2011 the SOCWA General Manager sent a letter to the remaining four member agencies stating the requirement to adopt their updated Pretreatment Ordinance in order for SOCWA to comply with its regulatory obligations. SOCWA will work with these member agencies to get them to adopt their Pretreatment Ordinances. Note that the member agency, Emerald Bay Service District (EBSD) has real estate restrictions in place that allow for only single-family residences within their service area. There are no industrial establishments in the EBSD, therefore they have no need for a Pretreatment Ordinance. This has been a known and included condition of the SOCWA Pretreatment Program since it was originally approved by the RWQCB-SD and EPA in 1997.

Recommendation No. 1 – It is suggested that SOCWA consider long-term consolidation of all pretreatment monitoring and enforcement by a single agency. Since 1989, SOCWA has conducted all of the monitoring and enforcement actions for all permitted SIUs/CIUs that are in the service area. SOCWA also conducts the monitoring and enforcement actions for the non-SIUs/non-CIUs in the service area that are required by SOCWA to obtain a discharge permit. Some member agencies monitor other non-SIUs/non-CIUs in order to conduct FOG control or strength/surcharge programs for billing purposes. SOCWA, where necessary, coordinates with the member agency to oversee the permitting process by reviewing and signing the permits issued to these other non-SIUs/non-CIUs. This allows SOCWA the necessary oversight and allows the member agency the flexibility to implement WDRs that fit their operating procedures.

Response due by August 15, 2011.
Submitted on August 9, 2011.

Requirement No. 1 – Require MA to update their PT Ord and ERP. Still waiting for the last one to complete this process.

Recommendation No. 1 – SOCWA will continue to work with MAs if they wish to control a non-SIU/non-CIU.

Mr. Robert W. Morris
RWQCB-SD
Page 2

Recommendation No. 2 – SOCWA's current local limits are thirteen years old and should be updated. SOCWA conducted and completed an evaluation of its local limits in 2007 using the guidance as presented in USEPA Local Limits Development Guidance, July 2004. That evaluation was submitted to the RWQCB-SD on May 9, 2007 and concluded that all local limits shall remain as is. SOCWA will strive to re-evaluate its local limits using the above noted guidance and in particular the procedures presented in Chapter 7 for pollutants of concern for which local limits have already been established by comparing them with our NPDES Permit limits and/or performance goals.

Recommendation No. 3 – SOCWA should create an inventory of the dentists located within its service area. SOCWA staff has reviewed local yellow pages for dental listings and is aware that there is a possible potential of 400 to 450 dentists in the service area. SOCWA staff has already contacted other POTW's that have dental amalgam programs to see how they may have conducted a survey of dentists in their service areas. SOCWA will strive to develop a survey of dental offices in anticipation of the promulgation of the EPA Mercury Amalgam regulations.

Recommendation No. 4 – SOCWA should initiate a pharmaceutical take back program. Other local enforcement entities have already implemented pharmaceutical/drug take back events that occur in the SOCWA service area. Due to the potential legal constraints of accepting a controlled substance SOCWA will strive to coordinate with these other entities in order to assist or participate in their events.

Please contact me at 949-234-5412 or pschmidtbauer@socwa.com if you have any questions about any of the above items.

Very truly yours,
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY



Paul D. Schmidtbauer
Industrial Waste Administrator

cc: via e-mail
Mr. Keith Silva (WTR-7), USEPA Region 9 silva.keith@epa.gov
Ms. Jenny Chen, SWRCB-DWQ hichen@waterboards.ca.gov
Mr. Philip Isorena, SWRCB-DWQ pisorena@waterboards.ca.gov
Ms. Joann Cofrancesco RWQCB-SO jcofrancesco@waterboards.ca.gov

Recommendation No. 2 – SOCWA will strive to re-evaluate its local limits. Will wait to receive new NPDES Permit to see if our discharge limits have changed.

Recommendation No. 3 – SOCWA created an inventory of dentists. Currently, there are 360 dental offices in our service area.

Recommendation No. 4 – SOCWA should initiate a pharmaceutical take back program. No, No and No. SOCWA will strive to coordinate with other entities who already have a program in place.

ORDER NO. R9-2012-0012
NPDES NO. CA0107417
WASTE DISCHARGE REQUIREMENTS
FOR THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
DISCHARGE TO THE PACIFIC OCEAN THROUGH THE SAN JUAN CREEK OCEAN OUTFALL

Order adopted April 11, 2012.

