

### SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

CHUCK REED, CHAIR
PETE McHUGH, MEMBER
KEVIN MOORE, MEMBER
JAMIE MATTHEWS, MEMBER
MADISON NGUYEN, MEMBER

KEN YEAGER, MEMBER JOHN GATTO, MEMBER ED SHIKADA, MEMBER KANSEN CHU, MEMBER

### AMENDED AGENDA/TPAC

4:30p.m. February 9, 2012 Room T-1734

- 1. ROLL CALL
- 2. <u>MINUTES</u>
  - A. January 12, 2012
- 3. <u>UNFINISHED BUSINESS</u>
- 4. <u>CORRESPONDENCE</u>
- 5. REPORTS
  - A. Open Purchase Orders Greater Than \$100,000
    The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1 million and of services between \$100,000 and \$250,000.

### 6. AGREEMENTS

A. Acton Item - TPAC Recommendation for approval:

The following action item is scheduled to be considered by the San José City Council on February 14, 2012:

Report on bids and award of contract for Installation of Potable and Non-Potable Water Services and Mains: 2012-2013 to the lowest responsive bidder, San Jose Water Company, for the estimated term of April 2012 through June 2013, in an amount not to exceed \$645,955.64.

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### B. Acton Item - TPAC Recommendation for approval:

# The following action item is scheduled to be considered by the San José City Council on February 14, 2012:

Adopt a resolution authorizing the City Manager to:

- 1. Execute a Master Service Agreement with Cameron International Corporation, dba Process & Compression Systems (Cameron) located in Houston, Texas for the sole source purchase of Electrical Generator Engines (EGE or "Generator") catalogue parts, repair, refurbishment of engine components and related services as may be required, for a not-to-exceed amount of \$3,000,000 over a three year period from January 2012 to January 2015.
- 2. Execute one-year options to extend the agreement to provide ongoing maintenance and support after the initial three year term, subject to the annual appropriation of funds.
- 3. Execute open purchase orders as required under the terms and conditions of the Master Agreement, subject to the appropriation of funds.

### C. <u>Acton Item - TPAC Recommendation for approval:</u>

The following action item is scheduled to be considered by the Transportation and Environment Committee on February 6, 2012 and will be considered by the San José City Council on February 14, 2012:

- 1. Accept this report on the capital project delivery approach for implementing the Plant CIP;
- 2. Direct staff to proceed with a Request for Information solicitation to determine market interest in Design Build, Design Build Operate, and Design Build Own Operate project delivery options for capital improvements using technology new to the City; and
- 3. Cross-reference this item to the February 14, 2012 Council meeting for consideration.

### D. <u>Acton Item - TPAC Recommendation for approval:</u>

The following action item is scheduled to be considered by the Transportation and Environment Committee on February 6, 2012 and will be considered by the San José City Council on February 14, 2012:

- 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

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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).

# 7. <u>STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC</u>

A. The following action item was approved by the San Jose City Council on January 10, 2012 and was heard by the Treatment Plant Advisory Committee on January 12, 2012:

Adopt a resolution authorizing the City Manager, subject to the concurrence of the Treatment Plant Advisory Committee, to submit an application to Reclamation for a WaterSMART grant through the Title XVI Water Reclamation and Reuse Program (Funding Opportunity Announcement No. R12SF80050), in an amount of up to \$5,000,000 for the construction of a regional recycled water intertie from north San Jose through the City of Santa Clara to the City of Sunnyvale's recycled water system and the construction of a new pipeline connecting the Sunnyvale recycled water system to the new Apple II campus via Wolfe Road.

### 8. MISCELLANEOUS

A. The next TPAC meeting will be March 8, 2012, at 4:30 p.m. City Hall, City Manager's Office, 17<sup>th</sup> Floor, Room 1734.

### 9. OPEN FORUM

### 10. ADJOURNMENT

NOTE: If you have any changes or questions, please contact Monica Perras, Environmental Services, 408-975-2515.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please call Monica Perras at (408) 975-2515 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

<u>Availability of Public Records</u>. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at San Jose City Hall, 200 East Santa Clara Street, 10<sup>th</sup> Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.

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# MINUTES OF THE SAN JOSE/SANTA CLARA

### TREATMENT PLANT ADVISORY COMMITTEE

City Hall, City Manager's Office, 17<sup>th</sup> Floor, Room 1734 Thursday, January 12, 2012 at 4:30 p.m.

### 1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 4:30 p.m. Roll call was then taken, with the following members in attendance:

Committee members: Pete McHugh, John Gatto, Jamie Matthews, Kevin Moore (late arrival), Madison Nguyen, Ed Shikada, Ken Yeager

Staff present: Monica Perras, Beth Gonzales, Mansour Nasser, Jon Newby, Mollie Dent, Kerrie Romanow, Linda Charfauros

Others present: Chris de Groot (City of Santa Clara), Kathleen Phalen (City of Milpitas), Teresa Alvarado (Santa Clara Valley Water District), Madison Casserly (Kennedy/Jenks Consultants), David Wall (San Jose Resident).

### 2. APPROVAL OF MINUTES

A. December 8, 2011.

The minutes for December 8, 2011 were approved to note and file.

### 3. UNFINISHED BUSINESS

### 4. <u>CORRESPONDENCE</u>

A. San Jose/Santa Clara Water Pollution Control Plant-Odor Study Update **Item 4.A was approved unanimously.** 

### 5. REPORTS

A. Open Purchase Orders Greater Than \$100,000

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1 million and of services between \$100,000 and \$250,000.

Item 5.A was approved unanimously.

