



April 15, 2021

(Via electronic mail)

To:
City of Richmond
Tawfic N. Halaby, P.E.
Interim Director of Public Works
450 Civic Center Plaza
City of Richmond, CA 94804

Subject: March - 2021 Monthly Operations Report

From:
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Municipal Water
VEOLIA NORTH AMERICA
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Mr. Halaby,

Section 5.11 of the 2002 CITY OF RICHMOND WASTEWATER TREATMENT FACILITY CAPITAL IMPROVEMENTS, OPERATIONS, MAINTENANCE AND MANAGEMENT AGREEMENT BY AND BETWEEN THE CITY OF RICHMOND, CALIFORNIA AND VEOLIA NORTH AMERICA (as amended, the "Agreement") states (in part), "*The Company shall submit to the City a monthly progress report detailing work accomplished and an updated schedule. The monthly progress report shall include a summary of work activities during the reporting month, a listing of upcoming work activities, a listing of submittals delivered during the reporting month, a listing of submittals scheduled for delivery the following month, a listing of any permit violations, and an updated schedule which reflects critical path activities. The updated schedule shall set forth major activities and reflect any change in the Company's estimated construction progress schedule from the schedule submitted the prior month.*"

Therefore, the following Monthly Operations Report is being submitted pursuant to Section 5.11 of the Agreement.

Monthly Operations Report: March -2021

- I. Summary of work activities during the reporting month March - 2021
 - a. Safety
 - i. There were no OSHA Recordable Incidents or Lost Time Accidents
 - b. Capital Projects Management
 - i. Baykeeper Settlement Agreement Projects
 1. Year-2 Sewer Pipe Rehabilitation project – Risk Assessment Analysis (RAA) project
 - a. The City decided to stop construction work on this project and utilize O&M emergency pipe segment repairs to fulfill the remaining mileage required under the Baykeeper Order. All initial work authorized by the City under the 2019 RAA project was completed by June 30, 2020.
 - b. Status of project:
 - i. PCO #7 (segment repair at 23rd and Garvin) was approved by the City on June 29, 2020; PCO #34 (segment repair at Barrett/34th Street) was approved by the City on July 22, 2020.
 - ii. All work is complete; a Task Authorization (TA) was submitted to the City for Change Order 1 on 6/24/20; a second TA for Change Order 2 for the above change order work was submitted on 12/7/20 for the City's review along with Change Order 1. CO2 was approved, but Veolia is still waiting for the TA for CO1 to be approved and returned.
 2. Capacity-related sewer projects
 - a. Cutting/Carlson & Hoffman
 - i. The project was substantially complete by the revised completion date of March 15, 2020.
 - ii. All work is complete; a Task Authorization (CO6) for Plan Line Q was submitted for the City's review on September 25, 2020. The work comprised of approximately 383 lf of pipe in Plan Lines Q, R and T, which was initially not done due to easement issues in 2019 but then subsequently reassessed as a full line replacement from the originally bid point repair; it was approved by the City in April 2020 and constructed. What remains is for the City to approve Change Order 6 TA so the contractor can be paid for this work.
 - iii. Project CCTV rework was conducted in October and resubmitted to Veolia in November. Some additional re-CCTV was required in December; QA/QC review by Veolia and the designer, V.W. Housen & Associates, was completed.
 - iv. All CCTV and project as-builts were transmitted to the City on February 16, 2021.
 - b. Macdonald & Virginia

