

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

In the matter of:)	
)	
CITY OF TAFT)	Order No. R5-2016-0508 (Proposed)
)	
No. R5-2016-0508 for)	Settlement Agreement and Stipulation for
Administrative Civil Liability)	Entry of Order; Order (Proposed)
)	

Section I: Introduction

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Stipulated Order) is entered into by and between the Central Valley Regional Water Quality Control Board Prosecution Staff (Prosecution Staff) and the City of Taft (Settling Respondent) (collectively, Parties) and is presented to the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) for adoption as an Order, by settlement, pursuant to Government Code section 11415.60.

Section II: Recitals

1. The Settling Respondent owns and operates by contract a wastewater treatment facility and its 18-inch gravity sewer main located adjacent to Sandy Creek, along Highway 119, in the City of Taft, Kern County. The wastewater treatment facility is located at 1120 East Ash Street in Taft (Facility). The Settling Respondent is subject to State Water Resources Control Board Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (SSO Order). Prohibition C.2 in the SSO Order states that "Any [sanitary sewer overflow] (SSO) that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited." Subsection D.8 of the SSO Order requires the Settling Respondent to properly manage, operate, and maintain all parts of its sewage collection system.
2. The Prosecution Staff alleges that the Settling Respondent violated SSO Order Prohibition C.2 and Subsection D.8 when it discharged 1,505,000 gallons of untreated sewage to Sandy Creek. The discharge began on or about 1200 on 9 March 2013 when a pipe broke, and continued to discharge until 2345 on 12 March 2013. The Prosecution Staff alleges that sewage spill created a condition of nuisance as defined in Water Code section 13050, subdivision (m), and that proper management and operations would have significantly reduced the discharge. Sandy Creek was dry at the time of the discharge and the Settling Respondent cleaned up the sewage solids.
3. To resolve the alleged violation described in Section II, Paragraph 2 by consent and without further administrative proceedings, the Parties have agreed to the imposition of

an administrative civil liability of \$250,000 against the Settling Respondent. Payment of \$130,000 to the State Water Resources Control Board Waste Discharge Permit Fund is due no later than 30 days following the Central Valley Water Board executing this Order. The remaining \$120,000 in penalties shall be suspended upon completion of an Enhanced Compliance Action (ECA) for the Settling Respondent to complete a Remote Area Flow Monitoring and Alarming (RAFMA) project and a Supervisory Control and Data Acquisition (SCADA) project.

4. The Parties have engaged in settlement negotiations, and agree to settle the matter without administrative or civil litigation and to present this Stipulated Order to the Central Valley Water Board for adoption as an Order pursuant to Government Code section 11415.60. The Prosecution Staff contends that the resolution of the alleged violation is fair and reasonable and fulfills its enforcement objectives, that no further action is warranted concerning the specific violation alleged except as provided in this Stipulated Order, and that this Stipulated Order is in the best interest of the public.

Section III: Stipulations

The Parties stipulate to the following:

5. **Administrative Civil Liability:** The Settling Respondent hereby agrees to pay the administrative civil liability totaling \$250,000 as set forth in Paragraph 3 of Section II herein. Further, the Parties agree that \$120,000 of this administrative civil liability shall be suspended pending completion of the Enhanced Compliance Project set forth in Paragraph 7 of Section II herein and Attachment A incorporated herein by reference.

6. **Payment:** The Settling Respondent shall submit a check for \$130,000 within 30 days of the date that the Stipulated Order is signed by the Central Valley Water Board or its delegate. The check shall be made out to the State Water Resources Control Board Waste Discharge Permit Fund, reference ACL Order R5-2016-0508, and submitted to:

State Water Resources Control Board Accounting Office
Attn: ACL Payment
P.O. Box 1888
Sacramento, CA 95812-1888

The Settling Respondent shall provide a copy of the check via mail or e-mail to:

Warren Gross, Supervisor [Warren.Gross@waterboards.ca.gov]
Enforcement Section
Central Valley Regional Water Quality Control Board
1685 E Street
Fresno, CA 93706

7. **Enhanced Compliance Action Description:** The Enhanced Compliance Action (ECA) is comprised of two components, the Remote Area Flow Monitoring and Alarming (RAFMA) project and the Supervisory Control and Data Acquisition (SCADA) project. The complete ECA description, project milestones, and budget are contained in Attachment A, incorporated herein. Both the RAFMA and SCADA components will aid in better prevention and response to potential sanitary sewer overflows (SSOs) and include additional benefits.