### 6. AGREEMENTS

A. Action Item - TPAC Recommendation for approval:

The following action item was considered by the San Jose City Council on January 10, 2012 subject to the concurrence of Treatment Plant Advisory Committee:

Adopt a resolution authorizing the City Manager, subject to the concurrence of the Treatment Plant Advisory Committee, to submit an application to Reclamation for a WaterSMART grant through the Title XVI Water Reclamation and Reuse Program (Funding Opportunity Announcement No. R12SF80050), in an amount of up to \$5,000,000 for the construction of a regional recycled water intertie from north San Jose through the City of Santa Clara to the City of Sunnyvale's recycled water system and the construction of a new pipeline connecting the Sunnyvale recycled water system to the new Apple II campus via Wolfe Road.

**Committee Member Kevin Moore arrives.** 

Item 6.A was approved unanimously.

### 7. STATUS OF ITEMS PREVIOUSLY APPROVED BY TPAC

The items that were approved by the San José City Council on November 29, 2011 and December 13, 2011 were accepted to note and file.

### 8. <u>MISCELLANEOUS</u>

A. The next TPAC meeting will be February 9, 2012, at 4:30p.m., City Hall, City Manager's Office, 17<sup>th</sup> Floor, Room 1734.

### **PUBLIC COMMENT**

- A. David Wall presented a speaker card on various topics.
- B. Teresa Alvarado(SCVWD) presented a speaker card announcing the new name of the Advance Water Treatment Facility as Advance Water Purification Center (AWPC).
- C. Kerrie Romanow spoke about EPS.

### 10. <u>ADJOURNMENT</u>

A. The Treatment Plant Advisory Committee adjourned at 4:40 p.m.

Chuck Reed, Chair Treatment Plant Advisory Committee

# City Manager's Contract Approval Summary For Procurement and Contract Activity between \$100,000 and \$1 Million for Goods and \$100,000 and \$250,000 for Services

### January 1 - January 31, 2011

Description of Contract Activity <sup>1</sup>	Fiscal Year	Req#/ RFP#	PO#	Vendor/Consultant	Original \$ Amount	Start Date	End Date	Additional \$ Amount	Total \$ Amount	Comments
NEW:										
TRACTORS/NEW 963 LOADER PER SAN JOSE SPECIFICATION	FY11-12	15317		PETERSON TRACTOR CO	\$900,000					
ONGOING:										
OVERHAUL OF TPS & FLOWAY PUMPS	FY11-12	14065		CONHAGEN, ALFRED INC	\$200,000					

<sup>&</sup>lt;sup>1</sup> This report captures in process contract activity (Requisition Number or RFP Number) and completed contract activity (Purchase Order Number, Contract Term, and Contract Amount)

COUNCIL AGENDA: 02-14-12 ITEM:



# Memorandum

**TO:** HONORABLE MAYOR AND CITY COUNCIL

**FROM:** Kerrie Romanow

David Sykes

**SUBJECT: SEE BELOW** 

**DATE:** January 23, 2012

Approved

1/24/12

Date

SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT FOR INSTALLATION

OF POTABLE AND NON-POTABLE WATER SERVICES AND MAINS:

2012-2013

### **RECOMMENDATION**

Report on bids and award of contract for Installation of Potable and Non-Potable Water Services and Mains: 2012-2013 to the lowest responsive bidder, San Jose Water Company, for the estimated term of April 2012 through June 2013, in an amount not to exceed \$645,955.64.

CPMS Project ID#6910

### **OUTCOME**

The award of the Installation of Potable and Non-Potable Water Services and Mains: 2012-2013 project will enable the construction of new water services that will provide a reliable source of water to new and existing customers.

### **BACKGROUND**

The San Jose Municipal Water System (Muni Water) bids an annual contract for miscellaneous new water service installations for commercial, industrial and residential developments within the Muni Water and South Bay Water Recycling (SBWR) systems. This contract allows all new installations to be made by one contractor for the approximate one-year duration of the contract, which increases staff's efficiency and ability to respond to and meet customer needs, as compared to the increased time and administrative support that would be required to process a separate contract for each installation.

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The installation work consists of such items as installing water mains, service laterals, and furnishing and installing pipes, valves, fittings, and all appurtenances necessary to install service laterals and other minor improvements. The contractor who is awarded the contract is required to effect permanent installations within a 30 calendar day period from the date they are given a design drawing for a particular installation. Customers are charged for the installation of their service, including actual costs of construction, fees for new meters, and an engineering/inspection fee. Funds collected from customers are deposited back into the originating fund to achieve full cost recovery.

### **ANALYSIS**

The project was advertised for bid and a total of seven bids were received and opened on December 15, 2011, with the following results:

Contractor	City	Bid Amount	Variance Over/(Under)		
Contractor	City	Diu Amount	<u>Amount</u>	<b>Percent</b>	
McGuire & Hester	Oakland	\$743,483	\$83,483	12.6%	
West Valley Construction	Campbell	\$686,460	\$26,460	4.0%	
Pacific Underground Construction	San José	\$670,435	\$10,435	1.6%	
J & M Inc.	Livermore	\$660,691	\$691	0.1%	
Engineer's Estimate		\$660,000			
San Jose Water Company	San José	\$645,956	(\$14,044)	-2.1%	
Northern Underground Construction	San José	\$596,983	(\$63,017)	-9.5%	

Section 2-1.06 of the City's Standard Specifications provides that proposals which are not submitted in strict compliance with the directions in the Notice to Contractors may be deemed non-responsive and rejected on that basis. The bid from Northern Underground Construction contained an incorrect calculation for the overhead and profit markup (Item 57 of the "Schedule of Quantities"), resulting from their incorrect factoring of the various components of the bid and use of a different methodology to arrive at a bid price on that item. Section 2-1.05 of the City's Standard Specifications allows the City to correct the calculation of the extended price for a bid item; however, under these circumstances the bid cannot be corrected as allowed for in that section. As a result, the bidder failed to provide a price on all bid items, and the bid from Northern Underground Construction is non-responsive and should be rejected in accordance with Standard Specifications Section 2-1.06.

