



August 18, 2021

(Via electronic mail)

To:  
City of Richmond  
Joe Leach, P.E.  
Director of Public Works  
450 Civic Center Plaza  
City of Richmond, CA 94804

Subject: July - 2021 Monthly Operations Report

From:  
Brian K. Bruce  
General Manager, Veolia-Richmond  
Municipal Water  
VEOLIA NORTH AMERICA  
601 Canal Boulevard, Richmond, CA 94804

Dear Mr. Leach,

The following Monthly Operations Report is being submitted pursuant to 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 WATER WEST OPERATING SERVICES, INC.

- I. Summary of work activities during the reporting month July - 2021
  - a. Safety
    - i. Monthly safety training was accomplished for all personnel
    - ii. Covid-19 restrictions require mask indoors for all employees and visitors
  - 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 2021 remaining mileage required under the Baykeeper Settlement. All initial work authorized by the City under the 2019 RAA project was completed by June 30, 2020
        - b. Status of project:
          - i. 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

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along with Change Order 1 to address additional costs incurred due to differing site conditions. CO2 was approved 12/10/20; CO1 was approved and returned on 7/1/21. This is the final MOR update for this project.

## 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 consisted 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.
- iii. All CCTV and project as-builts were transmitted to the City on February 16, 2021. The Change Order 6 TA was approved and returned to Veolia on August 4, 2021. This is the final MOR update for this project.

### b. Macdonald & Virginia

- 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. Pavement restoration and striping were completed in April 2021.
- ii. 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. Change Order 2 was executed and returned to Veolia on 4/8/21.
- iii. 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.
- iv. The leaking manhole was patched and new epoxy lining applied 5/20/2021. The remaining corrective work identified in the post CCTV videos was completed June 30, 2021. This is the final MOR update for this project.

### 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 8/19/20.

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- 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 2020. The First and Bissell Project construction was completed in January 2021.
- iii. 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. The City awarded this project to the low bid contractor, D'Arcy & Harty Construction, Inc. on 2/16/21.
  - 2. Veolia and V.W. Housen staff conducted a preconstruction conference on 3/29/21.
  - 3. In April 2021, D'Arcy & Harty submitted traffic control plans and started pre-CCTV inspections.
  - 4. Force Majeure conditions declaring shortage of C-900 PVC pipe after D'Arcy & Harty's bid was received were submitted as Change Order 1, which was approved by the City on May 24th.
  - 5. Notification to residents and sewer line replacement to commence in July 2021.
  - 6. NTP effective date June 14, 2021. Work commenced in Field on July 14, 2021.
  - 7. TA for Change Order 2 to remove and replace a manhole approved by the City and returned 8/4/21.
- d. Bush & Hayes Sag
  - i. The City authorized W.R. Forde to complete the work; all work was completed on July 17, 2020.
  - ii. A change order TA was submitted to the City on June 24, 2020; a signed TA was approved and returned on July 1, 2021. This is the final MOR update for this project.
- e. Marina Bay Parkway Force Main Extension Project (aka Moody Underpass)
  - i. V.W. Housen completed design and delivered 100% design documents to Veolia for review on 2/22/21.
  - ii. Veolia and V.W. Housen staff conducted a mandatory pre-bid conference on 2/26/21. The City posted this project for advertisement for public bid on PlanetBids website on 3/15/21.
  - iii. Four (4) bids were received 4/23/21 ranging from \$357,200 to \$589,000. Veolia has recommended the City award the contract to the low bidder W.R. Forde. A TA was sent to the City on May 6, 2021. The Resolution for this project was approved at the June 15, 2021 City Council Meeting.

