SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

JAMIE MATTHEWS, CHAIR SAM LICCARDO, VICE CHAIR PIERLUIGI OLIVERIO, MEMBER DAVID SYKES, MEMBER MARJORIE MATTHEWS, MEMBER PAT KOLSTAD, MEMBER JOSE ESTEVES, MEMBER STEVEN LEONARDIS, MEMBER JOHN GATTO, MEMBER

AGENDA/TPAC

4:30 p.m. June 11, 2015 Room 1734

- 1. ROLL CALL
- 2. APPROVAL OF MINUTES
 - A. May 14, 2015
- 3. <u>UNFINISHED BUSINESS/REQUEST FOR DEFERRALS</u>
- 4. <u>DIRECTOR'S REPORT</u>
 - A. Directors Report (verbal)
 - Monthly Progress Report

5. <u>AGREEMENTS/ACTION ITEMS</u>

A. Execute a Purchase Order with Carbon Activated Corp.

Staff Recommendation:

- 1. Report on bids for Filter Media Replacement and Under-Drain Tile Repair Services and authorize the City Manager to execute a Purchase Order with Carbon Activated Corp. (Compton, CA) for filter media replacement and under-drain repair tile services at the San Jose/Santa Clara Regional Wastewater Facility (RWF) for the initial term of July 15, 2015 through September 15, 2015, in an amount not to exceed \$311,775.
- 2. Approve a contingency of \$31,178 to execute change orders to cover any unforeseen changes or requirement that may arise during completion of services.

The proposed Purchase Order is scheduled for Council consideration on June 23, 2015.

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B. Agreement with San Francisco Bay Wildlife Society, Fiscal Agent for Don Edwards San Francisco Bay National Wildlife Refuge

Staff Recommendation:

- a. Authorize the City Manager to negotiate and execute an agreement with the San Francisco Bay Wildlife Society, which is the fiscal agent for the Don Edwards San Francisco Bay National Wildlife Refuge, for the purpose of providing public education about water quality, pollution prevention, and protection of water dependent ecosystems.
- b. Approve funding of up to \$130,000 for year one from July 1, 2015 through June 30, 2016, with two one-year options for renewal ending June 30, 2018, for a maximum not to exceed amount of \$390,000 over three years.

The proposed Contract Change Order is scheduled for Council consideration on June 23, 2015.

C. Contract Change Order No. 2 for 6835 – Handrail Replacement – Phase V Project

Staff Recommendation: Approve a contract change order for a credit to the project of \$109,124, and extend the project completion date from August 12, 2014 to August 31, 2015 (257 additional working days)

The proposed Contract Change Order is scheduled for Council consideration on June 16, 2015.

D. <u>Contract Change Order Authorization and Construction Contingency Increase for the "7100-Digester Gas Compressor Upgrade Design-Build Project" at the San Jose-Santa Clara Regional Wastewater Facility</u>

Staff Recommendation:

- 1. Approve a \$565,800 increase to the construction contingency amount of \$1,131,600 for a revised total contingency amount of \$1,697,400 and increasing the contract not-to-exceed amount from \$12,447,600 to a total revised contract amount not-to-exceed \$13,013,400.
- 2. Adopt a resolution authorizing the Director of Public Works to:
 - (a) Negotiate and execute Contract Change Order No. 8 (CCO8) with Anderson Pacific Engineering Construction, Inc. for the 7100-Digester Gas Compressor Upgrade Design-Build Project ("Project") in the amount of \$358,616; and

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- (b) Negotiate and execute one or more change orders in excess of \$100,000 for the remaining duration of the Project, not to exceed the revised total contingency amount approved for the Project; and
- (c) Negotiate and execute one or more change orders extending the project completion date from June 22, 2016 to March 19, 2017 for a total of 270 days beyond the original contract completion date of June 22, 2016.

The proposed Contract Change Order is scheduled for Council consideration on June 23, 2015.

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. <u>Biosolids Transition Strategy</u>

Staff Recommendation: Accept the following staff recommendations on the Biosolids Transition Strategy for the San José-Santa Clara Regional Wastewater Facility:

- a. Near-term recommendations:
 - 1. Proceed with implementation of the Digested Sludge Dewatering Facility and the Lagoon and Drying Bed Retirement projects as shown in the 2015-2016 Proposed Capital Budgets and 2016-2020 Capital Improvement Program.
 - 2. Locate the Digested Sludge Dewatering Facility at Site A.
 - 3. Direct staff to bring back recommendations on the size and makeup of the Biosolids Management Team (BMT) for City Council consideration as part of the annual budget process for 2016-2017.
- b. Long-term recommendations:
 - 1. Implement any future on-site processing facilities considering conditions at the time including starting small with pilots, demonstrations, and phasing and potentially participating in regional facilities and emerging technologies.

TPAC Referral: Staff to analyze options relating to a Community Facilities District; including analysis under Proposition 218, whether we have any risk in putting burdens on rate payers who live outside of the odor impact area.

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The proposed Strategy was heard and approved by Council on June 2, 2015.

B. San José – Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy

Staff Recommendation:

- Accept the staff report on the San José Santa Clara Regional Wastewater Facility (RWF) Ten-Year Funding Strategy.
- 2. Approve staff recommendation to have all agencies contribute to a 60 day operating reserve beginning in FY 2016-17; direct staff to continue to work with all agencies on optimal reserve levels for operating purposes.
- 3. Direct staff to pursue State Revolving Fund loans for RWF capital improvement projects to the maximum extent possible.
- 4. Direct staff to continue to work with City of Santa Clara (Santa Clara) and all tributary agencies to confirm participation in a commercial paper program and/or long term revenue bonds through the Clean Water Financing Authority (CWFA), by August 2015.
- 5. Direct staff to work with Santa Clara and all tributary agencies to amend the 1983 Master Agreement to incorporate terms related to operating reserve contributions, as well as terms related to financing of the RWF improvements through the CWFA.

The proposed Strategy was heard and approved by Council on June 2, 2015.

C. <u>San Jose/Santa Clara Water Pollution Control Plant 2016-2020 Proposed Capital Improvement Program</u>

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2016-2020 Proposed Capital Improvement Program

The San Jose/Santa Clara Water Pollution Control Plant 2016-2020 Proposed Capital Improvement Program is scheduled for Council consideration on June 9, 2015, and for adoption on June 23, 2015.

D. <u>San Jose/Santa Clara Water Pollution Control Plant 2015-2016 Proposed</u> Operating and Maintenance Budget

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2015-2016 Proposed Operating and Maintenance Budget

The San Jose/Santa Clara Water Pollution Control Plant 2015-2016 Proposed Operating and Maintenance Budget is scheduled for Council consideration on June 9, 2015, and for adoption on June 23, 2015.

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E. <u>San José – Santa Clara Regional Wastewater Facility Capital Improvement</u> <u>Program Semiannual Status Report</u>

Staff Recommendation: Accept the semiannual status report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program (CIP) for the period July through December 2014.

The proposed Status Report was heard and approved by Council on June 2, 2015.

F. <u>Approval of an Amendment for Legal Services Agreement for Regional</u> Wastewater Facility Capital Program

Staff Recommendation: Approve a First Amendment to the legal services contract with Hawkins, Delafield & Wood LLP, to increase the amount of compensation for the initial one-year term in the amount of compensation for each of the two one-year option terms from \$160,000 to \$300,000, subject to appropriation of funds by City Council, for a total contract amount not to exceed \$1,000,000 to support the San José-Santa Clara Regional Wastewater Facility capital improvement program.

The proposed Amendment was heard and approved by Council on May 19, 2015.

8. REPORTS

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million and of services between \$100,000 and \$270,000.

9. <u>MISCELLANEOUS</u>

A. The next TPAC meeting is August 13, 2015, at 4:30 p.m. City Hall, Room 1734.

10. OPEN FORUM

11. ADJOURNMENT

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NOTE: If you have any changes or questions, please contact Adriana Márquez, Environmental Services, (408) 975-2547.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please contact Adriana Márquez (408) 975-2547 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, 10th 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, Council Chambers Thursday, May 14, 2015 at 3:00 p.m.

1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 3:02 p.m. Roll call was taken, with the following members in attendance:

Chair: Jamie Matthews; **Committee members**: Sam Liccardo, Pierluigi Oliverio, Margie Matthews, Jose Esteves, John Gatto, Pat Kolstad, David Sykes, Steven Leonardis

2. <u>APPROVAL OF MINUTES</u>

A. April 9, 2015

Item 2.A was approved to note and file.

Ayes – 9 (J. Matthews, Liccardo, Oliverio, M. Matthews, Esteves, Gatto, Kolstad, Sykes, Leonardis)

Nays - 0

3. <u>UNFINISHED BUSINESS/REQUEST FOR DEFERRALS</u>

4. DIRECTORS REPORT

- **A.** Directors Verbal Report:
 - Monthly Progress Report
- B. TPAC Meeting Location And Time Change

TPAC Recommendation: On a motion by Committee Member Leonardis and a second by Committee Member Gatto, TPAC approved to keep future TPAC meetings in City Hall room 1734 with the purchase of table top microphones. Committee Member Oliverio opposed this recommendation.