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- i. By the end of December 2020, the contractor WR Forde had installed approximately 17,895 linear feet (13,230 lf Macdonald; 4,665 lf Virginia) of main pipe and laterals. Remaining work is pavement restoration.
 - ii. The project is on schedule and is anticipated to be complete by the end of April 2021.
 - iii. WR Forde staff identified a leaking MH during construction, not planned for repair which requires repair/lining. The City requested a cost proposal to repair/line the MH. Forde provided an estimate and Veolia submitted a TA for Change Order 2 to the City on 2/8/21.
 - iv. Veolia and VW Housen staff completed review of the post construction CCTV and as-built record drawings. Veolia transmitted review comments including corrective work required to the contractor, W.R. Forde.
- c. First Street Design
- i. V. W. Housen & Associates delivered its 100% design drawings of the First Street sewer relief in August. Veolia transmitted copies of the 100% submittal to the City for review on [date].
 - ii. Pursuant to City direction, two pipe segments have been identified as problematic due to operational concerns that they could contribute to SSOs (First and Bissell); these segments were separated out as a separate project in August.
 - iii. The First & Bissell project was posted for advertisement, bids were opened on October 5, 2020; the low bidder was W.R. Forde. This project was approved by Council on November 24, 2020. The project work was substantially complete in January 2021. As-built record drawings were transmitted to the City on 2/19/21. We are waiting on one CO1 TA to be approved prior to finalizing the project.
 - iv. The First Street Relief Sewer and Pipeline Rehabilitation project Pre-bid meeting was conducted on December 4, 2020. Approximately 24 Contractors, subcontractors and suppliers attended the meeting.
 1. Four contractors submitted bids on the project ranging between \$1,938,971 and \$3,028,000.
 2. Veolia recommended the City award the project to the low bid contractor, D'Arcy & Harty Construction, Inc. in the amount of \$1,938,971.
 3. The City awarded this project to the low bid contractor, D'Arcy & Harty Construction, Inc. on 2/16/21.
 4. Veolia and VW Housen staff conducted a preconstruction conference on 3/29/21.
- d. Bush & Hayes Sag

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- e. Veolia submitted a Task Authorization to the City for construction approval on 3/2/21. Veolia submitted a Task Authorization to the City on 3/12/21 for Carollo to perform Engineering Services during Construction (ESDC) and for Engineering Solutions Services (ESS) to perform SRF Support Services for approval.
2. Cogen Project
 - a. The Cogen Project Phase I was ongoing in 2020, with remote meetings continuing due the COVID-19 constraints.
 - b. A draft Basis of Design Report (BODR) was submitted to the City in early June 2020; the City provided initial comments, and Veolia continued its technical review in July.
 - c. The Design Build Entity (DBE, C. Overaa Co.) and Veolia continued review of the subcontract.
 - d. Veolia independently reviewed Overaa's calculations and assumptions for Greenhouse Gas (GHG) reduction during October.
 - e. Veolia submitted the final Basis of Design Report to the City on 11/23/20.
 - f. The DBE submitted a PH I Project Schedule Update to Veolia for review and comment.
 - g. Veolia and Overaa signed a new Agreement to complete Phase I work.
 - h. Veolia approved the revised Phase I schedule update to complete work by July 2021. Veolia submitted the schedule to the City for their information.
 - i. Overaa/HSE progressed the Cogen system design to 75% milestone in March 2021.
 3. The SCADA (Supervisory Control and Data Acquisition) Phase I Project, which replaces the existing SCADA system and maintains the upgrade, was ongoing in July. The Phase I portion is expected to be complete by December 2021.
 - a. Calcon (Subcontractor) continued server integration into the SCADA system, screen construction, rollout of the ignition system usage, functionality test, reports, charts, etc.
 - b. Calcon continued to work on remote site P&IDs in October and November; they also began work on the Bomgar Server, WWTP system PLC upgrades and the Managed Network System, including system design and material procurement.
 - c. Veolia and Calcon designed, ordered, took delivery and programmed SCADA Managed Network System (approximately 21 Industrial Grade, High Performance SCADA network switches) equipment for installation at the WWTP.
 - d. Calcon began installation and commissioning of the Managed Network System (Cisco) switches throughout WWTP facilities. This work is ongoing. Calcon completed the Managed Network System installation, connection and testing in March 2021.