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- iv. PreConstruction Conference held Tuesday August 10, 2021. The Contractor is preparing the schedule, traffic control plan and other submittals. Community Outreach is being conducted by Jacqueline Majors Associates. .
  - ii. Wastewater Treatment Plant Projects
    1. The Grit/Screening and Aeration Upgrade Projects (as part of the Critical Improvements High Priority Project) was advertised for bidding on PlanetBids on September 15, 2020.
      - a. The TA for Construction was approved and returned to Veolia on 4/2/21; the TA for ESDC and SRF Support Services was approved and returned to Veolia on 4/27/21.
      - b. Carollo conducted EADOC project document control introduction and protocol training for the City, Veolia, Carollo, ESS and Shimmick staff in April.
      - c. Shimmick Construction began mobilizing to the worksite in May, submitting RFI's and submittals through the EADOC document management system and scheduling contract work, including AC grinding, clearing and grubbing in advance of hazardous materials remediation and building demolition.
      - d. Restec began hazmat remediation work onsite on DAFT #1, Digesters #1 & #2. and at the Solids Handling Building, in advance of demolishing these facilities.
      - e. Shimmick procured and has begun setting up the temporary odor scrubber in advance of decommissioning the existing biofilter.
      - f. Shimmick continues submitting contract required documentation through EADOC.
      - g. Restec is doing hazmat remediation work on the old grit facility, the old sludge handling building and the DAFT #1. This includes lead paint removal, asbestos removal (the grout for the glass blocks and the gaskets for some of the pipes contain asbestos) and PCB's.
      - h. Veolia, Carollo and Shimmick agreed to begin weekly site meetings to review construction progress and discuss potential u/g conflicts to facilitate work in progress. Veolia began weekly reporting to the City on Changed Conditions Extra Work on the project on 6-28-21.
      - i. The City, Veolia, Carollo and Shimmick continue to meet weekly to discuss the Baseline Schedule submittal, which shows the detailed breakdown of the key project tasks and timelines for completing these task components, and thus the overall project. Veolia is finalizing comments on the Baseline Schedule submittal and Shimmick's Baseline Schedule submittal was returned with comments to Shimmick on 7-16-21.
      - j. Ferma (Shimmick's demolition subcontractor) is working on demolition of the old digesters and the Elutriation Tanks. Shimmick is working on isolating the rest of the buildings that are scheduled for

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- demolition, including the solids handling building, DAFT 1 and electrical building # 4.
  - k. Shimmick began excavating to connect the bypass piping and to remove the existing biofilter. Shimmick began hauling the excavated materials during the week of 8-2-21. Shimmick continues clearing existing utilities from the new blower building location.
2. Cogen Project
- a. Veolia submitted a TA for BAAQMD permit revisions for this project on 4/5/21 and then resubmitted a revised TA with additional proposals on 4/27/21; the TA is under review and expected to go to City Council.
  - b. Veolia and the DB team conducted several workshops to define/clarify 75% design review comments to be incorporated into the final 100% design.
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. 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.
  - b. 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.
  - c. Calcon continued to work on SCADA alarms and P&ID drawings in May.
  - d. Veolia submitted and the City approved the change order request (#3) on 7-22-21 to upgrade the Wet Weather Station panel view controls and include SCADA system programming, allowing for data screen access reporting. Veolia Staff are working on amending the PSA for Calcon.
4. Seismic Evaluation – The City selected ZFA Structural Engineers. The project kicked off on June 30, 2020. The next month was spent gathering documentation for the project (i.e., past Plant project documentation, record drawings, etc.);
- a. 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.
  - b. 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.

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- c. 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.
  - d. TA for ZFA to begin design work with Carollo was approved by the City on May 4, 2021. ZFA and Carollo started design review work for the primary sedimentation tanks and aeration basins.
  - e. A second TA for ZFA to perform analysis of adding a two-leaf door in the Chlorine Building was also approved by the City on May 4, 2021.
  - f. ZFA submitted/presented the final BODR to the COR on 6/25/21. The City accepted the final BODR with review comments incorporated into the report. Work on this project is completed as of 6/30/2021.
  - g. The City agreed to notify Veolia and ZFA on the status of the upcoming approval of the Seismic Analysis PH II project through the City budget process, beginning 7/1/21. Veolia submitted the Seismic Analysis PH II TA to the City on 7/13/21.
5. Sludge Thickener Project (Design/Build) – RFQs were received on January 10, 2020, and evaluated on January 21, 2020.
- a. 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.
  - b. 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 (Myers & Sons, Inc. and Overaa Construction).
  - c. Veolia conducted pre-proposal meetings in January 2021 with both 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.
  - d. 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 scored the proposals and decided on a recommendation to award the Phase I design.
  - e. The City selected Myers & Sons/Lee & Ro for Phase I design. A TA was submitted to the City on May 17, 2021 and returned approved on 7/1/21.
  - f. Veolia is preparing and will submit a construction agreement to the City selected DB firm, Myers & Sons Construction following City approval of the TA.
  - g. Veolia submitted the TA to the City on 5/17/21 for Design only, which was approved and returned 7/1/21; TA for ESDC to follow.
  - h. Veolia drafted and issued the subcontract to Myers & Sons on 7-29-21 for its review and approval.