Additionally, analysis of the bids revealed that the bids from McGuire & Hester, Pacific Underground Construction, and J&M Inc. did not comply with Project Specifications Section 2-1.13A, "Qualification of Bidders," in that they did not submit sufficient documentation of previous project experience with their bid. As a result, the bids from McGuire & Hester, Pacific Underground Construction, and J&M Inc. were deemed non-responsive.

Based on the above-mentioned four bids being considered non-responsive, West Valley Construction and San Jose Water Company are the remaining responsive bidders. Staff is recommending that Council award the contract to the lowest responsive bidder, San Jose Water

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Subject: Installation of Water Services and Mains: 2012-2013

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Company, whose bid has been reviewed, analyzed, and found acceptable.

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

The project is currently within budget and on schedule with a projected completion date of June 2013. No additional follow up actions with the Council are expected at this time.

### PUBLIC OUTREACH/INTEREST

CONST.	Criterion 1: Requires Council action on the use of public funds equal to \$1 million or greater. (Required: Website Posting)
	Criterion 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)
	Criterion 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 item does not meet any of the above criteria. To solicit contractors, this project was 'advertised in the *San José Post Record*, as well as on BidSync.

### **COORDINATION**

This project has been coordinated with Risk Management, the City Manager's Budget Office and the City Attorney's Office. This item is scheduled to be heard at the February 9, 2012, meeting of the Treatment Plant Advisory Committee (TPAC).

### FISCAL/POLICY ALIGNMENT

There are no cost implications to the General Fund as a result of this action. This recommendation meets the general principles of the 2011-2012 Mayor's June Budget Message of providing essential public services while valuing financial sustainability and cost recovery.

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Subject: Installation of Water Services and Mains: 2012-2013

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### COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION:

\$645,956\*

2. COST OF PROJECT:

Project Delivery
Construction
TOTAL/REMAINING PROJECT COSTS

\$90,000

\$645,956 \$735,956

3. SOURCE OF FUNDING:

500 - Water Utility Capital Fund

512 - San José/Santa Clara Treatment Plant Capital Fund

### BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contract recommended as part of this memo.

Fund #	Appn. #	Appn. Name	RC#	Total Appn.	Amt. For Contract	2011- 2012 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
Remaining Project Costs					\$645,956		,
Current Funding Available							
500	5366	Infrastructure	0308	\$840,000	\$100,000	V-212	6/21/11,
300		Improvements .	03				28928
500	4348	Service	0179	\$350,000	\$245,956	V-216	6/21/11,
300		Installations	08				28928
512	6589	Revised SBAP-	0628	\$3,469,000	\$300,000	V-181	10/18/11,
512		SBWR Extension	73	\$5,409,000	\$200,000	A-101	28979
Total	Total Current Funding Available			\$3,819,000	\$645,956		

### **CEQA**

Exempt, File No. PP10-163.

/s/

/s/

DAVID SYKES

KERRIE ROMANOW

Director, Public Works

Acting Director, Environmental Services

For questions please contact Jeff Provenzano, Senior Engineer, Environmental Services Department, at (408) 277-4218.

<sup>\*</sup>Funds collected from customers are deposited back into the originating fund to achieve full cost recovery.

COUNCIL AGENDA: 2/14/12 ITEM:



# Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Julia H. Cooper

**SUBJECT: SEE BELOW** 

**DATE:** January 23, 2012

Approved

Date 1/26/12

**SUBJECT:** 

PURCHASE OF ELECTRICAL GENERATOR ENGINE PARTS AND

RELATED SERVICES FROM CAMERON INTERNATIONAL

CORPORATION.

### **RECOMMENDATIONS**

Adopt a resolution authorizing the City Manager to:

- 1. Execute a Master Service Agreement with Cameron International Corporation, dba Process & Compression Systems (Cameron) located in Houston, Texas for the sole source purchase of Electrical Generator Engines (EGE or "Generator") catalogue parts, repair, refurbishment of engine components and related services as may be required, for a not-to-exceed amount of \$3,000,000 over a three year period from January 2012 to January 2015.
- 2. Execute one-year options to extend the agreement to provide ongoing maintenance and support after the initial three year term, subject to the annual appropriation of funds.
- 3. Execute open purchase orders as required under the terms and conditions of the Master Agreement, subject to the appropriation of funds.

### **OUTCOME**

Approval of a Master Agreement for Services with Cameron will allow the San José/Santa Clara Water Pollution Control Plant (WPCP) to continue to receive parts and services to maintain and operate the Electrical Generator Engines (Generator) which are critical for WPCP operations.

### **BACKGROUND**

The electrical generation and distribution system at the WPCP is the lifeline of Plant operation that ensures pumping and treatment of water. Failure of the system will result in a complete disruption of the wastewater treatment processes, resulting in equipment damage and potential

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Subject: Master Agreement with Cameron International

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releases of wastewater. As with much of the infrastructure at the WPCP, the engine generators are more than 30 years old and are at a high risk of failure. The eight Generators at the WPCP are designed to generate 13 mega-watts (MW) of electricity. Several of these engines need to be replaced due to lack of reliability, high maintenance cost, and difficulty in obtaining spare parts. Currently one Generator is out of service due to lack of replacement parts.

