

DRAFT

Water Operations Tri-Annual Inspections Review

Prepared for
City of Rialto

November 2016

WEST YOST

ASSOCIATES
Consulting Engineers

619-20-15-13

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W A T E R W A S T E W A T E R S T O R M W A T E R

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A handwritten signature in blue ink, appearing to read "Momcilo Savovic".

Momcilo Savovic, P.E.

11/03/16

Date

A handwritten signature in blue ink, appearing to read "K. Whatley".

QA/QC Review: Kristen Whatley, P.E.

11/03/16

Date





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- Appendix B: City of Rialto Water Infrastructure Facilities Photographs
- Appendix C: Rialto Water System SCADA Report



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List of Acronyms and Abbreviations

AQMD	Air Quality Management District	13
BLF	Baseline Feeder	32
CA	Concession Agreement	1
CCR	California Code of Regulations	32
CCR	Consumer Confidence Report	39
CFR	Code of Federal Regulations	31
City	City of Rialto	8
CM	Construction Manager	23
CMMS	Computerized Maintenance Management Software	4
CRWQCB	California Regional Water Quality Control Board	13
CWA	Clean Water Act	31
CWC	California Water Code	31
DBP	Disinfection Byproduct	39
DDW	Division of Drinking Water	37
DLR	Detection Limit for Reporting	34
DSD	Detailed Statement of Deficiencies	7
EDT	Electronic Data Transfer	37
EHS	Employee Health and Safety	22
ELAP	Environmental Laboratory Accreditation Program	23
FIP	Facility Improvement Project	4
GIS	Geographic Information System	5
GPM	Gallons Per Minute	27
HAA5	Total Haloacetic Acids	35
HP	Horse Power	27
kW	Kilowatts	19
MCC	Motor Control Center	25
MCL	Maximum Contaminant Level	38
MG	Million Gallons	28
mg/l	Milligrams per Liter	34
NA	Not Applicable	34
ND	Not Detected	34
NTU	Nephelometric Turbidity Unit	38
O&M	Operations and Maintenance	9
Operator	Veolia West Operating Services, Inc.	1
ORWTP	Oliver Roemer Surface Water Treatment Plant	32
OR&R	Operating Repairs and Replacement	20
OSHA	Occupational Safety and Health Act	20
OWAM	Oracle Utilities Work and Asset Management	4
P/A	Present or Absent	34
PCE	Perchloroethylene	39



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PHG	Public Health Goal	39
Plan	Tri-Annual Inspection Review Plan	1
SBVMWD	San Bernardino Valley Municipal Water District	8
SCADA	System Control and Data Acquisition	25
TCE	Trichloroethylene	39
TDS	Total Dissolved Solids	7
TTHM	Total Trihalomethanes	35
ug/L	One Microgram per Liter	31
USEPA	The US Environmental Protection Agency	52
VOC	Volatile Organic Compound	31
West Yost	West Yost Associates	2
WVWD	West Valley Water District	37

Water Operations Tri-Annual Inspections Review



EXECUTIVE SUMMARY

In 2012 the City of Rialto and Rialto Water Services/Veolia entered into a service contract known as the Concession Agreement (CA) for the design, construction, and financing of capital improvement upgrades and the operation and maintenance of the Rialto Utility Authority Wastewater Facility and Water Facility. The CA was signed into effect in May of 2012.

Section 11.1 (r) (Page 132 of CA) states *“Commencing upon the third anniversary of the Effective Date, and every third year thereafter during the Term, the Authority shall perform a full-scale inspection and review of the state of repair, working condition and performance capability of the Water Facility, including testing of equipment to determine its physical and operational conditions, and inspection of the general status of repairs of all equipment and structures, grounds, utility lines, spare parts, inventories, and operation, maintenance, repair and replacement records...”*. Tri-Annual Inspections Report is the acronym adopted to describe the activities in this section of the CA, and it is used throughout this report.

A Tri-Annual Inspection Review Plan (Plan) for the sewer and water utility operations and maintenance activities was prepared by the West Yost Associates (West Yost) and submitted to Veolia West Operating Services, Inc. (Operator) on January 18, 2016. The purpose of the Plan was to reach an agreement on a protocol for the Tri-Annual Inspection Review of the water facilities as provided for in Section 11.1 of the CA. The Plan is based on good industry standards and available public domain information for typical inspection procedures. A list of public domain publications is attached at the end of the Tri-Annual Inspections sewer report (the term “water report” is used throughout this report for the Tri-Annual Inspections water report and the term “sewer report” is used throughout this report for the Tri-Annual Inspections sewer report). The objectives of the review are to verify that the Operator has met the compliance requirements in the CA related to, operations, maintenance, renewal and replacements, spare parts and other compliance requirements.