Ayes – **8** (J. Matthews, Liccardo, Gatto, M. Matthews, Esteves, Kolstad, Sykes, Leonardis)

Nays – 1 (Oliverio)

5. AGREEMENTS/ACTION ITEMS

A. <u>Biosolids Transition Strategy</u>

Staff Recommendation: Accept the following staff recommendations on the Biosolids Transition Strategy for the San José-Santa Clara Regional Wastewater Facility:

- a. Near-term recommendations:
 - 1. Proceed with implementation of the Digested Sludge Dewatering Facility and the Lagoon and Drying Bed Retirement projects as shown in the 2015-2016 Proposed Capital Budgets and 2016-2020 Capital Improvement Program.
 - 2. Locate the Digested Sludge Dewatering Facility at Site A.
 - 3. Direct staff to bring back recommendations on the size and makeup of the Biosolids Management Team (BMT) for City Council consideration as part of the annual budget process for 2016-2017.
- b. Long-term recommendations:
 - 1. Implement any future on-site processing facilities considering conditions at the time including starting small with pilots, demonstrations, and phasing and potentially participating in regional facilities and emerging technologies.

On a motion by Committee Member Sam Liccardo and a second by Committee Member Margie Matthews, TPAC approved to adopt the staff recommendation for item 5.A with two opposed: John Gatto and Steven Leonardis.

TPAC Referral: Staff to analyze options relating to a Community Facilities District; including analysis under Proposition 218, whether we have any risk in putting burdens on rate payers who live outside of the odor impact area.

Ayes – 7 (J. Matthews, Liccardo, Oliverio, M. Matthews, Esteves, Kolstad, Sykes)

Nays – 2 (Gatto, Leonardis)

The proposed Strategy is scheduled for Council consideration on June 2, 2015.

David Wall spoke against this item.

B. San José – Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy

Staff Recommendation:

- 1. Accept the staff report on the San José Santa Clara Regional Wastewater Facility (RWF) Ten-Year Funding Strategy.
- 2. Approve staff recommendation to have all agencies contribute to a 60 day operating reserve beginning in FY 2016-17; direct staff to continue to work with all agencies on optimal reserve levels for operating purposes.

- 3. Direct staff to pursue State Revolving Fund loans for RWF capital improvement projects to the maximum extent possible.
- 4. Direct staff to continue to work with City of Santa Clara (Santa Clara) and all tributary agencies to confirm participation in a commercial paper program and/or long term revenue bonds through the Clean Water Financing Authority (CWFA), by August 2015.
- 5. Direct staff to work with Santa Clara and all tributary agencies to amend the 1983 Master Agreement to incorporate terms related to operating reserve contributions, as well as terms related to financing of the RWF improvements through the CWFA.

On a motion by Committee Member Pat Kolstad and a second by Committee Member Sam Liccardo, TPAC unanimously approved to adopt the staff recommendation for item 5.B.

Ayes – **9** (J. Matthews, Liccardo, Oliverio, M. Matthews, Esteves, Gatto, Kolstad, Sykes, Leonardis)

Nays - 0

The proposed Strategy is scheduled for Council consideration on May 19, 2015.

David Wall spoke against this item.

C. <u>San Jose/Santa Clara Water Pollution Control Plant 2016-2020 Proposed Capital</u> Improvement Program

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2016-2020 Proposed Capital Improvement Program

The San Jose/Santa Clara Water Pollution Control Plant 2016-2020 Proposed Capital Improvement Program is scheduled for Council consideration on June 9, 2015, and for adoption on June 16, 2015.

D. <u>San Jose/Santa Clara Water Pollution Control Plant 2015-2016 Proposed</u> <u>Operating and Maintenance Budget</u>

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2015-2016 Proposed Operating and Maintenance Budget

The San Jose/Santa Clara Water Pollution Control Plant 2015-2016 Proposed Operating and Maintenance Budget is scheduled for Council consideration on June 9, 2015, and for adoption on June 16, 2015.

On a motion by Committee Member Steven Leonardis and a second by Committee Member Pat Kolstad, TPAC unanimously approved to adopt the staff recommendation for item 5C & 5.D.

David Wall spoke against item 5.C and 5.D.

E. <u>San José – Santa Clara Regional Wastewater Facility Capital Improvement Program Semiannual Status Report</u>

Staff Recommendation: Accept the semiannual status report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program (CIP) for the period July through December 2014.

On a motion by Committee Member Pat Kolstad and a second by Committee Member Sam Liccardo, TPAC unanimously approved to adopt the staff recommendation for item 5.E.

The proposed Status Report is scheduled for Council consideration on June 2, 2015.

David Wall spoke against this item.

F. <u>Approval of an Amendment for Legal Services Agreement for Regional Wastewater Facility Capital Program</u>

Staff Recommendation: Approve a First Amendment to the legal services contract with Hawkins, Delafield & Wood LLP, to increase the amount of compensation for the initial one-year term in the amount of compensation for each of the two one-year option terms from \$160,000 to \$300,000, subject to appropriation of funds by City Council, for a total contract amount not to exceed \$1,000,000 to support the San José-Santa Clara Regional Wastewater Facility capital improvement program.

On a motion by Committee Member Margie Matthews and a second by Committee Member Sam Liccardo, TPAC unanimously approved to adopt the staff recommendation for item 5.F.

The proposed Amendment is scheduled for Council consideration on May 19, 2015.

6. OTHER BUSINESS/CORRESPONDENCE

- A. Letter from the City of Milpitas regarding Recycled Water Availability and Reliability
- B. Informational Memorandum Pond A18 Emergency Replacement Update

C. Informational Memorandum – Status of Regional Wastewater Facility Ten-Year Funding Strategy

Jim Stallman spoke on item 6.A. David Wall spoke on item 6B.

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Second Amendment to the Master Agreement with CDM Smith for Engineering

Services for the San José-Santa Clara Water Pollution Control Plant Improvement

Program

Staff Recommendation: Approve the Second Amendment to the Master Agreement with CDM Smith, for engineering services for the San José-Santa Clara Regional Wastewater Facility, increasing the amount of compensation by \$75,000, for a total agreement amount not to exceed \$1,575,000, and extending the term from June 30, 2015 to December 31, 2016.

The proposed Amendment was heard and approved by Council on April 14, 2015.

B. South Bay Water Recycling Strategic Master Plan Report

Staff Recommendation:

- 2. Accept the South Bay Water Recycling (SBWR) Strategic and Master Planning report for near term reliability projects for the South Bay Water Recycling Program; and
- 3. Direct staff to evaluate opportunities to collaborate with the Santa Clara Valley Water on the long term strategies identified in the Strategic and Master Planning report for potable reuse of recycled water

The proposed Master Plan Report was heard and approved by Council on April 21, 2015.

David Wall spoke against this item.

C. Wholesale Recycled Water Rates for FY 2015-16

Staff Recommendation: Adopt a resolution to standardize the discount rate at \$105 per acre foot for the wholesale recycled water service rates for the South Bay Water Recycling Program effective July 1, 2015, superseding Resolution No. 76964.

The proposed Resolution was heard and approved by Council on April 21, 2015.

David Wall spoke against this item.

8. <u>REPORTS</u>

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million and of services between \$100,000 and \$270,000.

Item 8.A was approved to note and file.

Ayes – **9** (J. Matthews, Liccardo, Oliverio, M. Matthews, Esteves, Gatto, Kolstad, Sykes, Leonardis)

9. <u>MISCELLANEOUS</u>

The next TPAC meeting is May 14, 2015, at 4:30 p.m. City Hall, Room 1734. (*This is subject to change pending discussion of item 4.B.*)

10. PUBLIC COMMENT

David Wall spoke on various items.

11. ADJOURNMENT

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

Jamie Matthews, Chair TREATMENT PLANT ADVISORY COMMITTEE





Capital Improvement Program Monthly Status Report for April 2015

June 4, 2015

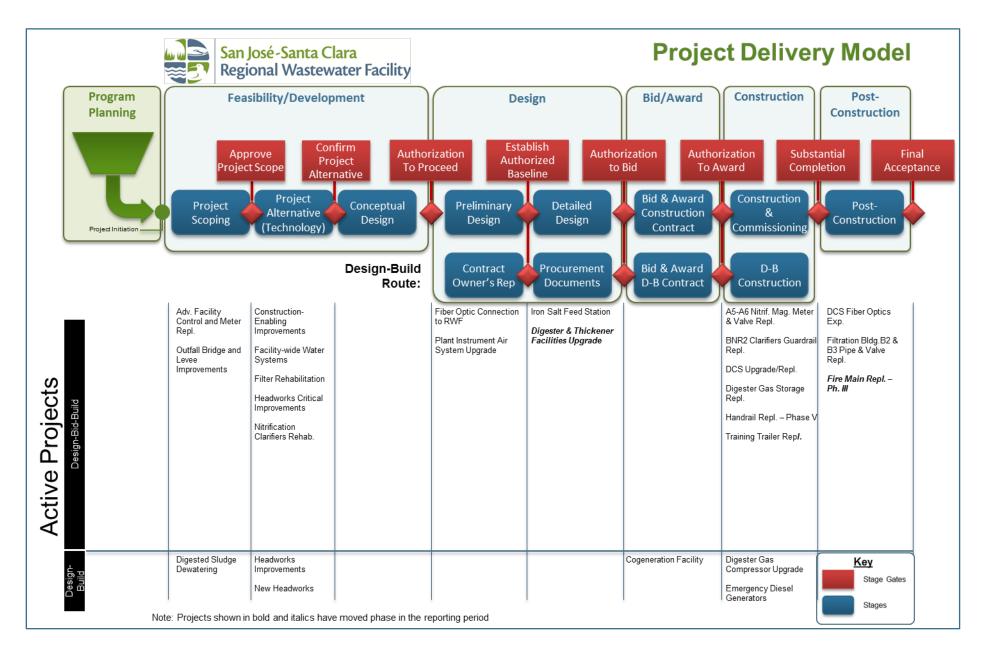
This report provides a summary of the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (Wastewater Facility or RWF) for the period of April 2015.