Despite the fact that the WPCP can purchase all of the electricity it needs directly from PG&E, the ability to generate electricity in-house is critical for operations reliability in the event of a PG&E power failure. The WPCP cannot sustain itself longer than 20 minutes without power before untreated sewage floods the WPCP grounds and flows into the Bay. Lack of reliable inhouse electrical generation during PG&E power failures can have disastrous consequences with significant damage to critical equipment and facilities, and potential discharge of raw sewage into the Bay. In addition, the Generator's burn about 1.5 million cubic feet of digester gas per day to generate electricity. This provides 35% of the electricity consumed by the WPCP processes using renewable energy. If the Generator's go off-line the generated digester gas needs to be burned at the WPCP "Flare Stack." This would result in significant amounts of wasted renewable energy and violation of the Title V Operating Permit issued by the Bay Area Air Quality Management District. There are major fines associated with Title V Permit violations and in some cases they exceed \$10,000 a day.

Proper maintenance of the aging Generators at the WPCP is of paramount importance for properly sustaining a minimum fleet so that PG&E power failures are dealt with in a safe, reliable, and regulatory compliant manner.

All of the aforementioned concerns have prompted the WPCP Staff to evaluate options for replacement of the electrical power generation system which would meet the City's environmental goals and WPCP's electrical reliability criteria. The WPCP Master Plan recognizes these concerns and developed a plan for the long term capital projects related to energy generation. However, the immediate need is to ensure that a plan of service is in place for the Generators which are the backbone of the electrical generation system at the WPCP.

For the last several years, the Generators have been maintained properly using many parts that were in inventory. When parts reach the end of their life expectancy and are at their breaking point, replacement parts and services are provided. With a reduced inventory, it is at a critical point to order sufficient parts and related services to avoid a significant system failure.

### **ANALYSIS**

The City requires catalogue parts; repair and refurbishment of engine component parts and/or engine rebuild and associated assemblies for the proper operation of the Generators at the WPCP. Many of the engine parts are near the end of their useful service life and need to be replaced. In order to keep the Generators running in top performance, it is essential to maintain them with Original Equipment Manufacturer (OEM) parts. These parts are only available from Cameron, the manufacturer. Cameron does not stock parts and only starts manufacturing them upon receipt of order, with lead times ranging from 15 to 26 weeks.

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Subject: Master Agreement with Cameron International

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Since the WPCP is heavily invested in the Cameron EGE infrastructure, it is not prudent to introduce significant risk and cost that may be associated with non-OEM parts. The sole source purchase is required to minimize increased risk from non-OEM parts, to match existing Cameron engine parts for proper operation, and optimum compatibility and interoperability. Therefore, Staff has determined that the continued sole source acquisition of Cameron parts is justified to ensure critical support services and OEM parts. As required by the Municipal Code 4.12.240 (C), the Director of Finance has reviewed and approved the Sole Source and Brand Name Proprietary Procurement Form.

To ensure competitive pricing, staff benchmarked pricing with a similarly situated government agency, the New York City Department of Environmental Protection (DEP). Staff validated that the pricing for parts and services is fair and reasonable and is consistent with the pricing offered to New York City at a 32.5% discount from list price.

**Summary of Cameron Agreement:** The Agreement provides for milestone payments as parts and assemblies are repaired or refurbished, upon inspection and acceptance by the City.

Cameron has requested changes to the City's standard indemnification provision involving a complete limitation on collecting any indirect and consequential damages. In addition, the Agreement contains a limitation on direct damages that would limit the City's recovery to the amount of the insurance coverage of \$4,000,000 required under the Agreement. This limitation would not apply to claims for personal injury, death, or claims made by third parties against the City. The principal effect of agreeing to this limitation would be to limit the City's ability to recover for property damage that might be sustained by the City due to some fault of Cameron. In such cases, the City's recovery would be limited to \$4,000,000. If an incident were to occur, any property damage beyond the insurance coverage in the Agreement would be covered under the City's property insurance policy.

Subject to the appropriation of funds, staff is requesting the authority to:

- Execute open purchases orders subject to the terms and conditions of the Master Agreement.
- Execute one-year options to extend the agreement to provide ongoing maintenance and support after initial three year period.

*Green Vision:* The purchase of parts, components and assemblies assist the City in meeting Goal 3 of the Green Vision by ensuring that digester gas from the WPCP can be used as renewable power for the wastewater treatment process. The WPCP currently uses two-thirds renewable power from digester gas and landfill gas and aims to increase the use of renewable power through implementation of the WPCP Master Plan.

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

This memorandum will not require any further follow-up.

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Subject: Master Agreement with Cameron International

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### **POLICY ALTERNATIVES**

Alternative #1: Conduct competitive solicitation for non-OEM parts and services.

Pros: Potential for better prices due to competition.

Cons: Risk of failure.

**Reason for not recommending:** Significant risk is introduced that the EGE's will not work according to specifications incurring greater risk of down time and resulting wastewater treatment disruptions.

### Alternative #2: Conduct competitive solicitation for new Generators.

**Pros:** A competitive process would provide an opportunity to purchase new generators.

**Cons:** The purchase of new generators would result in substantially higher costs, as well as the resource commitment needed to test, deploy, and learn a new system in a relatively short time period. In addition, replacement is being addressed in the WPCP's Master Plan.

**Reason for not recommending:** The purchase of a parts and rebuilding engines is currently a more cost effective solution than purchasing a new replacement generator system.

### PUBLIC OUTREACH/INTEREST

abla	Criterion 1: Requires Council action on the use of public funds equal to \$1 million or
	greater. (Required: Website Posting)
	Criterion 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)
	Criterion 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 item meets Criterion 1: Requires Council action on the use of public funds equal to \$1 million or greater. This memorandum will be posted on the City's website for the February 14, 2012 City Council agenda.

### COORDINATION

This memorandum has been coordinated with the Environmental Services Department, the City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the February 9, 2012 Treatment WPCP Advisory Committee meeting.

January 23, 2012

Subject: Master Agreement with Cameron International

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### FISCAL/POLICY ALIGNMENT

This project is consistent with the following General Budget Principles "We must focus on protecting our vital core city services for both the short- and long-term" and, "We must continue to streamline, innovate, and simplify our operations so that we can deliver services at a higher quality level, with better flexibility, at a lower cost."