- a. The RAFMA project entails installing ten real-time, continuous sewer flow monitors within the Settling Respondent's collection system. The remote monitors will alert system operators and City of Taft staff when flow conditions indicate the possibility of an SSO. The RAFMA project shall be completed 20 weeks from the date this Stipulated Order is issued.
- b. For the SCADA project, the Settling Respondent will fund the design, specifications, bidding, construction management, purchase, installation, and commissioning of the system. The SCADA system will provide a centralized method of monitoring the planned collection system flow measurement stations to improve monitoring and control of the wastewater treatment plant. The SCADA project shall be completed no later than 52 weeks from the date this Stipulated Order is issued.

8. **Representations and Agreements Regarding the ECA**

- a. As a material consideration for the Central Valley Water Board's acceptance of this Stipulated Order, the Settling Respondent represents that it will utilize the suspended \$120,000 to implement the ECA set forth in Attachment A. The Settling Respondent understands that its promise to implement the ECA, in its entirety and in accordance with the schedule for implementation, is a material condition of this settlement of liability between the Settling Respondent and Central Valley Water Board.
- b. The Settling Respondent agrees to: 1) spend the ECA amount as described in this Stipulated Order, 2) provide a certified, written report to the Central Valley Water Board consistent with the terms of this Stipulated Order detailing its implementation of the ECA; and 3) within 30 days of completion of the ECA, provide a certification by a responsible city official, signed under penalty of perjury, that the Settling Respondent, Settling Respondent followed any applicable environmental laws and regulations in implementing the ECA, including the California Environmental Quality Act (CEQA), Porter-Cologne Act, and the federal Clean Water Act. The Settling Respondent agrees that the Central Valley Water Board has the right to require a third-party audit of the funds expended to implement the ECA at the Settling Respondent's cost,

and that the Settling Respondent bears ultimate responsibility for meeting all deadlines specified in Attachment A.

9. **Publicity Associated with the ECA:** Whenever the Settling Respondent or its agents or subcontractors publicize one or more elements of the ECA, they shall state in a **prominent manner** that the project is undertaken as part of the settlement of an enforcement action by the Central Valley Water Board against the Settling Respondent.

10. **Progress Reports and Inspection Authority:** The Settling Respondent shall provide reports describing progress with implementing the ECA to the Central Valley Water Board as described in Attachment A at 10 weeks for the RAFMA project, and at 26 weeks for the SCADA project. The Settling Respondent shall permit inspection of the ECA by the Board staff at any reasonable time during normal business hours, with 24 hours' notice.

11. **Certification of ECA:** On or before the expiration of the 52nd week from the date that this Stipulated Order is issued, the Settling Respondent shall submit a final report and certified statement by a responsible city official Settling Respondent documenting the expenditures made by the Settling Respondent during the completion period for the ECA, and documenting that the ECA has been completed in accordance with the terms of this Stipulated Order. The expenditures may include external payments to outside vendors, but may not include the normal, routine work undertaken by Settling Respondent staff. In making such certification, the signatories may rely upon normal organizational project tracking systems that capture employee time expenditures and external payments to outside vendors, such as environmental and information technology contractors or consultants. Documentation for the completion of the ECA may include photographs, invoices, receipts, certifications, and other materials reasonably necessary for the Central Valley Water Board to evaluate the completion of the ECA and costs incurred. The Settling Respondent shall provide any additional information requested by the Central Valley Water Board staff that is reasonably necessary to verify the Settling Respondent's ECA expenditures and completion.

12. **Request for Extension:** The Assistant Executive Officer may extend the ECA deadlines contained in this Stipulated Order if the Settling Respondent demonstrates delays from unforeseeable contingencies, such as a delay in funding for the Wastewater Treatment Plant upgrades to which the SCADA system will be constructed, provided that the Settling Respondent continues to undertake all appropriate measures to meet the deadlines. The Settling Respondent shall make any deadline extension request in writing at least 30 days prior to the deadline. Any request for an extension must be approved in writing by the Assistant Executive Officer. Approval by the Central Valley Water Board of such extension requests will not be unreasonably withheld.

13. **Central Valley Water Board Acceptance of Completed ECA:** Upon the Settling Respondent's satisfaction of its obligations under this Stipulated Order, the

completion of the ECA, and any audits, the Assistant Executive Officer shall issue a letter stating that all obligations have been completed. Said letter shall terminate any further obligations of the Settling Respondent under this Stipulated Order and permanently suspend the remaining penalty amount.

14. **Failure to Expend All Suspended Funds on the Approved ECA:** In the event that the Settling Respondent is not able to demonstrate to the reasonable satisfaction of the Central Valley Water Board staff that the entire \$120,000 ECA amount was spent on the completed ECA, the Settling Respondent shall pay the difference between the suspended administrative civil liability and the amount the Settling Respondent can demonstrate was actually spent on the ECA.