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Project Delivery Model





Program Summary

April 2015

In the month of April, the CIP progressed on multiple fronts. We continued to advance studies and projects through stage gates of the Project Delivery Model (PDM) process. In particular, the Digester and Thickener Facilities Upgrade project advanced through the "Establish Authorized Baseline" stage gate this month.

Our Biosolids and Odor Control teams continued work on a revised Biosolids Transition strategy, based on the input received from the Treatment Plant Advisory Committee (TPAC) and City Council in November and December 2014 respectively. The team is currently focusing on alternative analyses of options to meet the Plant Master Plan goal to transition out of the open air lagoons and drying beds and to reduce odors.

Three Requests for Qualifications (RFQ) were advertised this month. Two separate RFQs were issued on the Cogeneration Facility Project to procure a design-build entity, and a consultant to provide Technical Support Services (TSS). An RFQ to procure consultant services for the Headworks projects was also issued.

The 2015-2016 Proposed Capital Budget and 2016-2020 Proposed CIP was submitted to the Budget Office for review.

The Environmental Team prepared a draft implementation plan identifying implementation actions, schedule, and responsible parties to ensure project compliance with the Plant Master Plan Environmental Impact Report (EIR) Mitigation, Monitoring and Reporting Program (MMRP). Work on the Initial Study/Mitigated Negative Declaration for the Iron Salt Feed Station Project also progressed.

Emergency repair work began on the Pond A18 Northern Gate Structure project. Early work focused on design, materials procurement and demolition to allow the new sheet pile dams to be installed next month.

Construction continued at the RWF for a number of CIP projects including the Emergency Diesel Generators, Digester Gas Compressor Upgrades, and the Digester Gas Storage Replacement projects. In addition, the Fire Main Replacement – Phase 3 project reached Beneficial Use on April 24, 2015.

Look Ahead

In May, we will continue to move forward on numerous efforts related to consultant and design-build procurements, including the Cogeneration Facility, Headworks Improvements, New Headworks, Facility Wide Water Systems Improvement, Filter Rehabilitation and Nitrification Clarifiers Rehabilitation. RFQ documents will be issued on the Filter Rehabilitation project, and Statements of Qualifications are expected on on the Cogeneration Facility (TSS) project next month.

The Approve Project Scope Stage Gate meeting will be held for the Advanced Facility Control and Meter Replacement Project.

The Digester and Thickener Facilities Upgrade project will reach the 60% design stage milestone in May.

The Biosolids Team will complete the revised Biosolids Transition Strategy and bring it back for consideration by TPAC in May and City Council in June. A key recommendation of the strategy is the implementation of the Digested Sludge Dewatering Facility and Lagoon and Drying Bed Retirement projects.

Work will continue on the programmatic funding and insurance strategies, including assembling Clean Water State Revolving Fund (SRF) loan application packages for the Digester and Thickener Facilities Upgrade project and investigating the applicability of an Owner Controlled Insurance Program (OCIP).

Staff will present the 2016-2020 Proposed CIP for review by the Planning Commission, TPAC, and City Council during special study sessions. Staff will also present the 2015-2016 Proposed Operating Budget to TPAC and City Council for review. A key proposal in the operating budget includes the addition of 23 full-time positions to support the increase in capital improvement activities. In addition, staff will present the 10-year funding strategy to TPAC.

Staff will initiate the Aeration Tanks and Blower Rehabilitation project. This is a key project for the CIP and will encompass the rehabilitation of the 24 aeration basins located in BNR1 and BNR2 along with completing blower modifications within the Secondary Blower Building (SBB), Tertiary Blower Building or Building 40.

The Initial Study/ Mitigated Negative Declaration for the Iron Salt Feed Station project will be posted for public review.



Program Highlight – The Business Case Analysis (BCA)

The Business Case Analysis (BCA) template provides guidelines for project alternative evaluation, including Net Present Value analysis and Triple Bottom-Line Plus analysis. As each project progresses through the Project Alternative Stage of the PDM, a Business Case Analysis will be completed to identify project options and apply a consistent methodology for selecting the preferred option. The ultimate purpose of the BCA is to increase the transparency and consistency of Program decisions.

The BCA contains standard assumptions for project variables, including energy unit costs, labor unit rates, inflation and debt interest that will be used across the Program. The Program uses a 30-year life-cycle cost as the basis for Net Present Value to consider more than just the upfront capital cost of a project.

To compare and evaluate the non-monetary benefits of project options, the Triple Bottom-Line Plus tool is used. The Triple Bottom-Line Plus analysis allows project alternatives to be scored against a set of qualitative criteria for environmental impacts, social impacts, economic impacts, and operational impacts. These scores provide additional visibility to the non-quantifiable project outcomes and put emphasis on Program vision and goals.

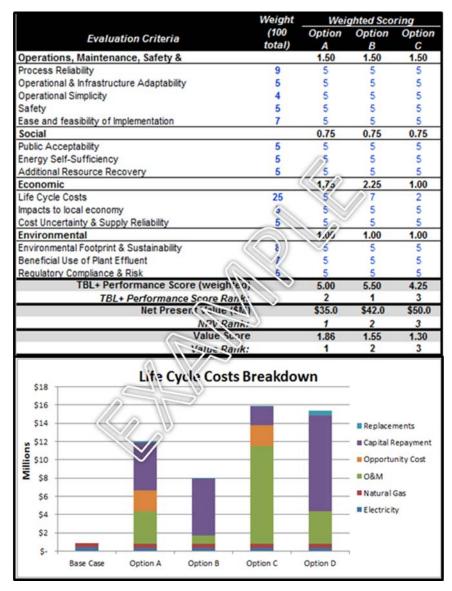


Figure 1: Triple Bottom-Line Plus tool



Program Performance Summary

Seven KPIs have been established to measure the overall success of the CIP. Each KPI represents a metric which will be monitored on a regular frequency. Through the life of the CIP, KPIs will be selected and measured which best reflect the current maturity of the program. The target for the seventh KPI "Staffing Level" KPI will be established as part of the analysis of future staffing needs.

Program Key Performance Indicators – Fiscal Year 2014-2015

KPI Description	Target	Actual	Status	Trend	Measurement
Schedule ¹	85%	100% (4/4)		>	Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. Target: 85% of projects delivered within 2 months of approved baseline schedule or better.
Budget ²	90%	67% (2/3)			Percentage of CIP projects that are completed within the approved baseline budget. Target: 90% of projects delivered are within 101% of the baseline budget.
Expenditure ^{3/4}	≥\$95.6M	\$93.1M	•	1	Total CIP actual + forecast committed cost for the fiscal year compared to CIP fiscal year budget. Target: Forecast committed cost meets or exceeds 60% of budget for Fiscal Year 14/15 (60% of \$159.3M=\$95.6M)
Procurement⁵	100%	86% (6/7)			Number of actual + forecast consultant and contractor procurements compared to planned for the fiscal year. Target: Forecast /actual procurements for fiscal year meet or exceed planned.
Safety	0	0		-	Number of OSHA reportable incidents associated with CIP construction for the fiscal year. Target: zero incidents.
Environment/Permits	0	0			Number of permit violations caused by CIP construction for the fiscal year. Target: zero violations.
Staffing Level ⁶	TBD	TBD	TBD	TBD	Percentage of authorized staffing level Target: to be determined

KEY:



Notes

- 1. For the Schedule KPI, the number of completed projects increased from three to four. This count includes Fire Main Replacement Phase III, which was accepted in April, 2015.
- 2. For the Budget KPI, two out of three projects were completed within the approved baseline budget. These two projects are RWF Street Rehabilitation Phase III, which was accepted in March, 2015 and 115KV Circuit Breaker Replacement, which was accepted in October, 2014. Dissolved Air Flotation Dissolution Improvements project finished 7% over budget.
- 3. FY14-15 budget excludes reserves, ending fund balance, South Bay Water Recycling, Public Art and Urgent and Unscheduled Rehabilitation items.
- 4. The Expenditure KPI Target has been adjusted from the previous month due to liquidation of the carryover from the previous Fiscal Year. Further details are provided in the "Fiscal Year 2014-2015 Program Budget Performance" section on page 7.
- 5. Initiation of the Audit Services has been delayed.
- 6. Staffing level KPI measured quarterly; all other KPIs measured monthly.