### COST SUMMARY/IMPLICATIONS

The maximum amount of compensation that the City will pay to the Contractor under this agreement, including payment for parts, services, repairs, upgrades, labor, technical support, delivery and taxes, shall not exceed \$3,000,000 for a three year period, with an annual limit of \$1,000,000. Any payments beyond 2011-2012 will be subject to Council appropriation of funds. The expenditure to procure immediate parts and services is estimated at \$900,000 for the first year.

### BUDGET REFERENCE

Fund #	Appn #	Appn. Name	RC#		Contract	Adopted Capital Budget	Last Budget Action (Date, Ord. No.)
512	5690	WPCP Infrastructure Improvements	042853	\$13,102,000	\$1,000,000	1	6/21/2011, 28928

### **CEQA**

Not a Project, File No. PP10-066(a) Agreements and Contracts.

ARN ANDREWS FOR JULIA COOPER Acting Assistant Director of Finance FOR Acting Director of Finance

For questions please contact Mark Giovannetti, Purchasing Division Manager at (408) 535-7052.

**T&E:** 02-06-12 ITEM: d(3)



# Memorandum

**TO:** TRANSPORTATION &

**ENVIRONMENT COMMITTEE** 

FROM: Kerrie Romanow

David Sykes

SUBJECT: BIOSOLIDS TRANSITION -

TIMELINE AND CIP DELIVERY

**APPROACH** 

DATE:

01-17-12

Approved 5

Date

1/27/12

### **RECOMMENDATION**

- 1. Accept this report on the capital project delivery approach for implementing the Plant CIP;
- 2. Direct staff to proceed with a Request for Information solicitation to determine market interest in Design Build, Design Build Operate, and Design Build Own Operate project delivery options for capital improvements using technology new to the City; and
- 3. Cross-reference this item to the February 14, 2012 Council meeting for consideration.

### **OUTCOME**

Approval of these recommendations will allow staff to continue procurement of engineering resources to implement the overall capital program to re-build the San Jose/Santa Clara Water Pollution Control Plant (Plant). It will also allow staff to further explore of Design Build options for priority projects, including alternative biosolids drying and energy solutions that assure a reliable power supply at the Plant and new facilities.

### **BACKGROUND**

In April 2011, Council initiated the environmental review process for the Plant Master with the selection of a Plant Master Plan preferred alternative. In addition, Council directed staff to prioritize the implementation of odor reducing projects at the Plant and to perform an analysis on the feasibility of transitioning to a new biosolids process in three to seven years.

The recommended Plant Master Plan preferred alternative for capital improvement projects were based on six drivers:

1) Condition of the infrastructure

### TRANSPORTATION AND ENVIRONMENT COMMITTEE

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Subject: Biosolids Transition Timing and CIP Delivery Approach

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- 2) Regulatory requirements necessitating new or modified infrastructure
- 3) Economic benefit from modifying or replacing infrastructure in reduced operations and maintenance costs
- 4) Improved performance benefit in modifying or replacing existing infrastructure that improves reliability or treatment performance
- 5) Increased flows and loads that trigger the need for additional infrastructure
- 6) Policy decision triggers based on Council and stakeholder interests

A challenge to implementing Plant rehabilitation projects is effectively managing such a large initiative while keeping the current operations intact. While the Master Plan triggers inform when projects need to start, the feasibility of actual implementation depends on a wide variety of factors, such as: the availability of experienced staff resources for implementation; creation of redundancy in existing processes that would allow for the shut downs required; the redistribution of incoming and outgoing wastewater flows to the Plant; and the mitigation of critical infrastructure failures that can result when the very limited existing Plant operational staff resources are diverted for capital projects. All of the above factors will limit the City's ability to deliver on long term project planning and implementation support needed to rehabilitate the Plant.

Over the last five years, the Plant has seen an unprecedented decline in staffing resources in all areas: engineering, operations and maintenance. At current engineering and supporting operations and maintenance staffing levels, capital project delivery has averaged about \$20 million in expenditures per year over the last three years. To implement the Master Plan recommendations, the critical rehabilitation projects would average about \$40 million a year. When combined with the accelerated biosolids transition, the total Plant capital outlay would require funding of about \$100 million per year over the next five to seven years. The magnitude of this effort is risky and challenging, especially given the newer technology implementation for the biosolids transition and the disruptive nature of the critical rehabilitation projects to the everyday operations of the 24/7 Plant facility.

Another challenge is the financing of this effort. Attachment A shows the cash flow requirements needed to fund projects to meet these implementation timelines. Implementing the Plant's capital improvement program, as shown in the chart, requires considerable variability, in cash flow, from a low of less than \$66,000,000 in a single year to a high of \$133,000,000 per year in 2017 and 2018. Sustaining revenues on pay-as-you-go financing would create significant rate spikes for the residents and businesses in the Plant service area, potentially requiring rates to double in a single year.