Order shall become effective on May 31, 2012

VI. Provisions.

C. Special Provisions.

5. Special Provisions for Wastewater Facilities (POTWs only).

c. Pretreatment Program.

vi. The Discharger **shall provide** a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1) following permit reissuance (40 CFR 122.44(j)(2)(ii)).

ORDER NO. R9-2012-0013
NPDES NO. CA0107611
WASTE DISCHARGE REQUIREMENTS
FOR THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
DISCHARGE TO THE PACIFIC OCEAN THROUGH THE ALISO CREEK OCEAN OUTFALL

Order adopted April 11, 2012.

Order shall become effective on May 31, 2012

VI. Provisions.

C. Special Provisions.

5. Special Provisions for Wastewater Facilities (POTWs only).

c. Pretreatment Program.

v. Semiannual report section.

(e) The Discharger **shall provide** a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1) following permit reissuance (40 CFR 122.44(j)(2)(ii)).

- The Discharger **shall provide** a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1) following permit reissuance (40 CFR 122.44(j)(2)(ii)).
- SOCWA's new NPDES Permits contain the requirement (shall provide) for a written technical evaluation of the need to revise local limits. No due dates were placed into the permits.
- SOCWA will evaluate for need to revise local limits. Will there be a revision or a change in the local limits? Probably not, yet the evaluation will be conducted because it is now required.
- How will it be done? **Use the EPA July 2004 "LOCAL LIMITS DEVELOPMENT GUIDANCE" document. Specifically Chapter 7 – Local Limits Reviews and Detailed Re-Evaluations.**
- SOCWA will again use the template developed for the last local limits re-evaluation that was submitted in 2007. Here is what it looked like. But first a little history.

Some SOCWA History

Current Approved Local Limits from 1997

Local Limits from AWMA Service Area Treatment Plants					
	(mg/L)				
					AWMA's
					Most Stringent
POCs	ETWD	LAWD	CTP	JRP	Local Limits
Arsenic	3.7	15	10	4.7	3.7
Cadmium	2.9	47	6.2	27	2.9
Chromium	30	100	81	112	30
Copper	10	144	37	57	10
Lead	5.1	13	7.8	11	5.1
Mercury	0.37	5.1	1.0	1.6	0.37
Nickel	11	157	20	97	11
Silver	5.7	22	11	22	5.7
Zinc	7.9	26	18	35	7.9
Cyanide	4.3	8.9	10	13	4.3

Local Limits from SERRA Service Area Treatment Plants							
	(mg/L)						
							SERRA's
							Most Stringent
POCs	3A	CBWD	CSC	CWRP	OCWRP	JBL	Local Limits
Arsenic	9.7	644	3.4	16	125	7.0	3.4
Cadmium	10	107	0.93	9.3	21	6.8	0.93
Chromium	16	220	72	106	558	43	16
Copper	7.2	89	22	67	221	10	7.2
Lead	9.0	86	13	23	85	13	9.0
Mercury	0.55	5.3	0.43	1.3	7.8	1.2	0.43
Nickel	61	647	9.5	29	133	30	9.5
Silver	2.8	54	8.4	29	88	4.3	2.8
Zinc	26	1539	22	55	228	34	22
Cyanide	6.4	72	10	22	126	16	6.4

AWMA/SERRA PROPOSED LOCAL LIMITS					
	(mg/L)				
	Current	AWMA's	SERRA's	Title 22	AWMA/SERRA
	1982	Most Stringent	Most Stringent	STLC	SERVICE AREAS
POCs	Limits	Local limits	Local limits	Limits	PROPOSED LOCAL LIMITS
Arsenic	0.8	3.7	3.4	5.0	3.4
Cadmium	0.2	2.9	0.93	1.0	0.93
Chromium	0.4	30	16	5	4.9
Copper	10.0	10	7.2	25	7.2
Lead	0.4	5.1	9.0	5.0	4.9
Mercury	0.015	0.37	0.43	0.2	0.19
Nickel	10.0	11	9.5	20	9.5
Silver	0.6	5.7	2.8	5	2.8
Zinc	10.0	7.9	22	250	7.9
Cyanide	1.0	4.3	6.4	-	4.3

Local limits
still in use
today - 2012.