15. **Failure to Complete the ECA:** If the ECA is not fully implemented within 52 weeks from the issuance of this Stipulated Order, or if there has been a material failure to satisfy a project milestone, the Assistant Executive Officer shall issue a Notice of Violation. The amount of the Suspended Liability owed shall be determined by a written, stipulated agreement of the Parties, or, if the Parties cannot reach agreement, via a Motion for Payment of Suspended Liability before the Central Valley Water Board or its delegate. The Settling Respondent shall be liable to pay the entire \$120,000 suspended liability, or, if shown by the Settling Respondent, some portion thereof less the value of the completion of any milestone requirements as stipulated by the Parties in writing, or as determined by the Motion for Payment of Suspended Liability. Unless otherwise agreed to or determined by the Board via Motion for Payment of Suspended Liability, the Settling Respondent shall not be entitled to any credit, offset, or reimbursement from the Board for expenditures made on the ECA prior to the date of receiving the Notice of Violation. Within 30 days of a determination by the Board, or its delegate, of the amount of the suspended liability assessed for the Settling Respondent to pay, the Settling Respondent shall submit payment consistent with the payment method described in Section II, Paragraph 6. Payment of the assessed amount shall satisfy the Settling Respondent's obligations to implement the ECA.

16. **Compliance with Applicable Laws:** The Settling Respondent understands that payment of administrative civil liability in accordance with the terms of this Order or compliance with the terms of this Order is not a substitute for compliance with applicable laws, and that continuing violations of the type alleged in the Complaint may subject the Settling Respondent to further enforcement, including additional administrative civil liability.

17. **Attorney's Fees and Costs:** Except as otherwise provided herein, each Party shall bear all attorneys' fees and costs arising from the Party's own counsel in connection with the matters set forth herein.

18. **Matters Addressed by Stipulation:** Upon adoption by the Central Valley Water Board or its delegate, this Stipulated Order represents a final and binding resolution and

settlement of the alleged violation as of the effective date of this Stipulated Order. The provisions of this paragraph are expressly conditioned on the full payment of the administrative civil liability by the deadlines specified in Section III, Paragraphs 5 and 6, and Settling Respondent's full satisfaction of the obligations described in Paragraph 7.

19. **Public Notice:** The Settling Respondent understands that this Stipulated Order will be noticed for a 30-day public review and comment period prior to consideration by the Central Valley Water Board or its delegate. If significant new information is received that reasonably affects the propriety of presenting this Stipulated Order to the Central Valley Water Board, or its delegate, for adoption, the Assistant Executive Officer may unilaterally declare this Stipulated Order void and decide not to present it to the Central Valley Water Board or its delegate. The Settling Respondent agrees that it may not rescind or otherwise withdraw its approval of this proposed Stipulated Order.

20. **Addressing Objections Raised During Public Comment Period:** The Parties agree that the procedure contemplated for adopting the Stipulated Order by the Central Valley Water Board and review of this Stipulated Order by the public is lawful and adequate. In the event procedural objections are raised prior to the Stipulated Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust the procedure as necessary or advisable under the circumstances.

21. **Interpretation:** This Stipulated Order shall be construed as if prepared jointly by the Parties. Any uncertainty or ambiguity shall not be interpreted against any one Party. The Parties are represented by counsel in this matter.

22. **Modification:** This Stipulated Order shall not be modified by any of the Parties by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties and approved by the Central Valley Water Board.

23. **If Order Does Not Take Effect:** In the event that this Order does not take effect because it is not approved by the Central Valley Water Board, or its delegate, or is vacated in whole or in part by the State Water Resources Control Board or a court, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the Central Valley Water Board to determine whether to assess administrative civil liabilities for the underlying alleged violation, unless the Parties agree otherwise. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in the hearing. The Parties agree to waive any and all objections based on settlement communications in this matter, including, but not limited to:

- a. Objections related to prejudice or bias of any of the Central Valley Water Board members or their advisors and any other objections that are premised in whole or in part on the fact that the Central Valley Water

Board members or their advisors were exposed to some of the material facts and the Parties' settlement positions as a consequence of reviewing the Stipulated Order, and therefore may have formed impressions or conclusions prior to any contested evidentiary hearing on the Complaint in this matter; or

- b. Laches or delay or other equitable defenses based on the time period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.

24. **Waiver of Hearing:** The Settling Respondent has been informed of the rights provided by Water Code section 13323, subdivision (b) and, if the settlement is adopted by the Central Valley Board, hereby waives its right to a hearing before the Central Valley Board prior to the adoption of the Stipulated Order. However, should the settlement not be adopted, and should the matter proceed to the Central Valley Water Board or State Water Resources Control Board for hearing, the Settling Respondent does not waive the right to a hearing before an order is imposed.