The Plan developed the following tasks based on the terms and conditions of the CA:

- Full-scale inspection and review of the state of repair;
- Working condition and performance capability of the Water Facility, including visual equipment inspections to determine physical and operational conditions;
- Inspection of the general status of repairs of all equipment and structures, grounds, utility lines, spare parts, and inventories;
- Operation, maintenance, repair and replacement records and asset management practices to ascertain on a comprehensive and focused basis the extent to which the Water Facility is properly maintained, repaired and replaced in accordance with the CA; and,
- Concurrent review of all relevant data, records and reports.

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The Tri-annual Water Facilities Inspections report (water report) makes reference to following common sections or appendices in Tri-annual Sewer Facilities Inspections report (sewer report):

- Assumptions regarding CA and Contractor's performance of its responsibilities is in the Executive summary. Relevant assumptions apply for water infrastructure
- Asset management practices in Section 2.3.1
- Billing and customer services in Section 5
- Referenced Appendices from Tri-annual Sewer Facilities Inspections report
 - Appendix A: Final Asset Management Document Review Observations
 - Appendix B: The City of Rialto Tri-Annual Water and Sewer Infrastructure Review Plan DRAFT
 - Appendix C: Veolia Dropbox file folder screenshot
 - Appendix G: Operating Repair and Replacement Funds Report

This Tri-Annual Water Facilities Inspections Report was prepared in accordance with Section 11.1 (r) of the CA detailing deficiencies found and requiring of the Concessionaire to submit a plan of remediation. These recommendations can be found in "Section 6 Statement of Deficiencies" of this report.

Summary of Findings

A Summary of key findings has been extracted from the report for the ease of review. Key issues are identified based on a review of operational data, provided documentation including monthly and annual reports, verbal information shared during the field visits by Operator personnel and application of professional judgment as it relates to industry practices.

- **Overall Performance:**



During our inspection, West Yost found that the services the Operator has rendered to be in general conformance with all the requirements of the CA and with good industry practices except in the adoption and performance of asset management practices where they did not deliver the committed scope. The existing facilities are in varying degrees of age, but remain functional and are maintained and renewed on an as-needed basis with adequate field maintenance effort and maintenance management, except for the vandalized and inactive facilities which the Operator has the responsibility to adequately maintain depending on whether these facilities will be brought back into production at a later date. Based on our inspections and available operational data review, some of these sites that could be brought back into production and could be in a better condition than they currently are.



- **CA Implementation:**



A prudent operator who is entrusted with the responsibility of the operation, maintenance, and management of the Water Facility should have developed a project plan to enact all provisions of the CA based on good industry practices. Veolia did not provide a management plan to enact the CA.

- **Asset Management:**



For Years 2012 through 2014, West Yost reviewed the asset management program provided by the Operator and identified a number of issues summarized in Appendix A of sewer report.



For Year 2015, West Yost reviewed the asset management program provided by the Operator and concluded Veolia started implementation of the major asset management program strategies required in the pertinent CA Articles and Schedules.

- **Maintenance Management Systems**



West Yost was provided access to the Oracle Utilities Work and Asset Management (OWAM) system only. Access to Info Net and other systems was not provided. We could not confirm OWAM and InfoNet Geographic Information System (GIS) based mapping systems communication and seamless integration. Some of the noted system functionalities were not proven to be within reasonable best management practices and what would be expected in a fully functional Computerized Maintenance Management Software (CMMS) system. Some of the report contents prepared using OWAM or other report writers such as Optimus did not confirm accurate and acceptable data transfer. Monitoring, documentation, and reporting appear to be lacking necessary technical information that would render the CMMS system as fully reliable. Recommendations are provided in Section 6 to address issues that warrant additional attention.

- **Capital Plan Implementation:**



For Years 2014 through 2015, West Yost Associates found that the development and implementation of an updated capital projects list, based upon the Operator's asset condition assessments are non-compliant. The Operator's 2014 through 2015 submittals adopted the Facility Improvement Projects (FIP) as identified in the CA and not a single Capital Improvement Project was included as part of the annual update of the Capital Plan. In addition, the submittals were combined for both water and wastewater. The CA requires a separate submittal for water.