### **ANALYSIS**

To overcome these challenges, staff has developed a Capital Improvement Program (CIP) implementation strategy consistent with the goals and objectives of the Plant Master Plan preferred alternative which addresses the following objectives:

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- Operational: Result in a reliable, flexible Plant that can respond to changing conditions
- Economical: Maximize economic benefits for customers through cost-effective options
- Environmental: Improve habitat and minimize impacts to the local and global environment
- Social: Maximize community benefits through improved aesthetics and recreational uses both for Plant neighbors and the public at large

### Capital Improvement Program Delivery Strategy

Staff has developed a "Packaged Delivery" approach to delivering the capital projects recommended by the Plant Master Plan preferred alternative through 2040. This strategy is detailed in Attachment B and consists of three CIP "packages:"

- Package 1 Includes the critical rehabilitation projects in the various processes areas such as the re-building of the headworks, rehabilitating and seismically upgrading the primary and secondary tanks, upgrading the corroding metallic components and machinery on the heating, cooling and ventilation systems, and electrical distribution systems upgrade. These projects are estimated to average \$40 million a year over the next ten years.
- Package 2 Includes projects that have the most significant impact to the current challenges faced by the Plant and have the largest impact in meeting the priorities set forth by the Plant Master Plan. These projects address the deteriorating power generation equipment, severe staffing shortages at the Plant, and odor impacts to the neighboring communities. Package 2 involves implementation of significant new technologies at an estimated cost on average of about \$500,000,000 over seven years.
- Package 3 Includes projects that are expected to exceed the ten to fifteen year implementation horizon and include estimated end of life replacement of existing infrastructure and new projects required to be implemented based on new regulatory drivers and/or changes in wastewater flows and volume loads. Total cost of these projects over the fifteen year period is estimated at \$1.1 billion, with a highly variable annual average cost which is dependent on the regulatory requirements that would trigger these projects.

The remainder of this report reviews options for delivery of the nearer-term Package 1 and Package 2 CIP.

### Package 1 Delivery Options

Package 1 projects rehabilitate existing processes and are therefore highly disruptive to Plant operations. They will require significant planning, coordination and oversight to ensure the Plant service is not interrupted and that there is not a spill or any violation of the Plant's discharge permits. These projects are typical of the Plant CIP implemented over the last five years using a standard Design/Bid/Build approach with consultant and other expert quality assurance and quality control resources. Staff is recommending that this approach be continued for Package 1

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implementation. There may be opportunities for some projects under this package to be candidates for an alternative delivery approach such as Design/Build, and Environmental Services Department and Public Works staff will identify opportunities to take advantage of the benefits of Design/Build procurements. To ensure coordination with Plant operations, dedicated Plant operations and maintenance staff will be assigned to the engineering division of the Plant to provide site specific information, operational conditions and constraints, and shut down coordination to the consultants and engineering team. Funding for these projects is already programmed into the current adopted 5 – Year CIP and into proposed rate models, subject to council approval.

### Package 2 Delivery Options

Package 2 projects include significant new technology implementation and provide significant potential for innovation and by extension cost savings and implementation schedule compression. Given this, staff has identified the following potential approaches to Package 2 CIP implementation:

- Design-Build (D/B): One contractor for both design and construction of a project, which was the method used to construct the Terminal Area Improvement Program at the Airport and is currently being used at the Convention Center.
- Design-Build-Operate (D/B/O): One contractor to design, construct, and operate the project, with the City retaining ownership of the constructed facilities.
- Design/Build/Own/Operate (D/B/O/O): Similar to D/B/O, except the City would not own the facility.

This package consists of the biosolids transition project which will transition the current open air drying process to mechanical dewatering and drying; energy generation projects which will replace the Plant's aging power generation equipment; and the filtration project which will replace the existing gravity bed filters with newer technology with the potential for much less staff resource needs for its operations. More detail on the state of energy infrastructure at the Plant and conceptual recommendations for replacement technologies will be presented at the March 5, 2012, Transportation and Environment Committee meeting. Due to the shorter timeline for implementation and the higher total costs for these projects, this package also could be considered for bond funding to mitigate the rate impact on users. Environmental Services staff is currently working with the Finance Department to identify the optimum financing options.

The magnitude and complexity of the transition to a new biosolids process for the Plant that treats the wastewater of 1.4 million people makes it one of the largest CIP projects by a public agency in the country. Staff engaged Carollo Engineers in October 2011 to determine if there are viable project delivery options for the biosolids project that could accelerate the timeline over the traditional design/bid/build method currently used at the Plant.

After reviewing potential technical issues for the D/B/B, D/B and D/B/O options, these approaches will be evaluated on several criteria, including:

• Schedule: opportunities to deliver the project in an accelerated timeline

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- Financial Impacts: Capital and operations and maintenance costs, resulting rate impacts, and staffing needs
- Risks: operational performance, regulatory, compliance, design and construction flexibility to respond to changing conditions (compliance, disposal options)
- Control: level of City control, sustainability, quality

A final report including a comparison matrix is expected by mid-February after Public Works and Environmental Services Department staff complete the evaluation. This report will summarize the benefits and potential drawbacks of utilizing various alternate delivery options, with the primary emphasis on shortening the implementation schedule for the overall biosolids transition program. Compared to the traditional design/bid/build approach, all of the options highlighted above allow for a potentially shortened transition schedule, transfer the design risk to the contractor, and allow for a single point of responsibility. Some of these options may also provide cost savings and innovative solutions and reduced City staffing resources to implement.

Potential schedule constraints common to all of the service delivery options include:

- 1. Completion of the Environmental Impact Report (EIR) for the Plant Master Plan, including the biosolids transition project. Staff projects that the EIR will be completed by Spring 2013.
- 2. Site preparation of the legacy biosolids area that was identified for the future biosolids facilities (this area currently contains old biosolids that contain some elevated levels of metals): A recent analysis completed by the City identified three off-site disposal/reuse and two on-site disposal/reuse options for the legacy biosolids. The off-site options, which generally involve hauling material to disposal facilities, are extremely costly and time intensive due to the classification of the legacy biosolids as hazardous waste. On-site options are more cost-effective but could require up to four years to implement. As a result, the EIR analysis will include two preferred alternatives for the proposed biosolids facilities, in order to provide environmental clearance to move forward should this issue become a significant constraint on implementing the new biosolids process.
- 3. Final clean-up of existing lagoons and drying beds: Three years worth of biosolids is estimated to be in the lagoons and drying beds that will need to be treated and disposed following the installation of the new facilities. Options that will be investigated to determine the most efficient way to complete this task include: utilizing the current lagoon/drying bed process, using standby equipment from the new facility, or negotiating a short-term contract operations solution.
- 4. Staff resources and consultant availability to lead the transition, including contract management and procurement support, engineering specialties to review and ensure quality control: Environmental Services Department and Public Works staff is working collaboratively to address this staff resource and consultant availability issue through the creation of a "Packaged" approach to delivering the entire capital program at the Plant, not just the biosolids transition.

