



COUNCIL AGENDA: 02-14-12  
ITEM: 7.3

# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** Dennis Hawkins, CMC  
City Clerk

**SUBJECT:** SEE BELOW

**DATE:** 2-8-12

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**SUBJECT: SAN JOSÉ/SANTA CLARA WATER POLLUTION CONTROL PLANT'S  
PRETREATMENT PROGRAM AND REVISIONS TO SEWER USE  
ORDINANCE**

## RECOMMENDATION

As recommended by the Transportation and Environment Committee on February 6, 2012 and outlined in the attached memo previously submitted to the Transportation and Environment Committee:

- (a) Accept the updated on the San José/Santa Clara Water Pollution Control Plant's Pretreatment Program; and
- (b) Approve a Director initiated ordinance amending Sections 15.14.270, 15.14.405, 15.14.465, 15.14.545, 15.14.575, 15.14.590, 15.14.695, and 15.14.745 of Chapter 15.14 of Title 15 of the San José Municipal Code to (1) update definitions for 'diluting waters,' 'significant change,' and 'zero discharger categorical user;' (2) allow issuance of permits to discharge stormwater to the sanitary sewer system; and (3) clarify requirements for reports submitted to the City from regulated facilities, as described in Title 40 of the Code of Federal Regulations (40 CFR).



# Memorandum

**TO:** TRANSPORTATION AND  
ENVIRONMENT COMMITTEE

**FROM:** Kerrie Romanow

**SUBJECT:** SEE BELOW

**DATE:** 01-18-12

Approved

Date

1/27/12

**SUBJECT: SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT'S  
PRETREATMENT PROGRAM AND REVISIONS TO SEWER USE  
ORDINANCE**

## RECOMMENDATION

1. Accept the update on the San Jose/Santa Clara Water Pollution Control Plant's Pretreatment Program; and
2. Recommend the full Council approve a Director initiated ordinance amending Sections 15.14.270, 15.14.405, 15.14.465, 15.14.545, 15.14.575, 15.14.590, 15.14.695, and 15.14.745 of Chapter 15.14 of Title 15 of the San José Municipal Code to (1) update definitions for 'diluting waters,' 'significant change,' and 'zero discharger categorical user;' (2) allow issuance of permits to discharge stormwater to the sanitary sewer system; and (3) clarify requirements for reports submitted to the City from regulated facilities, as described in Title 40 of the Code of Federal Regulations (40 CFR).

## OUTCOME

Inform the Committee on the key functions of the Pretreatment Program, recent activities, and programmatic enhancements. Recommendation to and final approval by the full Council of the proposed Ordinance will ensure that the City of San José is consistent with federal regulations governing the Pretreatment Program.

## BACKGROUND

The federal Clean Water Act establishes water quality standards for water bodies such as streams, rivers, bays, and oceans. In addition, the law created the National Pollution Discharge Elimination System (NPDES) permit program to control the discharge of pollutants from point sources, both direct dischargers like the Plant, and indirect dischargers (industrial facilities).

Wastewater treatment plants are designed primarily to treat domestic waste with traditional pollutants such as organic material, oil and grease, and pH. Industrial pollutants such as heavy metals and other chemicals are difficult and expensive to treat at the San Jose/Santa Clara Water Pollution Control Plant (Plant). Requiring regulated industries to treat their wastes before discharging to the Plant protects the health and safety of Plant and collection system staff, the integrity of the sanitary sewer system and Plant processes, and the health of the Bay. Pretreatment programs are designed to monitor and regulate industrial discharges. Since 1989, the City of San José (City) has implemented a Pretreatment Program for the Plant service area.

The Pretreatment Program permits, inspects, educates, and conducts surveillance on approximately 310 facilities in the service area. Additionally, staff collects over 1,750 samples and reviews approximately 700 monitoring reports annually. This group regulates all septic haulers and temporary dischargers to the sanitary sewer system, and conducts special research projects such as evaluating pollutant loads to the system and setting new pollutant limits for dischargers. Overseeing pretreatment compliance is a highly technical endeavor, and currently 20 positions (inspectors with a chemistry or biology background and engineers) comprise the Pretreatment Program. Since late 2009, the team has experienced a significant turnover of staff. Due to retirement, reassignment, or separation, 75 percent of staff are new to the program, and have occupied their current position for less than a year.