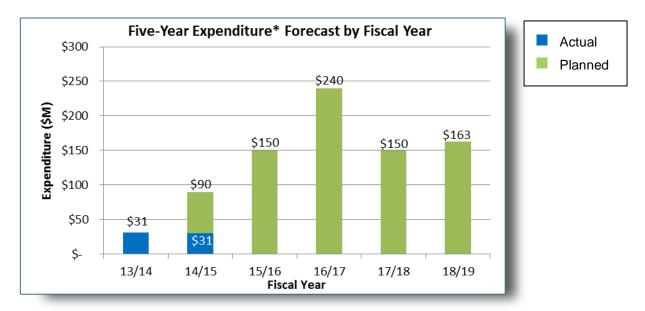


Program Cost Performance

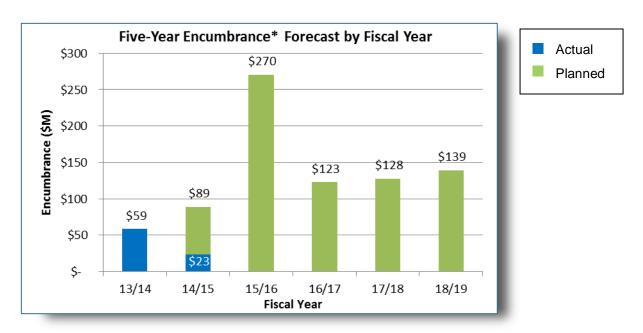
This section provides a summary of CIP cost performance for all construction projects and non-construction activities for FY13-14 and the 2015-2019 CIP.

Adopted 2015-2019 CIP Expenditure and Encumbrances

To accommodate the proposed increase in expenditures and encumbrances over the next five years, the City is developing a long-term financial strategy to fund the needed, major capital improvements while minimizing the impact to ratepayers.



^{*}Expenditure defined as: Actual cost expended associated with services and construction of physical asset which may include encumbered amounts from previous years



^{*}Encumbrance defined as: Financial commitments, such as purchase orders or contracts, which are chargeable to an appropriation and for which a portion of the appropriation is reserved

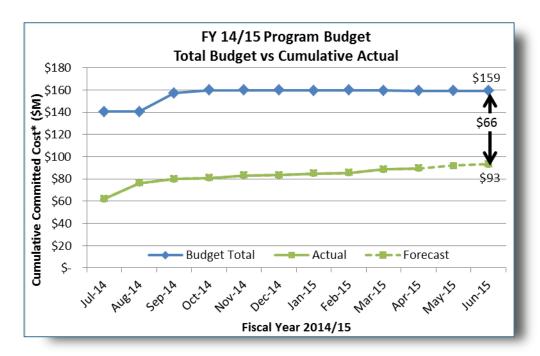


Fiscal Year 2014-2015 Program Budget Performance

The fiscal year program budget is \$159 million. The budget amount of \$159 million represents the 2014-2015 budget of \$107 million plus carryover of \$52 million. The budget amount excludes reserves, ending fund balance, South Bay Water Recycling, Public Art and Urgent and Unscheduled Rehabilitation items.

The projected year-end variance of approximately \$66 million is primarily due to the following reasons:

- Award of the Cogeneration Facility design-build contract and technical support services agreement are now expected in FY15-16 (\$24 million).
- Award of construction contracts for the Iron Salt Feed Station, Plant Instrument Air System Upgrade, and Switchgear S40/G3 Relay Upgrade projects are anticipated in FY15-16 (\$18 million).
- Award of a design contract for critical rehabilitation work in the Headworks Improvements is expected in FY15-16 (\$4 million).
- Work not yet initiated or re-programmed into later years for Secondary and Nitrification Clarifier Rehabilitation and Aeration Tanks and Blower Rehabilitation (\$4 million)
- Lower than expected expenditures and encumbrances in Equipment Replacement, Preliminary Engineering, and Program Management (\$4 million).
- Award of a design contract for the Advanced Facility Control and Meter Replacement project has been removed from the forecast while the project team reevaluates the scope to determine the best way to implement the project (\$2 million).
- Lowered forecasts for consultant services for the Emergency Diesel Generators, Fiber Optic Connection to RWF, and Plant Instrument Air System Upgrade projects (\$2 million).
- Miscellaneous project balances across 18 projects (\$8 million)



*Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).



Project Performance

There are currently 11 active projects in the construction or post-construction phase with a further 15 projects in feasibility/development, design or bid and award phases (see PDM graphic at the front of this report). All active projects are listed in the tables below. Projects in the construction phase have cost and schedule baselines established and are monitored using the City's Capital Project Management System (CPMS). These projects have green/red icons included in the table below to indicate whether they are on budget and schedule using the CPMS data as a source.

Project Performance – Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date ¹	Cost Performance	Schedule Performance
Distributed Control System (DCS) Fiber Optics Network Expansion	Post-Construction	May 2014 ³		
Filtration Building B2 & B3 Pipe & Valve Replacement	Post-Construction	Feb 2015 ³		
Fire Main Replacement - Phase III	Post-Construction	Apr 2015 ³		
BNR-2 Clarifier Guardrail Replacement	Construction	May 2015		
Training Trailer Replacement	Construction	Jun 2015		
A5-A6 Nitrification Mag. Meter & Valve Replacement	Construction	Aug 2015	•	•
Digester Gas Storage Replacement	Construction	Aug 2015		
Handrail Replacement - Phase V	Construction	Aug 2015		•
DCS Upgrade/Replacement	Construction	Jun 2016		
Emergency Diesel Generators	Construction	Aug 2016		
Digester Gas Compressor Upgrade	Construction	Sep 2016		•

KEY:

Cost:	On Budget	>1% Over Budget
Schedule:	On Schedule	>2 months delay

Notes

- 1. Beneficial Use is defined as when the work is sufficiently complete, in accordance with the contract documents, so that the City can occupy or use the work. Beneficial use dates are being reviewed as part of project schedule reviews.
- 2. An explanation of cost and schedule variances on specific projects identified in this table is provided on page 11.
- 3. Actual Beneficial Use Date

Project Performance – Pre-Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date ¹
Cogeneration Facility	Procurement	Jan 2019
Fiber Optic Connection to RWF	Design	Dec 2015
Iron Salt Feed Station	Design	Nov 2016
Plant Instrument Air System Upgrade	Design	Nov 2017
Digester & Thickener Facilities Upgrade	Design	Sep 2018
Construction-Enabling Improvements	Feasibility/Development	Oct 2016
Headworks Critical Improvements	Feasibility/Development	Apr 2017
Adv. Facility Control & Meter Repl. Ph. 2	Feasibility/Development	Sep 2019
Outfall Bridge and Levee Improvements	Feasibility/Development	Feb 2021
Headworks Improvements	Feasibility/Development	Mar 2021
Facility-wide Water Systems Improvements	Feasibility/Development	Aug 2021
Digested Sludge Dewatering Facility	Feasibility/Development	Dec 2021
Filter Rehabilitation	Feasibility/Development	Jan 2022
Nitrification Clarifiers Rehabilitation	Feasibility/Development	Apr 2022
New Headworks	Feasibility/Development	Jun 2022

Notes

^{1.} Beneficial Use is defined as when the work is sufficiently complete, in accordance with the contract documents, so that the City can occupy or use the work. Beneficial use dates are being reviewed as part of project schedule reviews.

Significant Accomplishments

Biosolids Package

Digester and Thickener Facilities Upgrade

In April, Brown and Caldwell submitted the final Preliminary Design Report. On April 9, the project successfully passed the Preliminary Design stage gate. The project team expects to receive the 60% design submittal for review in May.

Facilities Package

Cogeneration Facility

On April 7, the City advertised the RFQ for a Technical Support Services consultant to assist the project team with project management and technical reviews during design and construction. Statements of Qualifications (SOQs) are due mid-May. CIP staff anticipates bringing the agreement for TPAC and City Council consideration in August. The City also readvertised the RFQ for a design-build entity on April 21. Submissions for this procurement are due in early June.

Pond A18 Northern Gate Emergency Replacement

Galindo Construction Inc. delivered equipment and materials to the project site and demolished the non-critical timber members of the northern gate structure. Two sheet pile dams will be installed, one within Pond A18 and the other within the artesian slough. Both dams are required to isolate the work area for demolition and installing replacement materials. It is anticipated that the Pond A18 dam will be installed by the week of May 18.

Liquids Package

Headworks Improvements and New Headworks

On April 27, the City advertised an RFQ for planning, design, owner's representative, and construction management consultant services. The project team will conduct a site tour on May 14. SOQs are due in early June and the agreement is tentatively scheduled for TPAC and City Council consideration in October.

Programmatic Studies

Aeration Demands and Biosolids Production

Carollo Engineers completed the modeling calibration and validation to estimate future biosolids quantities and aeration demands. In addition, the consultant conducted a review workshop and two training sessions. The final workshop and training session are planned for May. CIP staff anticipates completing the study in June.

Facility Wide Heating and Cooling

On April 29, Brown and Caldwell submitted a final Technical Memorandum (TM) 1, which summarizes the existing and preliminary future heating and cooling systems supply and demand for the RWF. The consultant is drafting TM 2, which will address the alternatives available for supplying sufficient heat to the planned thermophilic digesters if the cogeneration facility comes online after the digesters are rehabilitated. CIP staff anticipates a draft TM in early May. The study is scheduled to finish in June.

Flood Protection Study

CIP staff finalized the draft service order with AECOM to conduct the study and anticipates issuing the Notice to Proceed in May. The study is expected to be completed December 2015.

Yard Piping Condition Assessment Plan

CIP staff reviewed a second draft of the Condition Assessment Protocol Memo, which is expected to be finalized in early June. Black and Veatch is expected to submit a final draft of the Condition Assessment Plan and provide training in May. The study is scheduled to be completed in June.



Explanation of Project Performance Issues

A5-A6 Nitrification Mag. Meter & Valve Replacement

In September 2014, during startup, the project team discovered that the actuators that had been specified and installed were incompatible with the available power supply. Engineering staff determined it would be more costly to modify the system than to order and install compatible actuators. In addition, O&M staff requested that the actuators match those used in the other clarifiers. The City continues to work with the contractor and is considering other options to resolve the actuator issue and complete the project. Beneficial use is expected by the end of August 2015.