25. **Waiver of Right to Petition or Appeal:** Except in the instance where the settlement is not adopted by the Central Valley Board, the Settling Respondent hereby waives its right to petition the Central Valley Water Board's adoption of the Stipulated Order for review by the State Water Resources Control Board, and further waives its rights, if any, to appeal the same to a California Superior Court and/or any California appellate level court. This explicit waiver of rights includes potential future decisions by the Central Valley Water Board or its delegate directly related to this Stipulated Order, including, but not limited to time extensions, completion of ECA milestones, and other terms contained in this Stipulated Order.

26. **Covenant Not to Sue:** The Settling Respondent covenants not to sue or pursue any administrative or civil claim(s) against any state agency or the State of California, their officers, Board Members, employees, representatives, agents, or attorneys arising out of or relating to any matter covered under this Stipulated Order, except that this covenant is not intended to, and does not limit the Settling Respondent's rights to sue over other Central Valley Water Board orders (e.g., permits, cease and desist orders, etc.) or limit the Settling Respondent's rights to defend against any additional enforcement or other actions taken by the Central Valley Water Board or its employees, representatives, agents, or attorneys, and shall not release any claims or complaints against any state agency or the State of California, their officers, Central Valley Water Board Members, employees, representatives, agents, or attorneys to the extent such covenant would be prohibited by California Business and Professions Code Section 6090.5 or by any other statute, rule, regulation or legal principle of similar effect.

27. **No Admission of Liability/No Waiver of Defenses:** In settling this matter, the Settling Respondent does not admit to liability or to the truth of the findings or allegations made by the Prosecution Team, and does not admit to any of the findings in

this Stipulated Order or its attachments, and does not admit to any violation of the Water Code, any Central Valley Water Board Order, or any other federal, state, or local laws or ordinances, but recognizes that this Stipulated Order may be used as evidence of resolution of a prior enforcement action consistent with Water Code section 13327 and the Enforcement Policy. By entering into this agreement, the Settling Respondent does not waive any defenses or arguments related to any new enforcement action that may be brought by the Central Valley Water Board, including any brought under its reserved discretionary enforcement authority herein.

28. **Necessity for Written Approvals:** All approvals and decisions of the Central Valley Water Board under the terms of this Stipulated Order shall be communicated to the Settling Respondent in writing. No oral advice, guidance, suggestions, or comments by employees or officials of the Central Valley Water Board regarding submissions or notices shall be construed to relieve the Settling Respondent of its obligation to obtain any final written approval required by this Stipulated Order.

29. **Authority to Bind:** Each person executing this Stipulated Order in a representative capacity represents and warrants that he or she is authorized to execute this Stipulated Order on behalf of and to bind the entity on whose behalf he or she executes the Stipulated Order.

30. **Effective Date:** This Stipulated Order shall be effective and binding on the Parties upon the date the Central Valley Water Board or its delegate enters the Order.

31. **Severability:** The Settling Respondent's obligations under Paragraphs 5-11 above are contingent upon the entry and continued effectiveness of the Order of the Central Valley Water Board in the form attached hereto. Otherwise, this Stipulated Order is severable; should any provision be found invalid the remainder shall remain in full force and effect.

32. **Counterpart Signatures:** This Stipulated Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.

Settlement Agreement and Stipulation for Entry of Order and Order R5-2016-0508
City of Taft
Kern County

IT IS SO STIPULATED.

California Regional Water Quality Control Board Prosecution Team
Central Valley Region

By: Clay L. Rodgers
Clay Rodgers, Assistant Executive Officer

Date: 3/4/16

City of Taft

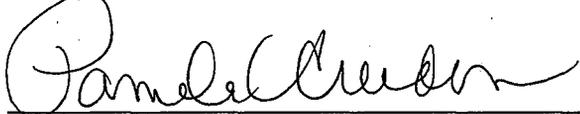
By: [Signature]
Craig Jones, City Manager

Date: 1/19/2016

Order of the Central Valley Water Board

1. This Order incorporates the foregoing Sections I through III, Paragraphs 1 through 32 by this reference as if set forth fully herein. In adopting this Stipulated Order, the Central Valley Water Board or its delegate has considered, where applicable, each of the factors prescribed in Water Code section 13351. The consideration of these factors is based upon information obtained by the Central Valley Water Board staff in investigating the alleged violation or otherwise provided to the Central Valley Water Board.
2. This is an action to enforce the laws and regulations administered by the Central Valley Water Board. The Central Valley Water Board finds that issuance of this Stipulated Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, sections 21000 et seq.), in accordance with section 15321(a)(2), Title 14, of the California Code of Regulations.