## ANALYSIS

### **PROGRAM UPDATE**

As the City monitors and partners with the industrial users in the service area to implement the pretreatment program, state and federal regulators do the same with the City. A significant component of monitoring and oversight under the NPDES permit program is regular inspection of facilities, processes, and procedures. The City is also subject to audits and inspections to evaluate the effectiveness and compliance of its pretreatment program. In 2005, the City received a Notice of Violation and Administrative Order from the Environmental Protection Agency (EPA) for deficiencies in implementation of the Pretreatment Program. To date, the City has completed all written submittals required but remains under the Order. Recently, the Pretreatment Program underwent two evaluations by regulators from the EPA and the State Water Quality Control Board in October 2009 and January 2011. These evaluations entailed review of the City's inspection and enforcement procedures, field inspection techniques, permit process, report review and quality control, and adequacy of the sewer use ordinance. Additionally, the EPA completed another Pretreatment Program inspection on January 5, 2012.

Results from the 2009 and 2011 evaluations indicated opportunities to improve the performance of the Pretreatment Program. In total, the inspectors sent by the EPA to audit the City's program identified 47 required and 38 recommended actions to address. The City received the final reports in January and April 2011. The findings identified in both reports include:

- Permitting – process requires better documentation practices and adherence to expiration dates
- Inspection – process requires more consistency among inspectors in execution and understanding of standard operating procedures, and better understanding and oversight of chemical and waste management at facilities
- Follow Up and Enforcement – address compliance issues identified at specific facilities
- Sewer Use Ordinance – potential improvements and clarity to language of several provisions.

The following link to the City's *2011 First Semi-Annual Industrial User Pretreatment Compliance Report*, <http://www.sanjoseca.gov/esd/wastewater/PDFs/2011Semi-AnnualPretreatmentReport1.pdf>, contains a list of all 85 actions and the status of completion as of July 31, 2011. This information has since been updated and submitted to EPA and the Water Board in preparation for the January inspection. Staff is working to address the few remaining elements by the end of February 2012, and have the City and all service area jurisdictions adopt ordinance updates by July 2012.

While staff did not wholly agree with all of the findings, the sum total of them indicated that program improvements were warranted. Throughout the spring of 2011, staff thoroughly examined the program's business practices, and has already implemented many program enhancements, particularly in updating operating procedures, training, and performance review, as described below. Preliminary results from the January 5, 2012 inspection indicate that the City's efforts in redirecting the program are in alignment with EPA's expectations. The EPA consultants commented on the significant positive change in the energy, attention to, and the structure of the program. Staff expects to receive a final report later this spring, and will bring the results and any follow up actions to the Committee.

In response to the above listed findings, the following program improvements were implemented, are in progress, or are recommended.

#### ***Improved Standard Operating Procedures***

A theme gleaned from the EPA's program review in 2009 and 2011 centered on inconsistency in the application of procedures for both inspection and permitting by some team members. While most team members were following procedures, staff has taken the opportunity to update all of the existing standard operating procedures for the program, and expand the library of procedures to provide additional clarity and guidance for all aspects of the core duties and responsibilities of the program.

Many of the items identified in the two reports centered on deficiencies in compliance at specific facilities inspected in 2009 and 2011. All identified compliance issues at these specific facilities have been addressed and continue to be monitored. Procedures on how to identify non-compliance activities and proper steps in enforcement also have been updated and regular staff training and oversight implemented, as described below. Early feedback from the January 5,

2012 inspection indicates that the City is on track in revamping its procedures and expectations for staff performance.

### *Training and Field Performance Review*

In the first half of 2011, staff conducted a comprehensive assessment of existing training materials. Consultant assistance was also utilized for areas where additional expertise was needed to evaluate current processes or to provide training. Staff was re-trained on specific elements identified in the 2009 and 2011 reviews of the City's program, such as the review of facility-submitted reports for compliance, key elements of an inspection process, and the timeline and process for handling permit applications. The Pretreatment Program initiated monthly training and peer review meetings to evaluate challenging cases and provide supplemental information on special topics. Supervisors are also now required to ride along on at least five percent of all field inspections to provide input and oversight to team members. Because of these changes, feedback on performance and additional guidance is provided to team members in a timely manner to calibrate field performance better.