Handrail Replacement - Phase V

For safety reasons, the contractor can only replace handrails on empty aeration basins. Typically, November through April is designated as the rainy season during which O&M staff need to have aeration basins available in the event of heavy rains. Additionally, Basin 1 is undergoing repairs to the diffusers and cannot be made available to the contractor until late June. As a result, the contractor has suspended work until the end of June 2015. Work is expected to resume (at no additional cost) when the remaining basin becomes available. Beneficial Use is expected by late August 2015.

Digester Gas Compressor Upgrade

During the course of the design portion of this design build project, it was determined that some of the equipment for this project would need to meet the explosion-proof classification of Class 1, Division 1 of the National Electric Code. This classification was more stringent than what was originally called for in the bid documents. Cost and schedule impacts were received from contractor, Anderson Pacific. A provisional three-month delay has been estimated based on the delivery schedule for the new motors. Council approval for additional project funding due to motor upgrade is anticipated during its June 16, 2015 session. Beneficial Use is expected by September 2016.



Project Profile

Filtration Building B2 and B3 Pipe and Valve Replacement

The existing Filtration Building, constructed in 1975, has a 40 year old pipe and valve system that is in need of replacement due to frequent leaks and maintenance requirements. The building is divided into two batteries (Battery A and Battery B), which each contain eight valves on the filter backwash pipelines. The B2 and B3 valves were determined to be the most in need of replacement, based on feedback from Operations and Maintenance (O&M) staff.

The pipe and valve replacement project included removal of B2 and B3 valves and motorized actuators, installation of new valves with new motorized actuators (including electrical and control wires), and installation of new pipe spools, pipe flanges and pipe supports.

The City awarded the \$158,900 contract to Anderson Pacific Engineering Construction in June 2014 with construction planned to begin in winter 2015 when there was less demand for recycled water. A critical portion of the work had to be completed within a 24-hour shutdown of Battery B. The small window of time required CIP staff to plan and coordinate shutdown procedures with O&M staff to allow the contractor to replace the valves. Therefore, the contractor completed the mechanical work in February 2015 and electrical work in March 2015.

The project reached Beneficial Use on March 11, 2015 and the project team anticipates Final Acceptance in early May. Project Budget: \$383,680.

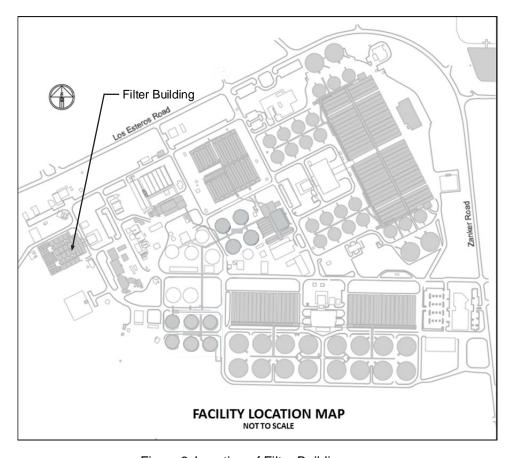


Figure 2: Location of Filter Building



Figure 3: Typical Old Leaking Valve (30")



Figure 4: Typical New Valve (30")

Regional Wastewater Facility Treatment - Current Treatment Process Flow Diagram

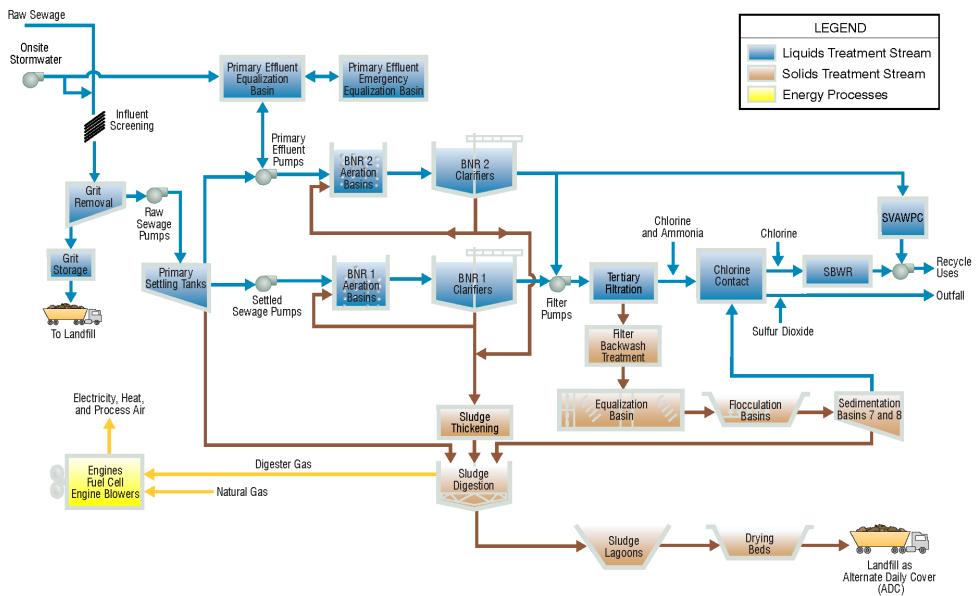


Figure 5—Current Treatment Process Flow Diagram



Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

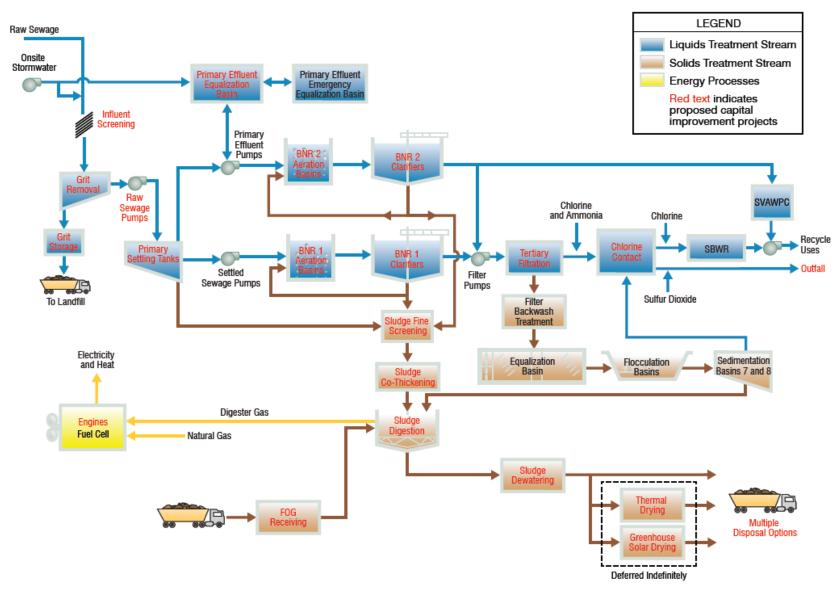


Figure 6—Proposed Treatment Process Flow Diagram



Active Construction Projects – Aerial Plan

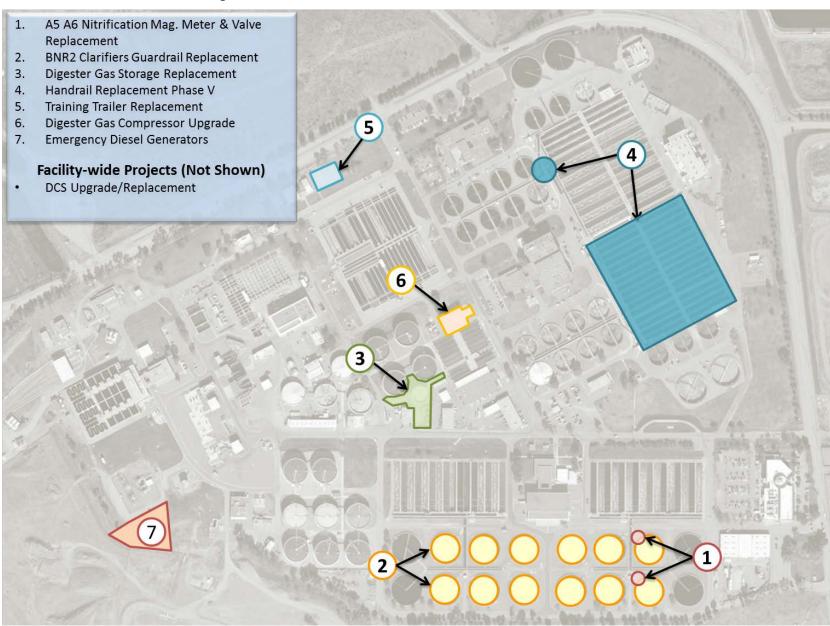


Figure 7—Active Construction Projects







CITY COUNCIL ACTION REQUEST									
Department(s):	CEQA:	Coordination:	Dept. Approval:						
Finance	WPCP Master Plan Update, File No.	ESD, City Attorney's Office, City Manager's Budget Office;	/s/ JULIA H. COOPER						
Council District(s): City-Wide	PP13-039	On June 11, 2015 the Treatment Plant Advisory Committee is scheduled to approve this item.	CMO Approval:						

SUBJECT: EXECUTE A PURCHASE ORDER WITH CARBON ACTIVATED CORP.