Local Limits Re-evaluation Report. Cover Page



May 9, 2007

Mr. John H. Robertus
Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123

Certified Mail
7003 1680 0000 3008 3533
Return Receipt Requested

**Subject: SOCWA Final Report on Local Limits Re-evaluation for
Order No. R9-2006-0054, NPDES Permit No. CA0107417 and
Order No. R9-2006-0055, NPDES Permit No. CA0107611
In Reply: ncr: 01-0175.02:jlim**

Dear Mr. Robertus:

In accordance with Section VI.C.2.d.7)c) Pretreatment Program contained in both of the above listed subject Orders, SOCWA is submitting its required final report on its local limits re-evaluation by the May 16, 2007 due date.

SOCWA conducted this re-evaluation of its current local limits using the procedures presented in USEPA Local Limits Development Guidance, July 2004. The attached report presents the final status of the re-evaluation of SOCWA's local limits.

Please contact Mr. Paul D. Schmidtbauer, Industrial Waste Administrator, at (949) 234-5412 or pschmidtbauer@socwa.com if you have any questions concerning this status report.

Very truly yours,

SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Tom Rosales
General Manager

cc: Distribution

One page final report.

SOCWA Final Report on Local Limits Re-evaluation

There are nine POTW's in the SOCWA service area that fall under the requirements to have local limits as part of an approved pretreatment program. They are as follows:

1. Irvine Ranch Water District – Los Alisos Water Reclamation Plant (IRWD-LAWRP)
2. El Toro Water District – Wastewater Treatment Plant (ETWD-WTP)
3. SOCWA – Joint Regional Plant (SOCWA-JRP)
4. SOCWA – Coastal Treatment Plant (SOCWA-CTP)
5. City of San Clemente – Wastewater Treatment Plant (CSC-WTP)
6. Moulton Niguel Water District – 3A Plant (MNWD-3A)
7. Santa Margarita Water District – Chiquita Water Reclamation Plant (SMWD-CWRP)
8. Santa Margarita Water District – Oso Creek Water Reclamation Plant (SMWD-OCWRP)
9. SOCWA – J.B. Latham Treatment Plant (SOCWA-JBL)

Data from the past SOCWA Annual Pretreatment Reports or other recently collected data was used for the re-evaluation of the local limits at each POTW. SOCWA utilized the USEPA Local Limits Development Guidance, July 2004 document for this re-evaluation. In this document the EPA recommended threshold values of 60% for metals and 80% for conventional pollutants to be used in the re-evaluation of the local limits. Any local limit exceeding the percentages for the data used would be identified and considered for additional re-evaluation. The comparison of current loadings with Maximum Allowable Headworks Loadings (MAHL) for each of the nine POTWs was presented in "Appendix A" that was submitted with the re-evaluation status report dated December 12, 2006.

Based on previously calculated and submitted threshold values the following Local Limits at the listed POTWs required further re-evaluation to determine if a new local limit was needed to be re-calculated:

1. Zinc at the Irvine Ranch Water District Los Alisos Water Reclamation Plant, Santa Margarita Water District Chiquita Water Reclamation Plant and the SOCWA Joint Regional Plant all based on the limiting criteria of inhibition.
2. Silver at the El Toro Water District Wastewater Treatment Plant based on the limiting criteria of pass-through.
3. Arsenic at the City of San Clemente Wastewater Treatment Plant based on the limiting criteria of the biosolids disposal.
4. Copper at the Moulton Niguel Water District 3A Plant based on the limiting criteria of pass-through. This review was previously submitted with the status report and is also included in this report.

The above pollutants at the respective POTWs were re-evaluated and, if needed, new MAHLs were calculated based on the limits contained in the recently issued SOCWA NPDES Permits and data from the recent past SOCWA Annual Pretreatment Reports. Additional data from the respective Member Agencies that was necessary to complete this re-evaluation process was also collected and is presented as needed.

Report Summary.

We will look at the SOCWA RTP
(Formally named JRP)

Summary of the review of the respective treatment plants that a necessary local limit re-evaluation was required.