Adding to the complexity of addressing all of the enhancements to the Pretreatment Program is the addition of numerous new staff to the team. Seventy-five percent of the team has been with the program in their current positions less than one year. To bring the new staff up to speed as quickly and consistently as possible, the program has developed a formal mentoring system, where each new team member is given a comprehensive training plan and assigned to a more experienced team member as a 'buddy.' The supervisors and other senior team members evaluate when the new staff have satisfactorily mastered each element of the plan.

The sum total of these programmatic changes has led to a more consistent and collaborative team. This was demonstrated on the January 5, 2012 inspection. The EPA consultants inspected seven facilities and reviewed City staff performance in the field. The preliminary assessment of performance was very favorable, and the program will continue to build on this positive review and momentum.

### *Plant Receiving Station and Septic Hauler Program Update*

While the vast amount of material the Plant receives and treats comes from the sanitary sewer system, septic haulers are allowed to transport waste to the Plant and discharge it at a set location on Plant property. Currently, 13 companies operate in the Plant's service area, and 20-25 loads per day are discharged at the Plant. The program requires the haulers to be permitted and to pay discharge fees to cover the cost of disposal and processing. Permit language, insurance requirements, and the disposal fees have not been updated since the late 1970s. In addition to reviewing permit and Municipal Code language, Pretreatment staff conducted a market survey to realign the Plant's disposal fees with Bay Area market rates. The final recommendations for program changes are under review, and will be brought to Council later in 2012.

## SEWER USE ORDINANCE REVISIONS

### *2009 PCA Recommendations*

The October 2009 audit report identified four specific changes to the City's Sewer Use Ordinance (SUO) to clarify language and provide better alignment with federal regulations. The proposed Ordinance updates to Chapter 15.14 include language that addresses these identified clarifications:

- Clarifying the definition of 'significant change' to include decreases in process flow. The current definition only refers to increases in flows, and changes in either direction can impact how a facility's pollutants are regulated and the sanitary sewer system's capacity.
- Clarifying the definition of 'zero discharger' to better distinguish industrial process flows that are federally regulated from those that are not. The program currently makes the distinction in a facility's permit, and this update aligns the SUO language with that practice.
- Stipulating the specific federal code section that requires the certification statement that must be submitted with reports. Currently, the program does require the inclusion of the proper certification statements in documentation submitted by all regulated facilities. This clarification calls out in the SUO the explicit reference to the federal code.
- Referencing the specific reporting requirements listed at 40 CFR 403.8 and 403.12. The program already requires all mandated reports. The SUO update highlights the explicit federal requirements.

### *Staff Recommended Updates*

After further review of Chapter 15.14, staff also recommends making several additional updates to the ordinance, including expanding two definitions and providing a means to discharge contaminated stormwater to the sanitary sewer.

*Definitions.* Two definition updates are proposed to increase the understanding of program requirements.

- The first change would further clarify what constitutes a 'significant change' to the amount of wastewater flows to the sanitary sewer system, including the amount discharged and the percentage increase or decrease of flows. Currently, a facility must submit a new permit application whenever its flows change by 25 percent. This revision will reduce the burden on low-flow dischargers (less than 1,000 gallons per day), who can experience this percentage change with small alterations in their process, yet not substantially increase their burden to the sanitary sewer system and the Plant.
- A second update will further refine the definition of what industrial processes contribute to 'diluting waters.' Diluting waters are prohibited from commingling with regulated wastewaters under federal regulations.

*Storm and other contaminated waters.* Staff proposes adding language to allow for the permitted discharge of contaminated storm and other waters to the sanitary sewer rather than releasing them untreated directly into the stormwater sewer system, a creek, or the Bay. Currently, the sewer use ordinance does not allow for discharge of any stormwater to the sanitary sewer. Occasionally, situations exist at industrial facilities where stormwater is contaminated and needs to be treated and also discharged to the sanitary sewer. In addition, the City's 2009 stormwater permit requires contaminated storm and other nonpoint source waters to be treated onsite, or discharged to a sanitary sewer system for treatment. This update to the ordinance aligns with the stormwater permit requirement. Depending on the situation, either a temporary or standard permit would be issued to a site. Regardless, specific permit conditions would be established, and the site inspected at least annually in conformance with Pretreatment Program requirements.