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4. Seismic Evaluation – The City selected ZFA Structural Engineers. The project kicked off on June 30, 2020. July was spent gathering documentation for the project (i.e., past Plant project documentation, record drawings, etc.);
 - a. ZFA continued the preliminary seismic analysis of other WWTP structures included in their scope of work, including Aeration Basins and Digester Facilities.
 - b. ZFA submitted requests to Veolia for SCADA operational data to assist their seismic evaluation of WWTP facilities.
 - c. ZFA submitted a proposal at the request of the City of Richmond and Veolia, to expand their scope of work for the remaining facilities at the WWTP, not included in their original scope of work.
 - d. The City approved ZFA to submit a proposal from Carollo Engineering, for engineering services required to assist ZFA to complete analysis of seismic retrofit options of the primary sedimentation tanks and aeration basins.
 - e. Carollo submitted the proposal in late February and a Change Order TA was prepared and routed for signature; it was delivered to the City on 3/1/21.
 - f. ZFA continued the seismic analysis of WWTP facilities and began cost estimating retrofit options for the Influent Pump Station (IPS) Headworks, Digesters and Pipe Chase facilities.
5. Sludge Thickener Project (Design/Build) – RFQs were received on January 10, 2020, and evaluated on January 21, 2020.
 - a. The final RFP was issued to the Prequalified Contractors on 10/19/20.
 - b. The City notified Veolia that a Workforce Stabilization Agreement (PSA) was in effect with the City, which affected this project. On October 29, 2020 Veolia issued a copy of the PSA to the two (2) short-listed DB firms, so this could be accounted for in their proposal.
 - c. On October 30, 2020, Veolia was notified by Carollo Engineers Project Manager that additional WAS piping and pumps scope of work was required to be added to the RFP. The RFP submittal process was halted until the WAS scope of work is determined and can be included in the RFP through an Addendum. This RFP is currently on hold.
 - d. Veolia issued Addendum 2, including the WAS scope of work developed by Carollo Engineers, Richmond Workforce Stabilization Agreement and revised project (timeline) schedule to the two shortlisted DB firms on December 22, 2020.
 - e. Veolia conducted pre-proposal meetings in January 2021 with each of the short listed firms to discuss the project, answer any questions and review the WWTP site conditions. The RFP is due 3/5/21. The two short listed DB firms submitted Proposals to Veolia on 3/5/21.

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- f. The two DB firms presented their proposals and answered questions submitted by the City, Veolia and Carollo on 3/29/21. The City, Veolia and Carollo are scoring the proposals and will decide on a recommendation to award the Phase I design effort in the coming days.

iv. Storm Water Projects

1. Trash Capture Device –

- a. A new Trash Capture Device project was decided on initially for a Bayview location. This item was presented to the City Council for review and approved in May 2020.
- b. A Task Authorization (TA) for the new installation was submitted to the City by Veolia on July 14, 2020, and it was approved by the City Council on July 28, 2020. The fully executed TA was returned to Veolia by July 30, 2020.
- c. A project topographical survey, which is a critical path item, was completed on August 14, 2020. Site was not selected due to proximity to the road and size of crane needed and size of the device needed. Another site visit was conducted on 9/16/20.
- d. A site survey was completed on 10/5/20 and 10/6/20; another onsite meeting was conducted on 10/13/20. There is bedrock in this location, so it was deemed not feasible. An alternate location is being considered.
- e. Another site survey was completed and preliminary design was present to the City on November 16, 2020.
- f. The City, Veolia, Contech and WR Forde continue to evaluate acceptable sites to locate the trash capture device. A new site at Cutting Blvd & Third St was selected and City, Veolia, Harris, Contech and W.R. Forde staff began project work activities, to facilitate project completion by May 1 2021 (the CalTrans required deadline for grant funds reimbursement).
- g. The contractor, W.R.Forde excavated the site in preparation to receive the manufactured trash capture device. The prefabricated Contec structure was delivered and placed in the open excavation prepared by W.R.Forde. The Trash capture device was delivered and placed onsite. This project is due to be completed by 4/26/21.

v. Other Projects

1. Sewer Master Plan Update

- a. The Final System Evaluation and Capacity Assurance Plan (SECAP) was submitted to the City on November 15, 2019.
- b. The City is planning to have the City Council adopt a report once Baykeeper comments have been submitted.
- c. A meeting to discuss Baykeeper comments with Nicole Granquist of Downey Brand and City staff was held on July 27, 2020. No update for March.

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c. Collections Systems and Wastewater Treatment Plant Operations and Maintenance

i. Collection Systems Operations and Maintenance

1. Baykeeper Settlement Agreement Projects

a. The 2020 RAA was re-submitted to Baykeeper on 5/28/20

- i. Inclusive to Veolia's submission of the 2020 RAA to the City of Richmond, the City of Richmond, in its submission of the 2020 RAA to Baykeeper, requested relief for one year in the requirement to repair an average of 2-miles/year of pipe segments having PACP Grade-5/4 defects such that the funds required for this work could be used instead to address the remaining inaccessible pipe segments reporting in the 2020 RAA as requiring repairs so that the CCTV condition assessment of the entire wastewater collection system can be completed. At present, Veolia-CPM is completing the preparations for a project to address the reported 2020 RAA inaccessible pipe segments; though it has not been determined at this time if whether or not the entire list of inaccessible pipe segments are to be repaired under a single project