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Staff is recommending direction to proceed with the necessary due diligence for all three Design/Build options for this package. If approved, the first step, in order to gauge industry interest in D/B, D/B/O, and D/B/O/O, would be a Request for Information (RFI) to solicit information and input regarding a future procurement process from the vendor community. Staff will report back to the Committee on the results of this effort in Fall 2012.

### Staff and Consultant Resources for Implementing the CIP

In order to address Plant staffing challenges discussed earlier in the report, staff is recommending procurement of an overall program management consultant(s) to provide oversight and quality assurance/quality control over the consultant design and augment the limited City resources, especially for Package 1. Such a model of having distinct program management consultant(s) is consistent with the recently completed San Jose International Airport Expansion project, and other similar agencies' programs such as San Francisco Public Utilities Commission and Sacramento Regional County Sanitation District.

Most Package 1 projects will likely be implemented in a traditional D/B/B approach managed by a Division Manager directing a team of engineering staff and consultants. Program management support and technical expertise for the entire program will be provided by a combination of staff and specialty consultants. Approximately half of the staff resources needed are currently available within Environmental Services and Public Works. An additional Principal Engineer will be needed to provide technical expertise for the energy projects and another to provide leadership and technical guidance for automation projects. In addition to these positions, it is anticipated that two Senior Engineers and five Associate Engineers will be needed to manage the approximately 20 to 30 active projects a year in various phases of implementation. It is anticipated that this project workload will continue for a period of at least ten years.

Package 2 projects will be led by a Principal Engineer directing a small staff for each of the three project elements (biosolids, energy, and filtration). Initially during the procurement an additional Senior Engineer will be needed to assist in the procurement process. Once project design begins; this staff will be augmented by two additional Senior Engineers to manage the different project elements. Inspection, code review, surveying, materials testing and additional support will be added to the project through the yearly staffing plan developed by Public Works.

A functional organizational chart for the entire program with the staffing levels for various packages and support programs functions is shown in Attachment C.

### Regional Solutions to Mitigate Cost of Alternative Biosolids Processing

Transition of the current low-cost biosolids drying technology to any other option will likely require an alternative disposal and/or beneficial reuse option for the dried biosolids, which are currently used at Newby Island Landfill adjacent to the Plant as an alternative daily landfill cover Reuse of the current material as cover works well because it contains 20% dirt from the claylined drying beds. Drying and disposal costs could account for up to 50% of the costs for the

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new biosolids technology, depending on the option. To ensure the maximum options for biosolids disposal and/or reuse, staff is developing a proposal for Council consideration at a future date to join the Bay Area Biosolids to Energy Coalition, a joint effort by sixteen Bay Area wastewater agencies to develop sustainable waste to energy facilities for biosolids. The coalition invited San Jose to join at a reduced rate by accepting the City's Harvest Power pilot project, which will analyze the feasibility of gasifying woodwaste and biosolids, as part of San Jose's contribution. The benefits of joining the regional collaborative include leveraging resources for regional facilities, developing new technologies, and joint lobbying and grant writing to obtain funding. The Coalition plans to initiate a procurement process next year to construct one or more regional facilities that turn biosolids into energy.

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

The Committee, Council, and Treatment Plant Advisory Committee will receive regular updates on both the odor study and the biosolids transition process. Staff plans to return to Council in spring 2012 for consideration of a proposal for City participation in the Bay Area Biosolids to Energy Coalition,

### PUBLIC OUTREACH/INTEREST

<b>Criteria 1</b> : 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 report does not meet the criteria above. Direct engagement with the public and the Plant's many stakeholder groups has been an essential component in developing the Plant Master Plan over the past three years. When staff presented questions to the public at community meetings on the speed with which to both better treat odors at the Plant and change the biosolids dewatering and drying process, the public has consistently responded by saying that the Plant should begin the development of these processes but make sure not to overburden ratepayers. These results can be found in the Plant Master Plan public opinion summaries.

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### **COORDINATION**

This report has been coordinated with the City Attorney's Office, Department of Finance and the City Manager's Budget Office, and will be presented to the Treatment Plant Advisory Committee (TPAC) at its February 9, 2012 meeting.

### **CEQA**

Not a Project, File No. PP10-069 (a) Staff Reports.