### **EVALUATION AND FOLLOW-UP**

Additional updates on the completion of the Pretreatment Program's response to the EPA's inspection reports, the findings of the January 5, 2012 inspection, and future communications with the EPA on the status of the 2005 Administrative Order, will be brought to the Committee by fall 2012.

### **PUBLIC OUTREACH/INTEREST**

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater.  
**(Required: Website Posting)**
- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This recommendation does not meet any of the criteria listed above. Staff updated the regulated community through an article in the summer 2011 edition of the *Tributary Tribune* <http://www.sanjoseca.gov/esd/water-pollution-prevention/tribtribune.asp>.

### **COORDINATION**

This memorandum has been coordinated with the City Attorney's Office.

HONORABLE MAYOR AND CITY COUNCIL

01-18-12

Subject: Pretreatment Program and Revisions to Sewer Use Ordinance

Page 7

CEQA

Resolution 76041, November 1, 2011, "Envision San Jose 2040 General Plan."

/s/

KERRIE ROMANOW

Acting Director, Environmental Services

For questions please contact René Eyerly, Environmental Services Program Manager, at (408) 793-5354.

DRAFT

ORDINANCE NO.

**AN ORDINANCE OF THE CITY OF SAN JOSE AMENDING SECTIONS 15.14.270, 15.14.405, 15.14.465, 15.14.545, 15.14.575, 15.14.590, 15.14.695 and 15.14.745 OF CHAPTER 15.14 OF TITLE 15 OF THE SAN JOSE MUNICIPAL CODE TO UPDATE DEFINITIONS, ALLOW ISSUANCE OF PERMITS TO DISCHARGE STORMWATER TO THE SANITARY SEWER SYSTEM, AND CLARIFY REQUIREMENTS FOR REPORTS SUBMITTED TO THE CITY FROM REGULATED FACILITIES**

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SAN JOSE:

SECTION 1. Section 15.14.270 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

**15.14.270 Diluting Waters**

“Diluting waters” means non-contact cooling water, boiler blowdown, domestic sewage, groundwater, storm water, surface drainage, reverse osmosis reject, water softener regeneration, or potable waters, or any waters which are not part of an industrial process and which do not contain priority pollutants but are combined with industrial wastewater prior to the monitoring point for industrial wastewater discharge. Diluting waters also includes excess water used in ~~rinse tanks when not in production~~ processes, such as rinse tanks or rinse water running when in production in excess of operational or quality requirements.

SECTION 2. Section 15.14.405 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

#### 15.14.405 Significant Change

“Significant change” means any change in an industrial user's operation that results in any of the following:

- A. A flow that exceeds the expected peak flow as shown in the sewage treatment plant connection allocation for the property on which the industrial user is located.
- B. An increase or decrease in annual average process flow of twenty-five (25) percent over the ~~industrial user's Standard Discharger's~~ average process flow for the dischargers' most immediate preceding ~~compliance period~~ twelve (12) months.
- C. An increase or decrease in annual average process flow that results in a change from Low Flow Discharger to Standard Discharger or from Standard Discharger to Low Flow Discharger.
- D. An increase or decrease in annual average process flow that results in a change from non-Significant Industrial User to Significant Industrial User or from Significant Industrial User to non-Significant Industrial User.
- E. An increase or decrease in annual production rate of twenty-five (25) percent for any industrial user subject to production-based limits over the industrial user's production rate for the most immediate preceding twelve (12) months.
- ~~E~~. Adding or deleting process discharge or sample points.

SECTION 3. Part 2 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to add a new section, to be numbered, entitled and to read as follows:

**15.14.465 Zero Discharge Categorical User or ZDC**

“Zero discharge categorical user” or “ZDC” means an industrial facility that performs any categorical process subject to Federal pretreatment standards, as described in 40 CFR 405-471, that has any connection to the sanitary sewer system, but does not discharge wastewater from the categorical process to the sanitary sewer.

SECTION 4. Section 15.14.545 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

**15.14.545 Storm and Other Waters**

- A. No person shall discharge, cause, allow or permit any stormwater, surface water, groundwater, subsurface drainage or roof runoff-water to be discharged into the sanitary sewer system or any part thereof without a wastewater discharge permit.
- ~~B. No person shall discharge, cause, allow or permit any groundwater or subsurface drainage to be discharged into the sanitary sewer system or any part thereof, without a wastewater discharge permit issued by the director specifically for such discharge.~~
- ~~C.~~ B. A wastewater discharge permit for the discharge of groundwater, ~~or subsurface drainage, surface water, roof water, or stormwater~~ shall only be issued if there is no reasonable alternative method for disposal of such water.