RECOMMENDATION:

- 1. Report on bids for Filter Media Replacement and Under-Drain Tile Repair Services and authorize the City Manager to execute a Purchase Order with Carbon Activated Corp (Compton, CA) for filter media replacement and under-drain repair tile services at the San José/Santa Clara Regional Wastewater Facility (RWF) for the initial term of July 15, 2015 through September 15, 2015, in an amount not to exceed \$311,775.
- 2. Approve a contingency of \$31,178 to execute change orders to cover any unforeseen changes or requirements that may arise during completion of services.

Desired Outcome: The filter rehabilitation replacement is critical to the operation of the filter building and will stop further loss of filter media and prevent the potential for total failure of the filters.

BASIS FOR RECOMMENDATION:

The San José/Santa Clara Regional Wastewater Facility (RWF) has a total of 16 filters that remove residual suspended solids from the biological nutrient removal (BNR) process. The filters provide a safety measure that ensures meeting requirements of the National Pollutant Discharge Elimination System (NPDES) permit for Bay discharge. Each filter has two cells and consists of 22" specified depth of anthracite coal at the top, 12" of silica sand in the middle, and 12" of supporting gravels at the bottom as filtration media to trap solids.

The filter media has a limited life span beyond which the efficiency of removal drops below acceptable settings.

During the last two years, three of the filters have been identified as needing media replacement and repairs for the under-drain support system. To change filter media and perform repairs on the filters, all of the filter media must be removed to expose the drain tiles including the steel plates and grout to allow for repairs. This rehabilitation and repair work is critical to the operation of the filter building and will stop further loss of filter media and prevent the potential for total failure of the filters.

A Request for Bid (RFB) for filter media replacement and under-drain tile repair services was issued on March 30, 2015. Three bids were received by the April 30, 2015 due date, and Carbon Activated Corp. submitted the lowest responsive and responsible bid.

Summary: Award to Carbon Activated Corp as the lowest responsive and responsible bidder pursuant to the formal bidding procedures of the San José Municipal Code, Section 4.12.310.B. Prevailing Wage is applicable to work under this purchase order. This Council item is consistent with the Council approved Environmental Services mission: Provide reliable utility infrastructure.

COST AND FUNDING SOURCE:

Funding for the cost of this agreement (\$311,775) is included in the Environmental Services Department Non-Personal/Equipment Appropriation (0762) in the San José-Santa Clara Treatment Plant Operating Fund (513) for the 2015-2016 Proposed Operating Budget, which was released on May 1, 2015 and is scheduled to be reviewed and adopted by the City Council on June 23, 2015.

FOR QUESTIONS CONTACT: Mark Giovannetti, Deputy Director, Finance, at 408-535-7052



Memorandum

TO: HONORABLE MAYOR

FROM: Kerrie Romanow

AND CITY COUNCIL

DATE: June 4, 2015

SUBJECT: SEE BELOW

Approved Date 65 15

SUBJECT:

AGREEMENT WITH SAN FRANCISCO BAY WILDLIFE SOCIETY,

FISCAL AGENT FOR DON EDWARDS SAN FRANCISCO BAY

NATIONAL WILDLIFE REFUGE

RECOMMENDATION

a. Authorize the City Manager to negotiate and execute an agreement with the San Francisco Bay Wildlife Society, which is the fiscal agent for the Don Edwards San Francisco Bay National Wildlife Refuge, for the purpose of providing public education about water quality, pollution prevention, and protection of water dependent ecosystems.

b. Approve funding of up to \$130,000 for year one from July 1, 2015 through June 30, 2016, with two one-year options for renewal ending June 30, 2018, for a maximum not to exceed amount of \$390,000 over three years.

OUTCOME

This agreement with San Francisco Bay Wildlife Society (SFBWS) will grant funding for outreach and education staff at the Don Edwards San Francisco Bay National Wildlife Refuge Environmental Education Center in Alviso. Work conducted under this agreement fulfills public outreach requirements included in the San José-Santa Clara Regional Wastewater Facility's RWF National Pollutant Discharge Elimination System permit.

BACKGROUND

The City, through the Environmental Services Department (ESD), has granted funding for educational staff at the Don Edwards San Francisco Bay National Wildlife Refuge

¹ The legal, official name of the facility remains San Jose/Santa Clara Water Pollution Control Plant, but beginning in early 2013, the facility was approved to use a new common name, the San José-Santa Clara Regional Wastewater Facility.

June 4, 2015

Subject: Don Edwards San Francisco Bay National Wildlife Refuge

Page 2

Environmental Education Center (Don Edwards) in Alviso since 1998. This grant to Don Edwards assists the City in meeting the SF Bay Regional Water Board's requirements for outreach and public education. Don Edwards' staff continues to provide programs on water quality, pollution prevention, and habitat protection for endangered species to school children and residents from San José, Santa Clara and the RWF's tributary agencies which include the cities of Campbell, Cupertino, Los Gatos, Milpitas, Monte Sereno, Saratoga, and some incorporated areas of the County.

Don Edwards is an important component of the City's plan for environmental education with the number of people visiting almost doubling from 12,700 in 1997 to 25,000 in 2014. The staff at Don Edwards delivers important information about the contribution of the RWF to the improved health of the South Bay. These beneficial impacts are attributable to the RWF effluent discharging into South Bay waters. Due to advanced wastewater treatment at RWF, South Bay waters have consistently shown 40 percent lower nitrogen levels and 90 percent lower phosphate levels, compared to 1989 levels. In addition, a comparison of the most recent vegetative survey, done in 2012, to the baseline salt marsh acreage in 1989 shows a net increase of 470 acres over the previous 23 years for which there is survey data.

Fish are spawning in large numbers in RWF effluent waters, due to the healthy, clean, and favorable environment for fish and wildlife in the South Bay. The impact of greater spawning numbers can be seen throughout the food chain, with an abundance of large fish (sturgeon, striped bass) and small fish (anchovies, silversides), and a healthy bird populations on this migratory path. RWF biologists and other bird observers are seeing large numbers of dowitchers, white pelicans, avocets, mallards, great blue herons, snowy egrets and more. Juvenile falcons born at City Hall have been tracked to a new nest at the refuge, just outside the RWF. In 2014, eight nesting pairs of burrowing owls were observed in the bufferlands outside of the RWF, the highest number of pairs ever observed, with 27 chicks. The freshwater effluent of the RWF is a critical component to this healthy ecological system.

In addition to educating the public on the beneficial environmental impacts of the RWF, Don Edwards staff will continue to collaborate with the City on environmental education about the large Capital Improvement Program at the RWF and the Silicon Valley Advanced Water Purification Center, another important neighboring facility. The City's grant, combined with other regional program support, makes it possible for Don Edwards staff to provide education to the public on these facilities and other critical water-related topics of the South Bay, including watershed protection, pollution prevention, water conservation, recycled water, and potential groundwater recharge benefits in the future.

ANALYSIS

The agreement between the City and Don Edwards has not been substantially updated since 1988. The agreement needs updating to be better aligned with City priorities and to comply with City policies and contract management practices. In particular, compensation rates have not been

June 4, 2015

Subject: Don Edwards San Francisco Bay National Wildlife Refuge

Page 3

adjusted in years, and entry level and intern positions identified in the current agreement are not compliant with the City's minimum wage ordinance passed by voters in 2013. In addition, staff is working with Don Edwards and SFBWS staff to better understand and document the cost of service delivery. While this latter analysis is still on-going, it is expected that improved cost of service accounting will improve the effectiveness of the funding provided.

To further improve program performance, staff recommends that Don Edwards be funded for one year with the option to extend the Agreement for two one-year terms contingent upon mutually agreeable program performance changes in areas such as increased diversity of field trip constituents and higher visibility in the watershed community of the South Bay.

Improved Cost Accounting

Staff recommends that the new agreement require Don Edwards staff to report their hours worked based on the cost of service to better reflect the actual costs of the various services. This process requires that Don Edwards staff track time spent by each service or product, such as weekend interpretive programs, field trips, and summer camp. Don Edwards staff have already started to track their time and have developed their best professional estimate of time they will spend in the coming year. This information will be tied to performance targets for each program or service provided.

Enhanced Marketing

In addition, staff is working with Don Edwards to develop a marketing plan and new outreach strategies to reach a wider base of students. Don Edwards staff will develop a marketing plan with target numbers, target areas, and outreach to include outreach efforts with community groups as well as school districts, principals, and teachers. The goal is to leverage work focused on South Bay habitat health and pollution prevention with other outreach and educational work related to creeks and open-space experiences for school-age children at the Don Edwards Refuge. Various creeks, such as Coyote Creek and Guadalupe River, flow into the South Bay in the area around the Don Edwards Refuge. The grant funds will also include money to be used for bus scholarships for fieldtrips for Title 1 schools.

Updated Compensation

City staff noted a key area where the agreement needed to be updated to be compliant with City policies. Compensation rates for the agreement have not been adjusted in ten years, and entry level and intern positions identified in the current agreement were not compliant with the City's minimum wage ordinance passed by voters in 2013. These salaries will be adjusted in the current agreement and have been calculated into the annual grant amount.

EVALUATION AND FOLLOW-UP

Staff will develop and monitor performance targets for outreach and education at Don Edwards. No further Council action is anticipated at this time.

June 4, 2015

Subject: Don Edwards San Francisco Bay National Wildlife Refuge

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POLICY ALTERNATIVES

Alternative 1: No funding for environmental education positions at Don Edwards.