1. Irvine Ranch Water District-Los Alisos Water Reclamation Plant (IRWD-LAWRP).
Review of Zinc Local Limit.
Recommendation: SOCWA Zinc local limit should remain as is.
2. Santa Margarita Water District-Chiquita Water Reclamation Plant (SMWD-CWRP).
Review of Zinc Local Limit.
Recommendation: SOCWA Zinc local limit should remain as is.
3. South Orange County Wastewater Authority-Joint Regional Plant (SOCWA-JRP).
Review of Zinc Local Limit.
Recommendation: SOCWA Zinc local limit should remain as is.
4. El Toro Water District-Wastewater Treatment Plant (ETWD-WTP).
Review of Silver Local Limit.
Recommendation: SOCWA Silver local limit should remain as is.
5. City of San Clemente-Wastewater Treatment Plant (CSC-WTP).
Review of Arsenic Local Limit.
Recommendation: SOCWA Arsenic local limit should remain as is.
6. Moulton Niguel Water District-3A Treatment Plant (MNWD-3ATP).
Review of Copper Local Limit (previously submitted).
Recommendation: SOCWA Copper local limit should remain as is.

The full review of all the above listed treatment plants follows:

Recommendation was Zinc
limit to remain as is.

South Orange County Wastewater Authority
Joint Regional Plant
(SOCWA-JRP)

Review of Zinc Local Limit

Recommendation:
SOCWA Zinc local limit should remain as is.

Here is why it stayed the same.

It does look like a bunch of mumbo jumbo, but it followed the guidance manual and it worked.

Review of the South Orange County Wastewater Authority – Joint Regional Plant MAHL

Based on the Comparison of Current Loadings with MAHL, Zinc was above the recommended threshold value which required a re-evaluation to determine if a new local limit needs to be re-calculated:

An updated inhibition allowable headworks loading (AHL) can be calculated for Zinc using the 2005 data as submitted in the SOCWA 2005 Annual Pretreatment Report. To accomplish this, the following is needed:

1. Determine the removal efficiency for Zinc.
2. Determine plant inhibition values (as indicated in Exhibit 5-3 in the EPA Local Limits Development Guidance):
 - a. Determining site-specific inhibition values is difficult because the exact point at which pollutant concentration inhibition takes place is difficult to identify.
 - b. POTWs have estimated site-specific inhibition values by simply using the highest observed pollutant concentration in the biological process that did not cause interference.
 - c. Original 1997 JRP inhibition was the Prelim default value of 0.300 mg/L.
 - d. Current loadings are acceptable to the treatment work's process.
 - e. No past inhibition problems reported at the JRP.
 - f. Plant influent flows are 21.6% higher than in 1997.
3. Calculate new inhibition AHLs for Zinc.
4. Compare past and new AHLs to determine the current MAHL.
5. Use the highest influent data for the past four years = 0.170 mg/L.

Calculation of the removal efficiency for JRP = $\frac{\text{influent conc} - \text{effluent conc. (2}^\circ \text{ or 3}^\circ\text{)}}{\text{Influent conc.}}$

2° effluent = 0.020 mg/L

3° = effluent = 0.021 mg/L

$$2^\circ \text{ Removal efficiency} = \frac{0.170 \text{ mg/L} - 0.020 \text{ mg/L}}{0.170 \text{ mg/L}} = \frac{0.150 \text{ mg/L}}{0.170 \text{ mg/L}} = 0.882$$

$$3^\circ \text{ Removal efficiency} = \frac{0.170 \text{ mg/L} - 0.021 \text{ mg/L}}{0.170 \text{ mg/L}} = \frac{0.149 \text{ mg/L}}{0.170 \text{ mg/L}} = 0.876$$

Calculation of AHL for 2° or 3° inhibition = $\frac{(8.34) (\text{inhibition for 2}^\circ \text{ or 3}^\circ) (\text{flow rate, MGD})}{(1 - 2^\circ \text{ or 3}^\circ \text{ removal efficiency})}$

$$2^\circ \text{ Inhibition AHL} = \frac{(8.34) (0.170) (10.2)}{(1 - 0.882)} = \frac{14.46}{0.118} = 122.5 \text{ lb/day}$$

$$3^\circ \text{ Inhibition AHL} = \frac{(8.34) (0.170) (10.2)}{(1 - 0.876)} = \frac{14.46}{0.124} = 116.6 \text{ lb/day}$$

$$2^\circ \text{ default Inhibition AHL} = \frac{(8.34) (0.300) (10.2)}{(1 - 0.882)} = \frac{25.52}{0.118} = 216.27 \text{ lb/day}$$

$$3^\circ \text{ default Inhibition AHL} = \frac{(8.34) (0.300) (10.2)}{(1 - 0.876)} = \frac{25.52}{0.124} = 205.81 \text{ lb/day}$$

The Zinc limit stayed the same because, at the time, it was at 18.8% of the MAHL which was below the EPA recommended threshold value of 60%.