DC. If permitted, discharge of groundwater, ~~or subsurface drainage,~~ surface water, roof water, or stormwater shall be subject to all applicable requirements of this Chapter 15.14, including but not limited to the payment of applicable permit fees and such terms and conditions as the Director may impose on the wastewater discharge permit.

SECTION 5. Section 15.14.575 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

**15.14.575 Corrosive Matter**

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any liquid, solid, vapor, gas, or thing having a pH lower than six (6) or ~~more than~~ equal to or greater than twelve and one-half (12-1/2) or having any other corrosive property capable of causing damage or hazard to the sanitary sewer system or any part thereof, or to any personnel operating, maintaining, repairing, or constructing said sanitary sewer system or any part thereof, or working in or about the sanitary sewer system.

SECTION 6. Section 15.14.590 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

**15.14.590 Prohibition on Use of Diluting Waters**

~~The use of diluting waters as a partial or complete substitute for adequate treatment, to achieve compliance, or to meet local limitations for wastewater as set forth in Section, or to avoid or minimize any requirements imposed in a wastewater discharge permit is prohibited.~~ No Industrial User shall ever increase the use of process water, or in any

way use diluting waters as a partial or complete substitute for adequate treatment, or to meet local limits or achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement.

SECTION 7. Section 15.14.695 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

**15.14.695 Discharge Reports**

- A. Dischargers are subject to the reporting requirements as contained in Title 40 of the Code of Federal Regulations. The director may require that any person connected to or discharging wastewater into the sanitary sewer system file additional periodic discharge reports or a zero discharge report.
- B. The periodic discharge report may be required to include, but need not be limited to, nature of process, volume, rates of flow, mass emission rate, hours of operation, number of employees, hauling records, potential for slug discharge or other information which relates to the generation of waste, including wastewater constituents and characteristics in the wastewater discharge and the ability of the discharger to meet applicable discharge limits.
- C. The zero discharge report shall certify that the zero discharge user does not discharge any process water to sanitary sewer, or for a zero discharge categorical user ~~discharger~~ does not discharge any categorical process water or ancillary process water to the designated zero discharge categorical sample point ~~industrial waste~~ or into the sanitary sewer system. This report may be required to include, but need not be limited to, nature of process, hours of

operation, number of employees, hauling records, or other information that relates to the generation of wastes.

- D. The director may also require such periodic discharge reports and zero discharge reports to include information concerning the chemical constituents and quantity of chemicals stored on-site, including waste hauling records or other information, which relates to the generation of wastes even though they may not normally be discharged.
- E. In addition to discharge reports, the director may require dischargers to submit such additional reports as may be necessary to allow the city to evaluate the discharger's ability to comply with this chapter, including but not limited to best management practice or self-monitoring reports.
- F. It shall be unlawful for any person who has discharged wastewater to the sanitary sewer system to refuse to file any report requested by the director.
- G. Sampling and analysis shall be performed in accordance with 40 CFR 136 and amendments thereto. Where 40 CFR 136 does not contain sampling or analytical methods for the pollutant in question, or where the director determines that 40 CFR 136 are inappropriate for the pollutant in question, sampling and analysis shall be performed by using analytical methods validated by the director.

**SECTION 8.** Section 15.14.745 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

**15.14.745 Signature Requirements**

- A. Permit applications, discharge reports and any other reports required by the director to be signed, shall be signed by an executive officer of the business filing the application.
- B. Such executive officer shall be at least of the level of vice president, general partner, president, or an individual responsible for the overall operation of the facility applying for said permit, or meet federal requirements for NPDES applications as contained in Title 40 of the Code of Federal Regulations.
- C. Reports subject to the requirements of Title 40 of the Code of Federal Regulations shall include the certification statement as contained in Title 40 of the Code of Federal Regulations.

RD:MD1:ERD  
11/9/2011

PASSED FOR PUBLICATION of title this \_\_\_\_\_ day of \_\_\_\_\_, 2012, by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

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CHUCK REED  
Mayor

ATTEST:

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DENNIS D. HAWKINS, CMC  
City Clerk