1. 4-year-out wastewater system cleaning progress

a. 2004 Service Agreement annual cleaning miles objective = 49.8

- i. 2021 planned hotspot cleanings (altered by the BKSA) and pre-CCTV cleaning = 133.2 actual miles cleaned to date = 15.89
- ii. Actual unplanned various cleanings, i.e., service calls, post construction, etc. = 3.005

2. 10-year-out wastewater system CCTV condition assessment progress

a. 2004 Service Agreement annual CCTV miles objective = 19.7

- i. Grade 4 and 5 miles planned annual condition assessments (altered by BKSA) and 70% or less = 43.3; actual complete = 15.75
- ii. Actual unplanned post construction completed CCTV = .42

b. Total gravity pipe segments in system reporting in InfoNet = 3,645

- i. Pipe segments with CCTV < 10-years and > 70% complete = 3,503
- ii. Pipe segments with CCTV > 10-years = 142
 - 1. (38) are greater than 10 years
 - a. (32) Pipe segments have been attempted but are currently inaccessible due to various reasons. (Cars parked on manholes, private property, etc.)
 - b. (0) are completed and pending data upload
 - c. (6) Segments scheduled but not completed as of Mar 31st
 - 2. (82) have surveys within 10 years but are less < 70% complete
 - 3. (0) pipe segments needing point repairs before CCTV can be completed
 - 4. (22) are Inaccessible due to submerged pipes - Keller Beach

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4. Sanitary Sewer Overflows
 - a. Actual SSO's in February = 0
 - b. Actual SSO's YTD, 2021 = 2
 - i. Permissible by Baykeeper Settlement Agreement = 21 for 2021
5. Customer Service Calls = 17
6. Emergency & Miscellaneous Repairs
 - a. Wastewater point repairs = 7
 - b. Manhole cover repair = 3
 - c. Storm water point repairs = 0
7. Storm water collection system progress
 - a. Customer service calls = 0
 - b. City service calls = 0
 - c. Catch basins cleaned = 7
 - d. Trash capture devices cleaned = 0
 - e. Pipe segment cleaned = 0
 - f. V-ditched cleaned = 0-Ft
- ii. Wastewater Treatment Plant Operations
 1. Permit Violations – None
 - a. Average daily flow = 5.60 MGD
 - b. Max daily flow = 8.80 MGD
 - c. Peak daily flow = 19.4 MGD
 - d. Influent BOD/TSS mg/l = 337 mg/l / 331 mg/l
 - e. Effluent BOD/TSS mg/L = 12.5 mg/l /10.6 mg/l
 - i. Permit Limits for Effluent BOD/TSS mg/L = 30/30
 - f. Effluent Coliform = (Monthly Median) 2 MPN / 100 ml
 - i. Permit Limits for Effluent Coliform = (Monthly Median) 240 MPN /100 ml
 - g. Plant Odor complaints = 0
 2. Non-standard operating conditions - DAFT unit still out of service. Continuing to use the gravity belt sludge thickener. Repair/Replacement parts were delivered and installed at the end of January. After initial testing further repairs were deemed necessary. The three way process/ drain valve which controls the sludge flow to the digester transfer pumps and regulates the settled sludge at the bottom of the daft was not operating properly. After draining the daft and opening the valve up, it was determined that the internals of the valve were mostly corroded away. The new valve was ordered and installed. After filling the DAFT with process water, further testing has uncovered a large hole on the top of the 6" TWAS pipe that sends sludge to a sump pit for transfer to the digesters. Veolia provided pictures to the City on 2/11/21. This pipe is at the end of the Beach trough that runs through the wall into a sump basin. The corroded pipe hole is between the trough and the wall. Veolia received and presented to the City an emergency repair proposal

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from Overaa on 2/17/21. Veolia received written approval from the City to proceed with the repair proposal on 2/23/21. Veolia ordered parts and repairs were completed in March. Testing was successful using process water, so sludge operational testing began the last week of March.