Pros: Not funding environmental education positions at Don Edwards will result in cost savings **Cons:** This will have a negative impact on a valuable partnership with an important regional facility such as Don Edwards and will significantly decrease level of outreach to school children. Public awareness of environmental protection and restoration, of habitat and endangered species protection, will not be promoted as effectively. Public outreach requirements included in the RWF's National Pollutant Discharge Elimination System permit will need to be fulfilled through alternate means which may not leverage other regional resources.

Reason for not recommending: Public awareness of the RWF and resources surrounding it are critical to promote public awareness of water quality, pollution prevention, environmental protection, and public use of RWF lands. A partnership with Don Edwards is an effective way of increasing community awareness about the RWF while complying with RWF's permit requirements.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the June 23, 2015 City Council Agenda.

COORDINATION

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

FISCAL/POLICY ALIGNMENT

Funding for the Agreement is consistent with the San José-Santa Clara Regional Wastewater Facility National Pollutant Discharge Elimination System Permit.

COST SUMMARY/IMPLICATIONS

1.	AMOUNT OF RECOMMENDATION/COST OF PROJECT:	\$ 130,000
	Management	\$ 3,220
	Advertisement and office materials	\$ 10,872
	Don Edwards Maintenance	\$ 23,083
	Outreach and education staff	\$ 92,825
	TOTAL AGREEMENT/CONTRACT AMOUNT	\$ 130,000

June 4, 2015

Subject: Don Edwards San Francisco Bay National Wildlife Refuge

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- 2. SOURCE OF FUNDING: San José-Santa Clara Treatment Plant Operating Fund (513)
- 3. FISCAL IMPACT: The proposed action will allow the City Manager to negotiate and execute an agreement with the San Francisco Bay Wildlife Society. There will be no impact to the General Fund as a result of this action.

BUDGET REFERENCE

The table below identifies the fund and appropriations to fund the agreement recommended as part of this memorandum.

						2015-2016	Last
						Proposed	Budget
			·			Operating	Action
Fund	Appn			Total	Amt. for	Budget	(Date, Ord.
#	#	Appn. Name	RC#	Appn	Contract	Page	No.)
513	0762	Non-Personal/	800801	31,662,570	58,500	XI-79	N/A
	-	Equipment					
513	0762	Non-Personal/	800803	31,662,570	58,500	XI-79	N/A
		Equipment					
513	0762	Non-Personal/	800865	31,662,570	13,000	XI-79	N/A
		Equipment					

CEQA

Not a Project. File No. PP10-066(e), Services that involve no physical changes to the environment.

/s/Ashwini Kantak for KERRIE ROMANOW Director, Environmental Services

For questions, please contact René Eyerly, Sustainability and Compliance Manager, at (408)975-2594.





CITY COUNCIL ACTION REQUEST Department(s): CEOA: **Coordination:** Dept. Approval: Environmental Services, Exempt, /s/Ashwini Kantak for City Attorney's Office, Public Works File No. PP11-028 City Manager's Budget Kerrie Romanow Office, TPAC /s/ Barry Ng **Council District(s): CMO** Approval: City-Wide

SUBJECT: CONTRACT CHANGE ORDER NO. 2 FOR 6835 - HANDRAIL REPLACEMENT - PHASE

V PROJECT

RECOMMENDATION:

Approve a contract change order for a credit to the project of \$109,124, and extend the project completion date from August 12, 2014 to August 31, 2015 (257 additional working days).

BASIS FOR RECOMMENDATION:

On June 18, 2013, the City Council awarded the 6835 - Handrail Replacement – Phase V Project to Rodan Builders, in the amount of \$1,254,630 with a contingency in the amount of \$125,463. The project will replace 8,500 linear feet of safety handrail around the secondary aeration tanks at the San José-Santa Clara Regional Wastewater Facility (RWF).

During the material submittal phase of the project it was discovered that the 2-inch diameter handrails specified in the contract had a significantly longer lead time for manufacturing and could not be mechanically fastened together without welding and custom fittings. Consequently, the contractor proposed a substitution for 1.5-inch diameter handrail, which: 1) is more readily available for replacement fittings; 2) has three to four times less lead time; and 3) is easier to assemble and disassemble for future maintenance work. The City and Contractor performed an analysis of the material and confirmed that it met the design strength criteria and was compatible with the existing handrails. Consequently, the City is recommending approval for installing 1.5-inch diameter handrail along with a credit to the project of \$109,124.

The material submittal and review process extended into the wet weather season, when several of the secondary aeration tanks must be used for process capacity. Since the proposed handrail is side-mounted (i.e., within the tanks), the contractor cannot access the tanks to install the handrails until the tanks are drained during the dry, summer months. In addition, RWF Maintenance is making much-needed mechanical repairs to three of the aeration tanks (B1, B2, and B3). This work can only be performed after these tanks have been drained at the end of the rain season (April 15). These operational schedule constraints have added an additional 257 days to the construction duration, pushing the completion date to August 31, 2015. The project is currently 90% complete.

COST AND FUNDING SOURCE:

1. COST OF RECOMMENDATION:	(\$ 109,124)
Original Construction Contract Amount	\$ 1,254,630
Original Contingency Amount	\$ 125,463
Original Total Contract Amount	\$ 1,380,093
Contract Amount Completed as of May 12, 2015	\$ 978,978
Contract Change Order	(\$ 109,124)
Total Funding Remaining within Contract Authority	\$ 510,239

- 2. SOURCE OF FUNDING: Fund 512: San José-Santa Clara Treatment Plant Capital Fund (Appn.: 5690 Plant Infrastructure Improvements, RC 170025)
- **3. FISCAL IMPACT:** The recommended change order approval will have no impact on the General Fund operating budget.

FOR QUESTIONS CONTACT: Ashwini Kantak, Assistant Director of ESD at (408) 975-2553





Memorandum

TO: HONORABLE MAYOR

AND CITY COUNCIL

FROM: Kerrie Romanow

Barry Ng

SUBJECT: SEE BELOW

DATE: June 1, 2015

Approved D. DS4L

Date

6 5 15

SUBJECT:

CONTRACT CHANGE ORDER AUTHORIZATION AND

CONSTRUCTION CONTINGENCY INCREASE FOR THE "7100-

DIGESTER GAS COMPRESSOR UPGRADE DESIGN-BUILD PROJECT"

AT THE SAN JOSE-SANTA CLARA REGIONAL WASTEWATER

FACILITY

RECOMMENDATION

- 1. Approve a \$565,800 increase to the construction contingency amount of \$1,131,600 for a revised total contingency amount of \$1,697,400 and increasing the contract not-to-exceed amount from \$12,447,600 to a total revised contract amount not-to-exceed \$13,013,400.
- 2. Adopt a resolution authorizing the Director of Public Works to:
 - (a) Negotiate and execute Contract Change Order No. 8 (CCO8) with Anderson Pacific Engineering Construction, Inc. for the 7100-Digester Gas Compressor Upgrade Design-Build Project ("Project") in the amount of \$358,616;
 - (b) Negotiate and execute one or more change orders in excess of \$100,000 for the remaining duration of the Project, not to exceed the revised total contingency amount approved for the Project; and
 - (c) Negotiate and execute one or more change orders extending the project completion date from June 22, 2016 to March 19, 2017 for a total of 270 days beyond the original contract completion date of June 22, 2016.

OUTCOME

Approval of the recommendations will allow for the proper completion of the Digester Gas Compressor Upgrade Design-Build Project and enable staff to expediently authorize and pay for additional work needed to complete the Project. It will also streamline the approval process for change orders in excess of \$100,000 and/or extending the project completion date for a total of 270 days beyond the original contract completion date.

June 1, 2015

Subject: Contingency Increase and Contract Change Order Authorization for the Digester Gas Compressor

Project
Page 2 of 6

BACKGROUND

The San José-Santa Clara Regional Wastewater Facility¹ (RWF) currently operates three digester gas compressors located in the Sludge Control Building. The two small gas compressors, GC1 and GC3, were installed in 1964 and are over 50 years old. GC1 and GC3 currently serve as backup units but are unreliable and difficult to maintain due to their age and availability of parts. A third, large gas compressor, GC4, was installed in 1984 and has been in continuous use for over 30 years. In August 2012, a condition assessment study of the RWF's power and air equipment confirmed the need to replace the gas compressors as a high priority. The gas compressors are a critical element of the RWF's power generation system. They receive low-pressure methane gas from the digestion process and boost the pressure to the required operating pressures for use in engine generators, which in turn, produce power and air for operating the various treatment processes. The RWF's engine generators rely on blended gas and without reliable gas compressors, the engines would revert to operating on only natural gas with valuable digester gas being flared.

On September 12, 2012, the City issued a service order under a Master Agreement with CDM Smith for engineering services including technology evaluation and gas compressor package prequalification assistance, preparation of preliminary engineering documents (also referred to as 30% drawings and specifications or "bridging documents") for the purpose of procuring a design-builder to bring the project to 100% design and construction completion, and engineering support services during bidding and detailed design and construction by the design-builder.

On May 20, 2014, the City Council approved the award of the Project to Anderson Pacific Engineering Construction, Inc. in the amount of \$11,316,000 along with a ten percent contingency in the amount of \$1,131,600. The project scope includes the installation of two new gas compressors to be housed in a new 4,000 square foot building, new digester gas pre-coolers, new cooling towers, associated gas piping and building and equipment utility tie-ins. Since completion of the preliminary engineering design documents and award of the project, a number of interface issues have been identified that have required the issuance of several change orders.