Pursuant to Water Code section 13323 and Government Code section 11415.60, **IT IS HEREBY ORDERED** on behalf of the California Central Valley Regional Water Quality Control Board.



Pamela C. Creedon, Executive Officer

Date: 3/7/16

Attachment A: Enhanced Compliance Action

City of Taft
Remote Area Flow Monitoring and Alarming
and Supervisory Control and Data Acquisition
Enhanced Compliance Action (ECA)

A. Project Name:
Remote Area Flow Monitoring and Alarming (RAFMA) and Supervisory Control and Data Acquisition (SCADA) Project
B. Project Developed by:
City of Taft
C. Project to be Performed by:
City of Taft
D. Contact:
Craig Jones, City Manager City of Taft 209 E. Kern Street Taft, CA 93268 Telephone: (661) 763-2480 Fax: (661) 765-2480 Email: cjones@cityoftaft.org
E. Description of Project:
<p>1. Project Description. Through this Enhanced Compliance Action (ECA), the City of Taft (City) intends to complete a Remote Area Flow Monitoring and Alarming (RAFMA) and Supervisory Control and Data Acquisition (SCADA) project.</p> <p>The RAFMA part of this project is limited to the capital purchase and installation of 10 flow monitors at strategic locations throughout the City's sewer collection system. Once installed, the flow monitors will continuously track and record sewage flow within the collection system at the specified locations, alerting system operators and City staff when flow conditions indicate the likelihood for a sanitary sewer overflow (SSO).</p> <p>The City will maintain and operate the units, including the annual service fee for web-enabled monitoring and annual battery replacements.</p> <p>For the SCADA system part of the ECA, the City will fund the design, specifications, bidding, purchase, installation, and commissioning of the SCADA hardware and equipment as defined herein. The SCADA system will be installed at the City's Wastewater Treatment Plant</p>

(WWTP) located at 1120 East Ash Street within the City of Taft in conjunction with the City's WWTP Maintenance Project that is modernizing the facility.

Once installed, the SCADA system will be utilized to monitor and control the WWTP processes defined under Section E.2 of this proposal. If feasible, the SCADA system will also provide an additional centralized method of monitoring the RAFMA units. .

- 2. Project Overview and Description.** The City of Taft provides sanitary sewer collection and treatment services within the City's service boundary. Wastewater collected with the City's 29 miles of collection sewer pipe is transported to the City's WWTP.

Currently, the City relies upon "eyewitness" reports of sanitary sewer overflows occurring within the City's collection system. Through this method, an SSO can be reported to the City in one of five ways:

- a. A call to City Hall
- b. A call to the Police Department
- c. A call to the Fire Department
- d. A call to the Public Works Department, or
- e. A call by radio from City Staff

Depending on the amount of time between the start of the SSO and the time that the SSO is observed, reporting and response may not be immediate. As a result, response time may be extended and the volume of the spill may be increased. A situation similar to this occurred during the March 2013 sewage spill at the Sandy Creek location.

The sewer flow monitors installed through this ECA will provide continuous real-time monitoring and data recording and will immediately alert system operators and City staff if recorded flows at those locations indicate the potential for an SSO. The flow meters are intended to eliminate the City's reliance on an "eyewitness" to initiate reporting and response to SSOs in areas where the monitors are placed.

Flow information recorded by the monitors is uploaded to a secure, password-protected web browser maintained by the equipment manufacturer and available for review by system operators and City Staff at any time through multiple devices. The data remains archived on the site for a period of five years. The potential also exists to transmit this data to the SCADA system, which is also a component of this ECA.

The flow monitoring units identify flow patterns that may lead to an SSO by first analyzing the recorded data over an initial period following installation, and establishing a "routine" system flow curve for that

location. Once established, the units utilize the routine system flow curve to detect periods of "non-routine" flow.

If "non-routine" flow patterns are detected, alerts are sent to system operators and City staff via cell phone and email, prompting a response, and allowing for pre-emptive and/or expedited actions to be taken.

An example of a "non-routine" flow scenario would be an upstream SSO in which less sewage is flowing to the downstream meter, or a downstream pipe blockage in which flow past the meter is restricted or stopped due to the blockage. The result would be a "*low-flow*" alert to system operators and City staff. Conversely, a sudden increase of flow, resulting from stormwater inflow or downstream blockage, would result in a "*high-flow*" alert to system operators and City staff.

In addition to monitoring flow patterns within the collection system, the units are capable of detecting the sewage level within the manhole. If sewage levels exceed pre-specified elevations, indicating the possibility for an SSO, the units will send a "high-level" alert to system operators and City Staff. The units also send alerts following unauthorized removal of the manhole covers, presumably for illegal dumping of waste.