/s/

KERRIE ROMANOW

Acting Director, Environmental Services

/s/

DAVID SYKES

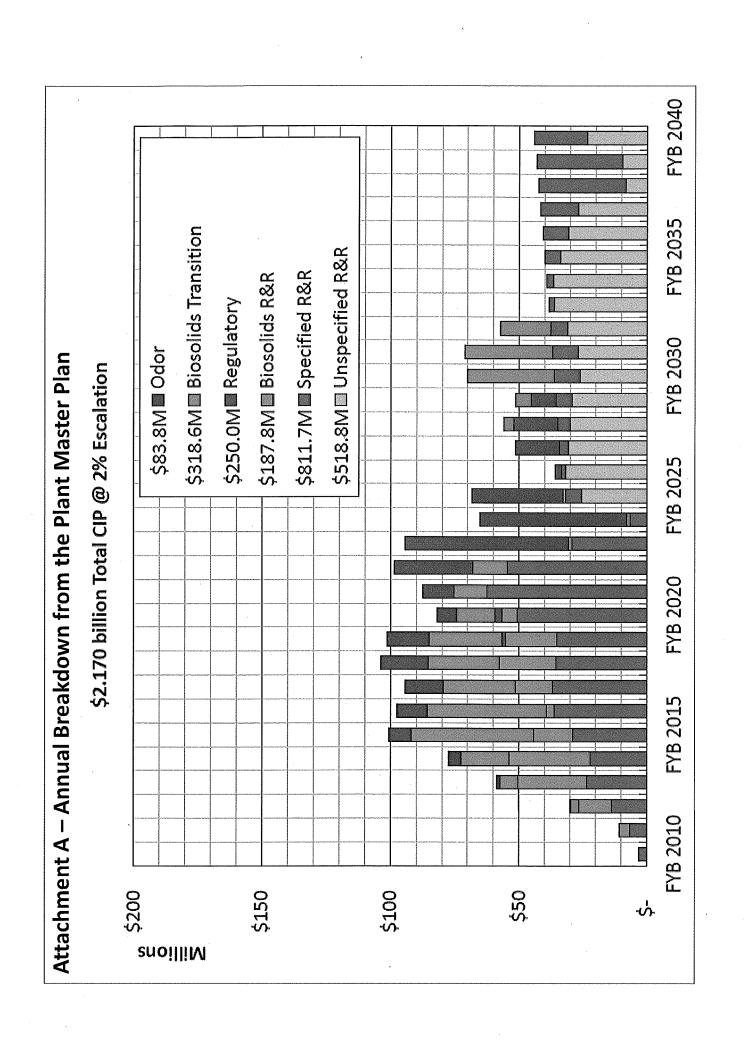
Director, Public Works

Attachment A: Annual Breakdown. (Draft)

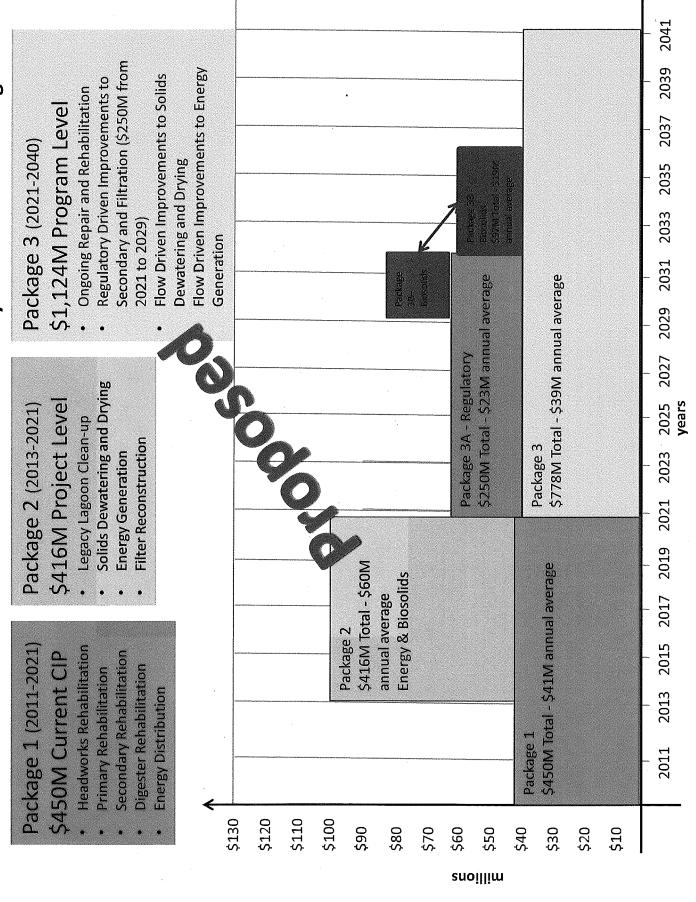
Attachment B: Three Phases of the Plant Master Plan 30-year CIP and EIR linkage. (Draft)

Attachment C: Functional Organizational Chart

For questions, please contact Bhavani Yerrapotu, Deputy Director (ESD) at 945-5321 or Harry Freitas, Deputy Director (PW) at 535-8488.



# Attachment B - Three Phases of the Plant Master Plan 30-year CIP and EIR linkage



Division Manager; AE – Associate Engineer; San. E – Sanitary Legend: SE – Senior Engineer; PE – Principal Engineer; DM – \$400 million/6 years (DPW Staffing Plan) Review, Surveying, Inspection, Code **Biosolids&Energy** (1 PE, 1 SE) Testing, etc Filters (1 SE) Biosolids Energy Package 2 (1 SE) Engineer; Insp – Construction Inspector Liquids (1 PE) (1 Consultant) Leadership (QA/QC) Attachment C - Functional Organizational Chart Biosolids Automation (1 PE)Energy (1 PE) Technical (2 Contracts, \$1M/year) Management Management (1 DM, 1 SE, 2 (1 AE, 1 Tech) Support Program Document Management Controls Program Coordination/Pilots Technical Studies/pilots (3 SE, 4 AE, 2 Tech) (10 to 15 Contracts, \$500K to \$1M /year) Expertise/Technical (1 SE, 3 AE, 2 Insp) (1SE, 2 AE, 2 San.E) Support/Design (8 O&M) (Rehab) \$40M/Year Subject Matter 0&M Construction Design Package 1

**T&E AGENDA:** 02-06-12 **ITEM:** d(4)



# Memorandum

TO: TRANSPORTATION AND

**ENVIRONMENT COMMITTEE** 

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

**DATE:** 01-18-12

Approved

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, <a href="http://www.sanjoseca.gov/esd/wastewater/PDFs/2011Semi-AnnualPretreatmentReport1.pdf">http://www.sanjoseca.gov/esd/wastewater/PDFs/2011Semi-AnnualPretreatmentReport1.pdf</a>, 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.

### **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.