To date, a total of seven change orders have been issued totaling \$379,741 for various items of work. All seven change orders authorized to date have been within the Public Works Director's approval authority in accordance with San Jose Municipal Code 14.04.415. The project is currently 22 percent complete with \$751,859 remaining in the contingency balance, not including this CCO8.

¹ The legal, official name of the facility remains San Jose/Santa Clara Water Pollution Control Plant, but beginning in early 2013, the facility was approved to use a new common name, the San José-Santa Clara Regional Wastewater Facility.

June 1, 2015

Subject: Contingency Increase and Contract Change Order Authorization for the Digester Gas Compressor

Project
Page 3 of 6

ANALYSIS

During the detailed design development phase, it was determined that the hazardous area classification for the skid mounted digester gas compressor equipment, including motors, controls, and instrumentation, needed to be revised from Class 1 Division 2 to Class 1 Division 1, Group C and D in order to comply with National Electric Code (NEC) requirements. The NEC requires that all electrical devices (e.g., motors, controls, and instruments) that operate in an explosive type environment be designed and constructed in a manner to avoid explosions.

Electrical equipment can cause explosions in certain atmospheres. Equipment used in areas where explosive concentrations of dusts or vapors may exist must be equipped with special wiring and other electrical equipment for safety purposes.

During review of the design-builder's gas compressor skid submittal, CDM Smith, who developed the preliminary engineering documents for the project, determined that the explosion-proof classification in the gas compressor bid specification needed to be revised from Class 1 Division 2 to Class 1 Division 1. The Class 1 Division 1 is a more stringent explosion-proof classification than Class 1 Division 2. The Class 1 Division 1 classification assumes that electrical devices will be operating continuously in an explosive gas environment, while Class 1 Division 2 does not. The design-builder, Anderson Pacific Engineering Construction, also agreed with this determination.

To minimize delays to the project schedule, two separate contract change orders, CCO4 and CCO7 have been issued to allow the design-builder to proceed with making engineering revisions to the mechanical, electrical, and instrumentation system design and drawings to meet the Class 1 Division 1 classification requirements. The cost for CCO4 and CCO7 is \$64,622 and \$17,853 respectively, for a total of \$82,475 in associated redesign fees.

This CCO8 will allow the design-builder to proceed with the procurement of upgraded electric motors, controls, and instrumentation to comply with the Class 1 Division 1 hazardous area classification, and installation of intrinsically-safe wiring and conduit seals from the gas compressor skid to the non-classified area (i.e., the electrical room). Staff has reviewed the design-builder's cost proposal for this work and finds it reasonable. Approval of this recommendation will result in the execution of CCO8 in the amount of \$358,616.

The authorization of CCO8 in the amount of \$358,616 will reduce the available construction contingency from \$751,859 to \$393,243. Construction contingencies for capital projects are established by Council Resolution No. 71319 as follows:

- a. Five percent of the total contract amount for street, sidewalk or park projects;
- b. Ten percent of the total contract amount for utilities and building projects;
- c. Fifteen percent of the total contract amount for building renovation projects;
- d. Such other amount as may be approved by the City Council for a particular project.

June 1, 2015

Subject: Contingency Increase and Contract Change Order Authorization for the Digester Gas Compressor

Project
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With the project at only 22% complete and given the complex project interface issues to existing systems and other concurrent capital improvement projects underway by others, staff recommends increasing the approved construction contingency from ten percent to fifteen percent to provide funding for any unanticipated work necessary for the proper completion or construction of the Project. Approval of this recommendation will result in a \$565,800 increase to the original construction contingency amount of \$1,131,600 for a revised total contingency amount of \$1,697,400, and increase the original contract not-to-exceed amount of \$12,447,600 to a revised contract not-to-exceed amount of \$13,013,400.

As a result of the reclassification of the gas compressors to Class 1 Division 1, the fabrication of the gas compressors skids was delayed until the selection of the electric compressor motors and the design of the intrinsically-safe panels were determined. The fabrication time for the new Class 1 Division 1 motors will take longer than the original motors. These delays are expected to add a minimum of three months to the original construction completion date of June 22, 2016, which staff is currently assessing with the design-builder.

In addition to CCO8, staff anticipates needing to execute two additional change orders in the near term to allow for proper interconnection and operations with the Digester and Thickener Facilities Upgrade and Cogeneration Facility projects. Both of these change orders are expected to exceed the Public Works Director's approval threshold of \$100,000. In efforts to minimize further schedule impacts to the Project, staff recommends delegating authority to the Public Works Director to execute one or more change orders in excess of \$100,000 for the remaining duration of the Project, not to exceed the revised total contingency amount approved for the Project, and subject to other applicable limitations on the authority of the Director in the San Jose Municipal Code.

Based on the foregoing, staff recommends delegating authority to the Director to negotiate and execute one or more change orders extending the original project completion date from June 22, 2016 to March 19, 2017 which will enable staff to minimize schedule impacts due to potential delivery delays and expediently authorize work needed to complete the Project.

Approval of these recommendations will allow for the proper completion of the Project and provide staff with the flexibility to efficiently and effectively respond to unforeseen or changed conditions for the remaining duration of the Project.

EVALUATION AND FOLLOW-UP

No other follow-up action with the Council is expected at this time. A progress report on this and other Wastewater Facility capital projects will be made to the Transportation and Environment Committee and the Council on a semiannual basis. Monthly progress reports will also be submitted to the Treatment Plant Advisory Committee (TPAC) and posted on the City's website.

June 1, 2015

Subject: Contingency Increase and Contract Change Order Authorization for the Digester Gas Compressor

Project
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POLICY ALTERNATIVES

Alternative #1: Do not approve an increase to the construction contingency amount, do not authorize the Director of Public Works to negotiate and execute CCO8, and do not delegate authority to the Director of Public Works to execute one or more change orders in excess of \$100,000 and/or extending the contract completion date exceeding 180 days beyond the original contract completion date.

Pros: The additional cost associated with contingency increase and CCO8 will not be incurred. **Cons:** If an increase to the construction contingency is not approved, staff will not be able to negotiate and execute additional change orders above and beyond the remaining contingency balance. The digester gas compressor skids and associated gas compressor equipment (motors, controls, and instrumentation) will not comply with the Class 1 Division 1 explosion-proof regulations in the National Electric Code. Additional delays and cost will be incurred each time staff is required to return to Council for approval of change order(s) above the Director of Public Works approval authority.

Reasons for not Recommending: Given that this project is still in the early phase of completion and must interface with other major capital improvement projects being completed by others, it is prudent to increase the contingency amount from ten percent to fifteen percent. This will provide staff with the flexibility to respond to unforeseen conditions in a timely manner. If CCO8 is not approved, the constructed project will be out of compliance with the National Electric Code hazardous area classification.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the June 23, 2015 City Council agenda.

COORDINATION

This project and memorandum have been coordinated with the City Manager's Budget Office and the City Attorney's Office. This item is scheduled to be heard at the June 11, 2015 TPAC meeting.

June 1, 2015

Subject: Contingency Increase and Contract Change Order Authorization for the Digester Gas Compressor

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COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: \$565,800

2. COST OF CONTRACT

Original Construction Contract Amount \$11,316,000
Original Contingency Amount 1,131,600
Original Total Contract Amount 12,447,600
Contingency Increase 565,800
Total Contract Amount \$13,013,400

3. SOURCE OF FUNDING: San José-Santa Clara Treatment Plant Capital Fund (512))

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contract recommended as part of this memo and remaining project costs, including project delivery, construction, and contingency costs.

-					2014-2015	
					Adopted	Last Budget
Fund	Appn		Total	Amt. for	Capital	Action (Date,
# .	#	Appn. Name	Appn	Contract	Budget Page	Ord. No.)
Rema	Remaining Project Costs		\$937,855			
Rema	Remaining Funding Available					
512	7453	Combined Heat and	\$1,324,000	\$565,800	V-192	10/07/2014
		Power Equipment				Ord. No.
		Repair and				29496
		Rehabilitation				
Total	Current	Funding Available	\$1,324,000	\$565,800		

CEQA

BARRY NG

Exempt, File No. PP13-060

/s/

Interim Director of Public Works

/s/ Ashwini Kantak for KERRIE ROMANOW

Director, Environmental Services

For questions please contact Ashwini Kantak, Assistant Director of Environmental Services, at (408) 635-2039 or Michael O'Connell, Deputy Director of Public Works, at (408) 975-7333.

City Manager's Contract Approval Summary For Procurement and Contract Activity between \$100,000 and \$1.08 Million for Goods and \$100,000 and \$270,000 for Services

MAYI 1, 2015 - MAY 31, 2015

Description of Contract Activity ¹	Fiscal Year	Req#/ RFP#	PO#	Vendor/Consultant	Original \$ Amount	Start Date	End Date	Additional \$ Amount	Total \$ Amount	Comments
M.S.A. GAS DETECTION SYSTEM	14-15	20414	78507	TELSTAR INSTRUMENTS INC	\$267,601	5/29/2015	11/30/2015			
FLOOD PROTECTION STUDY	14-15		AC 25493	AECOM TECHNICAL SERVICES, INC	\$249,970	5/18/2015	140 business days after NTP			SERVICE ORDER #7 MASTER AGREEMENT TERM: 8/13/13-6/30/17

¹ This report captures completed contract activity (Purchase Order Number, Contract Term, and Contract Amount)