Because the monitoring units provide continuous sensing and data recording of wastewater flows within the collection system during routine and non-routine flows, the City will receive the added benefit of gaining a better understanding of the system's capacity and the flows that its collection system can handle, where possible limitations may be in the system, and why those limitations exist. In the event of an SSO, the flow monitor units may also benefit the City during spill volume estimation procedures.

Upon conclusion of the ECA, the City will have the means to improve monitoring of the City's collection system and to reduce and/or prevent SSOs through expedited and/or preemptive response.

The proposed SCADA system installed under this ECA project will provide an integrated platform for monitoring and controlling the Taft WWTP. If feasible, the system will also provide a centralized method of monitoring the planned collection system flow measurement stations, as discussed previously. With respect to the WWTP, the system is anticipated to include the following elements, depending upon those included in the WWTP Maintenance Project, which is utilizing a USDA loan to fund the non-ECA improvements:

- a. Installation of a centralized computer system with open-source SCADA software and secure remote access via internet or smart phone. The system will include provisions for viewing, modifying, and trending key data points as described below, and will have the

additional functionality of triggering maintenance activities based on system trends such as water levels, run time on mechanical equipment, and apparent calibration float.

- b. The WWTP headworks area that is being replaced by the Maintenance Project will be monitored for the following:
 - i. Water level with associated alarm setpoints;
 - ii. Screen status and alarms; and
 - iii. Influent flow.
- c. The pond aeration system and dissolved oxygen (DO) monitoring equipment will be installed as part of the Maintenance Project, and the following items will be monitored and/or controlled by the SCADA system:
 - i. Pond blower status and amperage;
 - ii. Diffused air header pressure; and
 - iii. DO levels.
- d. The final effluent storage pond and irrigation pump system will be monitored including:
 - i. Effluent pond level and stored/remaining volume;
 - ii. Irrigation pump run status and amperage; and
 - iii. Irrigation flow.
- e. The power and building management systems for the WWTP (if constructed as part of the WWTP Maintenance Project) will also be monitored specifically for the loss of plant power including:
 - i. Generator and automatic transfer switch status and alarms.

3. Project Goals. The City's ECA project has two primary goals.

- a. To reduce the volume of future potential sanitary sewer overflows from the City's collection system by installing real-time continuous sewage flow monitoring devices capable of sending advisory alerts to system operators and City staff when flow conditions indicate the likelihood for an SSO; and
- b. To provide an integrated SCADA platform for improved monitoring and control of the Taft WWTP.

4. Detailed Plans for Achieving the Goals.

Although minor variations may occur throughout the duration of the project, the following detailed plan indicates how the primary goals of this project will be achieved on the timeline and for the costs set forth in the Project Milestones and Budget section below.

RAFMA

- a. Research and evaluated available remote area flow monitoring and alarming units for the City's wastewater collection system. This task has recently been completed.
- b. Purchase and install the specified flow monitoring devices at remote and/or environmentally sensitive locations on the City's collection system.
- c. Utilize the continuous sensing and data recording functions provided by the specified flow monitoring devices to better monitor system flows, particularly in remote locations of the City's collection system where an SSO is more likely to go unnoticed and unreported.
- d. Receive and respond to alerts provided by the specified flow monitoring devices in a timelier manner than conventional responses where the response is dependent upon an "eyewitness" to first observe, and then report the SSO.

Upon completion, the City will take ownership of the monitoring units and submit a final ECA report declaring completion of the RAFMA portion of the ECA project and detailing the fund expenditures and goals achieved.

SCADA System

- a. The City will solicit proposals from one or more qualified Engineering Design Consultants to:
 - i. Design the SCADA system;
 - ii. Prepare technical specifications for the SCADA system purchase and installation;
 - iii. Assist with the public bidding process; and
 - iv. Provide construction management support services during award of contract and installation of the SCADA system
- b. The City and Design Consultant will evaluate proposals received under item (a) above and award a contract for the services listed.
- c. The Design consultant will then prepare a Plans, Specification, and Estimate (PS&E) package for public bidding by the City.
- d. Following completion of the PS&E package, the City will bid the PS&E package and award a contract to a qualifying bidder for purchase and installation of the SCADA system.
- e. The Bidder awarded the PS&E contract will furnish, install, tests and train City staff on the use of the SCADA equipment in conformance with PS&E contract awarded.

- f. Upon completion, the City will take ownership of the SCADA system and submit a final ECA report declaring completion of SCADA portion of the ECA project and detailing the fund expenditures and goals achieved.
- g. It should be noted that a number of SCADA inputs as well as a portion of the SCADA infrastructure not included as part of the ECA will be constructed by the WWTP Maintenance Project that is being funded with a USDA loan. The process of obtaining the loan has been lengthy and as a result the timing of the start of construction has been difficult to estimate. Since the SCADA and WWTP Maintenance Project are intertwined, extensions of the timelines may be needed, and approval for such extensions will not be unreasonably withheld by the Regional Water Board.