A comparison of the calculated current inhibition loading limitations will show which AHL should be used to determine if the original local limit provides sufficient protection or if a new local limit for Zinc is needed at this time. (Note: The other original AHLs are from the local limits study approved by the RWQCB-SD in 1997)

The above calculated Current 2° Inhibition AHL =	122.5 lb/day
Current 3° Inhibition AHL =	116.6 lb/day
Current 2° default Inhibition AHL =	216.27 lb/day
Current 3° default Inhibition AHL =	205.81 lb/day
Original NPDES (pass-through) AHL =	566.66 lb/day
Original final sludge AHL=	80.64 lb/day

The original solids loading at the SOCWA SMWD Plant is the most stringent of the above AHLs and thus now becomes the MAHL. A new Actual Loading vs. MAHL can now be calculated as follows:

SOCWA-JRP Influent Loading = (mg/L) (8.34) (flow) = (0.170) (8.34) (10.7) = 15.1705 lb/day

% of MAHL = $\frac{\text{Influent Loading}}{\text{MAHL}} \times 100 = \frac{15.1705 \text{ lb/day}}{80.64 \text{ lb/day}} \times 100 = 18.8\%$

Zinc at 18.8% of the above MAHL does not exceed the EPA recommended threshold value of 60%. The current SOCWA Zinc local limit was based on the original MAHL from the El Toro Water District Plant, which was the most stringent in the SOCWA service area at that time. Calculation of a new Zinc local limit would produce one that would be less stringent (higher) than the one in use now due to the use of a new higher MAHL. Based on this SOCWA-JRP review the current SOCWA Zinc local limit should remain as is.

South Orange County Wastewater Authority
Joint Regional Plant
(SOCWA-JRP)

Support Information and Data

Preliminary evaluation used to determine if a re-evaluation is recommended. This is from the EPA Local Limit Guidance Manual.

Original MAHL lb/day for Zinc = 22.0176

New MAHL lb/day for Zinc = 80.64

SOCWA Joint Regional Plant
Comparison of Current Loadings with MAHL

2005 Flow (MGD) = 10.7

Pollutant	2005 Inf Data ug/L	2005 Inf Loadings lb/d	Original MAHL lb/d	2005 Loading vs MAHL %	Re-Evaluation Recommended	Limiting Criterion
Arsenic	5.0000	0.4462	2.1354	20.89%	NO	Inhibition
Cadmium	5.0000	0.4462	9.2694	4.81%	NO	Biosolids
Chromium (Total)	5.0000	0.4462	38.8688	1.15%	NO	Pass-Through
Copper	63.0000	5.6220	23.4125	24.01%	NO	Inhibition
Lead	5.0000	0.4462	7.3392	6.08%	NO	Inhibition
Mercury	0.3000	0.0268	0.5765	4.64%	NO	Biosolids
Nickel	10.0000	0.8924	33.0778	2.70%	NO	Inhibition
Silver	10.0000	0.8924	9.1774	9.72%	NO	Pass-Through
Zinc	170.0000	15.1705	22.0176	68.90%	Re-Evaluate	Inhibition
Cyanide	25.0000	2.2310	7.3392	30.40%	NO	Inhibition
Oil & Grease	9700.0	865.6	9264.6000	9.34%	NO	Pass-Through

lb/day = mg/l x MGD x 8.34

2005 Inf Data = From the SOCWA 2005 Annual Pretreatment Report submitted to the RWQCB-SD

Original MAHL = From the SOCWA 1997 Local Limit Documents Submitted to the RWQCB-SD.

The re-evaluation of Zinc at the SOCWA-JRP.

Data

1. Current San Juan Creek Ocean Outfall NPDES limit for Zinc = 1.22×10^2 ug/l = 1.22 mg/l
2. 2005 Influent concentration = 170 ug/L = 0.170 mg/l
3. 2005 effluent concentration = 20.0 ug/L = 0.020 mg/L
4. 2005 tertiary effluent concentration = 21 ug/L = 0.021 mg/L
5. 2006 flow = 10.2 MGD
6. 2^o Removal efficiency = 0.882
7. 3^o Removal efficiency = 0.876

Most stringent AHL based on current plant data = 80.64 lb/day. (see review).