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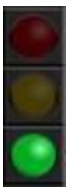
For Year 2016, West Yost Associates found that the development and implementation of an updated capital projects list, based upon the Operator's asset condition assessments are partially compliant. The meter replacement program implemented by the Operator is in compliance with the CA. Separate submittals for water and wastewater were provided.

- **Facility Improvement Project Implementation:**



The water FIP projects have not been completed except for W3 and W7.

- **Water Quality Sampling Services:**



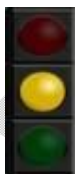
West Yost concludes that the water quality sampling services provided by Veolia are generally performed in conformance with the terms of the CA and the applicable governing rules and regulations. The Operator is in compliance with local and state regulations. The operator shall confirm water laboratory certification update.

- **Structures and Site:**



West Yost found that the Water Facility buildings and structures are in a generally good condition and state of repair, except for the inactive sites such as City Well #5, City Well #3, Rialto Well #2, Rialto Well #1, City Well #6 and active sites such as Easton Reservoir. More information is provided in Table 3-2 in Section 3.6 of this report.

- **Distribution System Maintenance:**



West Yost found that the Operator's use and implementation of the distribution system maintenance program are updated and appropriate for the management of distribution system assets and maintenance. Service lines are being upgraded to copper, and meters and associated appurtenances are being replaced or repaired as deemed necessary. Valves were not exercised prior to 2015. However, they are now being exercised on a regular basis. Fire hydrants are being flushed according to an established schedule.

However, documentation pertinent to these underground assets were not captured in the InfoNet or OWAM systems based on vast street blocks depicted without service lines, meters, and fire hydrants, and thus documentation is incomplete.

- **Maintenance:**



West Yost found, based on the information reviewed with the Operator and the records provided, all of the water systems are generally being maintained in accordance with the requirements of the CA with a couple of exceptions that are listed below:



Identified maintenance issues include but are not limited to:

- The eye and hand wash stations at some sites were not functioning correctly.
- There was poor lighting at the Highland and Easton Reservoirs.
- Booster Pumps 1 and 2 were completely vandalized and in need of repair.
- Disinfection cabinets require painting.
- A valve exercise program must be fully and consistently implemented.
- Nameplates were missing on important equipment.
- The SCADA system was failing, and updates are not available.

- **Regulatory Compliance:**



West Yost did not identify any water quality issues. However, a sanitary survey conducted by the State Water Quality Control Board (SWQCB) found there were many sampling procedures required by regulations that had not been performed in the years 2013 and 2014. This is being addressed by the Operator and steps are being taken to remedy the situation.

- **Billing Services:**



West Yost found the billing services provided by the Operator to be managed consistent with good industry practices. West Yost found the data as represented to be up to date and the management of the billing database quality was being provided.

- **Payment Delinquency Program:**



West Yost found that the delinquency payment program implemented and managed by the Operator is managed well and consistent with good industry practices.

- **Customer Services:**



West Yost found the customer services provided by the Operator to be managed consistent with good industry practices. However, call center response time and measurements of response statistics should improve to match acceptable industry standards.

- **Emergency Preparedness Plan (CA Article XI (j))**



Not provided, except for the outline in the Annual Report.

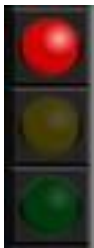
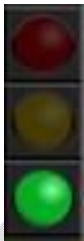
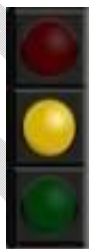
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- **OSHA Compliance Program (CA Article XI (k))**



Not provided, except for the outline in the Annual Report.

Table ES-1. Overall Score Summary		
	Score	Percentage
	6	33%
	4	22%
	8	45%

Based on the Tri-Annual Inspection simple score summary above, it could be concluded that there is room for improvement in the CA implementation, asset management, and document updates. A Detailed Statement of Deficiencies (DSD) is provided in Section 6. The operator should address items identified in DSD Section 6 and provide a remediation plan as described in the CA as “*The remediation plan sufficient to reasonably demonstrate that, if implemented, the Water Facility will be promptly brought into compliance with the requirements of CA. If the Authority accepts the remediation plan, the Concessionaire shall thereupon correct all material deficiencies noted in accordance therewith.*” as outlined in CA Article XI, Section 11.1 (r).