F. Compliance with ECA Criteria:

- 1. Benefit to Water Quality and Beneficial Uses.** The RAFMA portion of this project provides the means for system operators and City Staff to receive alerts via cell phone and email during "non-routine" flow scenarios within the City's sewer collection system that may indicate the likelihood of an SSO.

Arriving onsite prior to, or shortly after the initiation of an SSO will benefit surface water quality and beneficial uses by decreasing untreated sewage spill potential and/or volume from the City's collection system.

Alerts sent following unauthorized removal of the manhole covers at the monitoring locations, presumably for illegal dumping of waste, provide additional benefit to the adjacent water quality and beneficial uses by allowing the City early notice and the ability to respond to manhole access alerts. This not only can assist with water quality, but also public health and safety to prevent accidents related to unauthorized manhole access.

The flow meter units will also be beneficial for analyzing Inflow and Infiltration (I&I) volumes following significant rain events. This information can be used to determine and mitigate the source(s) of I&I.

Treated effluent from the City's WWTP is discharged from the WWTP and applied to irrigated farm land. The SCADA project will benefit surface and ground water quality and beneficial uses by providing more improved system performance and reliability of the treatment process at the WWTP.

Aside from providing control measures, SCADA systems also perform monitoring, data logging, alarming, and diagnostic functions, which will benefit WWTP effluent monitoring.

2. **ECA is not an Obligation of Discharger.** The City has not been required to develop, implement, or fund the RAFMA or SCADA portions of this ECA project by any permit, order, or local, state, or federal law.
3. **No Fiscal Benefit to Water Board.** The ECA project including the RAFMA and SCADA does not provide any fiscal benefit to the Central Valley Regional Water Quality Control Board (RWQCB), or fund any functions, members, or staff of the RWQCB.
4. **Nexus between Violation and ECA.** A nexus exists between the City's spill violation and the RAFMA and SCADA portions of this ECA project.

The remote area flow monitors are intended to provide continuous monitoring of the collection system wastewater flow and alerts to system operators and City staff during periods of "non-routine" flow, including flow scenarios similar to those that contributed to the March 2013 sewer spill. Installing a system that provides round-the-clock monitoring and notification of non-routine flow scenarios that have the potential to lead to or indicate an SSO flow will prevent/reduce the amount of future sewage spills from the City's collection system.

The SCADA system is intended to provide improved monitoring and controlling of the treatment works at the Taft WWTP, resulting in improved system performance and reliability prior to discharge of treated effluent to land and thereby preserving ground water quality and beneficial uses.

5. **Plans to Continue or Maintain the ECA Beyond the ECA Funded Period.** The City does not intend to purchase additional RAFMA or SCADA units beyond the ECA-funded period described herein.

Ongoing use of the flow monitoring devices requires an annual service fee to be paid to the manufacturer for the web-enabled monitoring and alerting services provided. These fees are required over the entire life of the units. The batteries that supply the sole source of power to the remote area units must be replaced annually. The City intends to maintain the units for the duration of their useful life, including battery replacements and the annual subscription to the web-enabled monitoring and reporting.

The City intends to maintain the SCADA system for the duration of its useful life outside and separate of this ECA. Operations and Maintenance (O&M) funds are not included in the anticipated project expenses identified in Section H of this proposal.

G. Key Personnel Involved in ECA:

1. The City's management, staff, and engineering consultants, have developed this ECA project.
2. The City's management, staff, and contracted system operators will oversee and/or implement this ECA project.
3. The City's management, staff, and contracted wastewater system operators, will maintain RAFMA and SCADA systems following completion of the ECA project.

H. Project Milestones and Budget:

The total adjusted monetary assessment of the City's liability under the RWQCB enforcement action paid in the form of the ECA is **\$120,000**. The remainder of the \$250,000 Administrative Civil Liability will be paid per the Stipulated Order.

RAFMA Portion of ECA

The City will fund the RAFMA purchase and installation in the anticipated amount of \$41,000.00. This amount represents approximately 33% of the total adjusted monetary assessment of the City's liability under the RWQCB enforcement action. The RAFMA purchase and installation will include the following milestones, measured from the effective date of the settlement agreement authorizing the ECA (ECA Effective Date).

Task 1: Equipment Purchase

This task provides for the equipment purchase necessary to implement the RAFMA project. Under this task, the City will allocate necessary funds for this portion of the ECA project, coordinate equipment purchase with vendor, and submit a purchase order to vendor for delivery and installation of equipment. This task is estimated to be completed within **45 days** from the ECA Effective Date.