Pollutant	2005 Inf Data ug/L	2005 Inf Loadings lb/d	Original MAHL lb/d	2005 Loading vs New MAHL %	Re-Evaluation Recommended	Limiting Criterion
Zinc	170.0000	15.1705	80.6400	18.81%	NO	Inhibition

This data was used because it was the highest reading in the previous four years.

Questions?

POTW: SOUTH ORANGE COUNTY WASTEWATER AUTHORITY - JOINT REGIONAL PLANT (SOCWA-JRP)
RESULTS OF POTW SAMPLING AND ANALYSIS OF INFLUENT AND EFFLUENT
Sheet A (2005)

NON-PRIORITY POLLUTANTS - GENERAL						
Min Freq	UNIT	TOS	INFLUENT	EFFLUENT	METHOD	
Flowrate	Continuous	MGD R/T	10.7	5.1	Flow Meter	
cBOD ₅ @ 20°C	Weekly	mg/L C	201	5	SM 5210B	
BOD ₅ @ 20°C	Monthly	mg/L C	253	24	SM 5210B	
Total Suspended Solids	Weekly	mg/L C	274	4.6	SM 2540D	
Oil & Grease	None	mg/L G	9.7	0.53	EPA 1664A	
pH	None	SU G	8.1	7.4	SM 4500-H* B	

PRIORITY POLLUTANTS - CYANIDES					
UNIT	TOS	INFLUENT	EFFLUENT	METHOD	
Cyanide	mg/L C	<0.025	<0.025	EPA 335.2	

PRIORITY POLLUTANTS - METALS					
UNIT	TOS	INFLUENT	EFFLUENT	METHOD	
Antimony	ug/L C	<10	<10	EPA 200.7	
Arsenic	ug/L C	<5	<5	EPA 200.7	
Beryllium	ug/L C	<2	<2	EPA 200.7	
Cadmium	ug/L C	<5	<5	EPA 200.7	
Chromium, Total	ug/L C	<5	<5	EPA 200.7	
Chromium, Hexavalent	ug/L C	NA	NA	EPA 218.4	
Chromium, III	ug/L C	NA	NA	Calculation	
Copper	ug/L C	63	<10	EPA 200.7	
Lead	ug/L C	<5	<5	EPA 200.7	
Mercury	ug/L C	0.30	<0.20	EPA 245.1	
Molybdenum	ug/L C	<20	<20	EPA 200.7	
Nickel	ug/L C	<10	<10	EPA 200.7	
Selenium	ug/L C	<10	<10	EPA 200.7	
Silver	ug/L C	<10	<10	EPA 200.7	
Thallium	ug/L C	<10	<10	EPA 200.7	
Tributyltin	ug/L C	<5	<5	GC/MS	
Zinc	ug/L C	170	<20	EPA 200.7	

PRIORITY POLLUTANTS - TCDD EQUIVALENTS (DIOXIN)					
	UNIT	TQS	INFLUENT	EFFLUENT	METHOD
TCDD Equivalents (Sum)	pg/L	G	ND	ND	EPA 1613B
(Multiplied by toxicity factors as shown below)					
Chlorinated Dibenzodioxins (2,3,7,8-CDDs)					
2,3,7,8-tetra CDD	1.0				
2,3,7,8-penta CDD	0.5				
2,3,7,8-hexa CDDs	0.1				
2,3,7,8-hepta CDD	0.01				
octa CDD	0.001				
Chlorinated Dibenzofurans (2,3,7,8-CDFs)					
2,3,7,8 tetra CDF	0.1				
1,2,3,7,8 penta CD	0.05				
2,3,4,7,8 penta CD	0.5				
2,3,7,8 hexa CDFs	0.1				
2,3,7,8 hepta CDFs	0.01				
octa CDF	0.001				

C = 24-hr composite
G = Grab
ND = Not Detected
NA = Not Analyzed

SU = Standard Unit/pH
R/T = Recorder/totalizer
TOS = Type of Sample
Sum = Shall mean the sum of

g/L = grams/liter
mg/L = milligram/liter
ug/L = micrograms/liter
ng/L = nanograms/liter

pg/L = picograms/liter
ml/L = milliliter/liter
pCi/L = picocuries/liter
MGD = Million Gallons per Day