3. Regulatory agency reporting – All standard monthly reports submitted in a timely manner with no exceptions reported back from the regulator

iii. Collection System Pump Station and Wastewater Treatment Plant Equipment/Facility Maintenance

1. Total preventive maintenance work orders completed = 184
2. Total corrective maintenance work orders completed = 31
3. All wastewater treatment plant mission-critical and redundant systems and equipment were observed and/or maintained and/or repaired as scheduled and/or required
4. All Storm and wastewater collection system pump stations were routinely checked and maintained as scheduled
 - a. Storm water pumps stations monitored = 8
 - b. Wastewater pump stations monitored = 15
5. Maintenance projects
 - a. Replaced the upper rubber scum skimmer on Secondary Clarifier #3.
 - b. Cleaned and inspected Chlorine Contact Basin #1 & #2

II. List of upcoming activities

- a. Continue discussions with City staff regarding prioritization and procurement delivery method for various maintenance and construction projects noted previously
- b. Continue planned CPM and O&M activities previously described in section I.b and I.c, respectively, above

3. List of Task Authorizations (TAs) delivered to the City:

- a. CPM
 - ii. 2019-20 Sewer Segment Rehab Project, RAA Year Two Change Order 1 TA – submitted 6/24/20
 - iii. Cutting, Carlson & Hoffman TA Change Order 6 – submitted on 9/25/20
 - iv. Washington Avenue Emergency Sewer Repair – submitted on 1/4/21
 - v. First Street Relief Sewer Project – submitted on 2/1/21
 - vi. Sodium Hypochlorite SHC Design – submitted on 2/1/21
 - vii. Trash Capture – Amendment for New Site – submitted on 2/8/21
 - viii. Macdonald & Virginia Change Order 2 – submitted on 2/8/21
 - ix. Seismic Retrofit Change Order 1 - submitted on 3/1/21
 - x. Critical Improvements Project, Construction - submitted on 3/2/21
 - xi. First Street & Bissell Change Order 1 - submitted on 3/3/21
 - xii. Critical Improvements Project, ESDC and SRF Support Services - submitted on 3/12/21
 - xiii. Sludge Leachate Line Condition Assessment Update - submitted on 3/26/21
 - xiv. 2021 RAA - V.W. Housen Response to Baykeeper - submitted on 3/29/21

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a. O&M

- i. RAA/SECAP/Master Plan TA – Submitted March 27th, COR responded Matter is under dispute
- ii. Boiler Burner #2 TA – Submitted May 20th, COR responded June 3rd. Matter is under dispute.
- iii. NASSCO upgrade from 6.0 to 7 TA – Submitted May 19th, Rejected by the COR on 9/23/20. Matter is under dispute.
- iv. Collection Camera Cable Replacement TA – Submitted on 5/22, COR requested detail on 7/15, we provided on 7/21. Rejected by the City on 9/23/20. Matter is under dispute.
- v. Collection Gas Detectors TA – Submitted 6/23/2020, COR asked further detail on 6/24, we provided requested detail on 6/26, COR asked further detail on 7/21, we provided on 8/10, Rejected by the COR on 9/23/20. Matter is under dispute.
- vi. Portable Sludge Thickener TA – Submitted 8/25/20 – Received written approval by email from Yader on 8/25/20 to order the unit from Synagro while the TA is processed. Have submitted the monthly invoices to the city for the rental unit plus the chemical invoices. Haven't received the signed TA.
- vii. Emergency Sludge Leachate Vault Repair TA - Submitted 2/26/21 - Received written approval by email from Mary/Yader on 2/23/21 to proceed with the engineers design proposal. Work is underway. Signed TA still required.
- viii. Emergency DAFT Sludge Line Repair TA - Submitted 2/26/21 - Received written approval by email from Mary/Yader on 2/23/21 to proceed with the repair proposal. Work is underway. Signed TA still required.

IV. List of submittal scheduled for the following month

- a. To be determined

V. Listing of Permit Violations

- a. None

VI. Updated critical path schedule

- a. There are no current projects operating under a critical path method of delivery

VII. Other Project Discussion

a. CPM

- i. None

b. O&M

i. Rolling Stock Inventory

- a. Audit completed and provided to the City on May 19, 2020. Review and recommendations provided to the City on August 24, 2020
- b. Veolia is renting and/or leasing any rolling stock inventory that is needed to perform the daily operations of the system and will continue to bill the City until the City can provide the necessary Vehicles as per the contract for Veolia to perform the work

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- c. Veolia provided the new Vactor truck specs and quote on November 25, 2020 as requested. As per previous conversations, we have provided specs/quotes for a new push camera on Dec 10 and for the new Camera truck and Jetter truck on Dec 13.