Task 2: Equipment Delivery

This task consists of equipment delivery and installation. The equipment vendor indicated that delivery of equipment will be made 6 weeks following receipt of purchase order provided under Task 1 and receipt of complete engineering and site information as requested by vendor. This task is estimated to be completed within **60 days** from completion of Task 1.

Task 3: Equipment Installation

This task provides for equipment receiving and installation. Installation will be performed by the equipment vendor and coordinated with the City's contracted system operators. This task is estimated to be completed within **21 days** from completion of Task 2. Upon completion of this task, a final RAFMA ECA project report will be prepared and submitted declaring such completion and detailing the fund expenditures and goals achieved on the project.

Total RAFMA purchase and installation duration is estimated to be **20 weeks** from the ECA Effective Date.

An itemized breakdown of expenses for this portion of the ECA project is provided below.

<u>Description</u>	<u>Unit Qty</u>	<u>Unit Price (EA)</u>	<u>Extended</u>
SmartFLOE Unit	10	\$3,476	\$34,760.00
Stabilizer Platform	10	\$595	\$5,950.00
Shipping and Handling	-	-	\$200.00
Total Estimated RAFMA Cost*			\$40,910.00

* Does not include tax if applicable

The final ECA report submitted by the City at the conclusion of this RAFMA portion of the ECA project will detail the actual funds expended under this part of the ECA.

SCADA Portion of ECA

The City will fund the SCADA portion of the ECA Project in the anticipated amount of \$80,000.00. This amount represents approximately 67% of the total adjusted monetary assessment of the City's liability under the RWQCB enforcement action. The SCADA Project will include the following conceptual milestones, measured from the ECA Effective Date.

Task 1: Retain Engineering Design Consultant

This task allows for the retention of a qualified Engineering design consultant to prepare the Plans Specifications & Estimate (PS&E) Contract documents discussed under Section E.4 above, assist with PS&E contract bidding, and provide construction management support during installation. This process is estimated to be completed within **60 days** from the ECA Effective Date.

Task 2: PS&E Preparation by Engineering Consultant

This task consists of the preparation of a PS&E package for the SCADA purchase and installation. This task is estimated to be completed within **60 days** from completion of Task 1.

Task 3: Contract Bidding and Retention of Contractor for Installation

This task provides for public bidding of the PS&E contract documents utilizing Qualification-Based Selection procedures. Bids received will be analyzed by the City and Engineering Consultant and a contract will be awarded to a qualifying bidder. This task is estimated to be completed **90 days** from completion of Task 2.

Task 4: Install SCADA System

This task provides for the installation, testing, and startup of the SCADA system. This task also provides for construction management support from the engineering consultant. Upon completion of this task, a final SCADA ECA project report will be prepared and submitted declaring such completion and detailing the fund expenditures and goals achieved on the project. This task is estimated to be completed within **60 days** from completion of Task 3.

The SCADA purchase and installation is estimated to be approximately **52 weeks** from the ECA Effective Date.

A summary of the anticipated project expenditures for the SCADA portion of the ECA is provided below.

Design, Specifications, Bidding, and Construction Management:	\$5,000.00
SCADA installation, commissioning, and training:	<u>\$75,000.00</u>

Total Estimated SCADA Cost \$80,000.00

The final ECA report submitted by the City at the conclusion of this SCADA portion of the ECA project will detail the actual funds expended under this part of the ECA.

I. Reports to the Regional Water Quality Control Board

The City intends to comply with reporting requirements associated with the ECAs. The City understands that quarterly reporting requirements apply to an ECA greater than one-year in duration and that final close-out reporting is required upon completion of each ECA.

As noted under Section H of this proposal, the RAFMA ECA project is scheduled to be completed 20 weeks after the ECA effective date.

The SCADA ECA project is scheduled to be completed 52 weeks from the ECA Effective Date. As a result, the City does not anticipate the need for quarterly periodic report submissions for this project, but will submit a close-out report to the RWQCB as required by Section IX of the May 2010 SWRCB Water Quality Enforcement Policy upon completion of each portion of the ECA project (RAFMA and SCADA) declaring the project completion and detailing fund expenditures and goals achieved.

J. Additional Funding Sources

The City does not believe that this project qualifies for additional funding sources through local, state, or federal programs. A USDA loan is being used to construct the improvements associated with the WWTP Maintenance Project and is providing some of the infrastructure that the SCADA system will utilize.

K. Project Compliance with CEQA.

Work completed on this ECA project is limited to internal portions of the City's sewer collection system and the City's WWTP process units. Pursuant to 14 C.C.R. §15061(b) (2) and (3) and §15301 (existing facilities), environmental impacts are not anticipated from this ECA project.