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## 6. Critical Plant Projects - SBS (Chemical Building) Facility

- a. West County is proceeding with design utilizing Carollo Engineers. Construction will be done by Veolia.
- b. Carollo conducted a Design Camp in September 2020 with WCS, COR and Veolia staff in attendance, focusing on SBS Facility design preferences, allowing the designer to proceed to the 50% design stage.
- c. Carollo submitted the 50% design on 10/23/20.
- d. Discussion on the possibility of upgrading the old and troublesome CL2 system as part of the City's portion. Brian communicated with Aaron Winer at West County; Aaron is in agreement with this approach if the legal team is OK with the approach.
- e. WCA and the City approved in a 1/4/21 conference call meeting for Carollo to submit a Proposal for design services including an SBS emergency generator and a Chlorine Building Chlorine System upgrade;
- f. Veolia submitted a TA to the City on 2/1/21 for the SHC Design by Carollo.
- g. WCA, the City, Veolia and Carollo met to confirm advertising/bidding requirements for the SBS/SHC project.
- h. WCA has requested this project be advertised and awarded for construction as soon as possible. Veolia will work with the COR to accomplish the advertisement/award process.
- i. The project was posted to advertise on PlanetBids on 4/30/21.
- j. Addendum 1 was issued by Veolia and posted to PlanetBids on 5/10/21.
- k. Veolia conducted a mandatory prebid site walk on 5/18/21.
- l. Addendum 2 was issued by Veolia and posted to PlanetBids on 5/18/21.
- m. The bid proposal period ended on 6/18/21. There were four bidders on the SBS Facility Improvements Project, ranging from \$4,738,888 to \$6,701,000. Myers & Sons Construction was the apparent low bidder with their submitted bid of \$4,738,888.
- n. Veolia evaluated the bids and recommended the City award the project to the apparent low bidder, Myers & Sons in the amount of \$4,738,888. On 7-2-21, Veolia recommended the City award this project to the apparent low bidder, Myers & Sons Construction Company; and on 7/27/21, the City awarded the SBS Facility Improvements Project to Myers & Sons.
- o. Veolia prepared and submitted a TA to the City on 8/2/21 for its review and approval. The TA was approved by the City on 8/4/21.

## iii. Storm Water Projects

1. Trash Capture Device –

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- a. Other locations are currently being considered by the City and Caltrans for additional Trash Capture Device Installations. A TA is being drafted for a new installation.
- c. Collections Systems and Wastewater Treatment Plant Operations and Maintenance
  - i. Collection Systems Operations and Maintenance
    - 1. 4-year-out wastewater system cleaning progress
      - a. 2004 Service Agreement annual cleaning miles objective is 49.8 miles
        - i. 2021 planned hotspot cleanings (altered by the BKSA) and pre-CCTV cleaning is 133.2 miles. The total cleaned year to date is 86.230 miles
        - ii. The unplanned cleanings, e.g., service calls, post construction, etc. is 11.36 miles
      - 2. 10-year-out wastewater system CCTV condition assessment progress
        - a. 2004 Service Agreement annual CCTV miles objective is 19.7 miles
          - i. Grade 4 and 5 miles planned annual condition assessments (altered by BKSA) and 70% or less is 43.3 miles. The total complete year to date is 28.89 miles
          - ii. Unplanned completed post-construction CCTV is 1.22 miles
        - b. Total gravity pipe segments in system reporting in InfoNet is 3,645
          - i. Pipe segments with CCTV < 10-years and > 70% complete is 3,527
          - ii. Pipe segments with CCTV > 10-years is 118
            - 1. (18) are greater than 10 years
              - a. (5) need cleanouts changed to manholes or to be reevaluated when the new push camera arrives
              - b. (4) Need Contractor to pothole and locate
              - c. (3) Bypass required due to pipe surcharged
              - d. (2) Need City to obtain Railroad Permit
              - e. (2) Need Contractor to excavate and locate assets
              - f. (2) Point Repairs required - Scheduled for completion in August
            - 2. (78) have surveys within 10 years but are less < 70% complete and are on the inaccessible list.
            - 3. (22) are Inaccessible due to submerged pipes - Keller Beach
      - 4. Sanitary Sewer Overflows
        - a. Actual SSO's in July: 3
        - b. 2021 Actual SSO's, YTD: 9
          - i. 2021 Permissible SSOs per Baykeeper Settlement Agreement: 21
      - 5. Customer Service Calls = 16
      - 6. Emergency & Miscellaneous Repairs
        - a. Wastewater point repairs = 2
        - b. Manhole cover repair = 0
        - c. Storm water point repairs = 0

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## 7. Storm water collection response calls

- a. Customer service calls = 0
- b. City service calls = 0
- c. Catch basins cleaned = 0
- d. Trash capture devices cleaned = 0
- e. Pipe segment cleaned = 0
- f. V-ditched cleaned = 0-Ft

## ii. Wastewater Treatment Plant Operations

Permit Violations – There were no NPDES Permit variances to report for the Month of July.

All monitored discharge water quality parameters were met for July.

- a. Average effluent daily flow = 4.50 MGD
- b. Maximum effluent daily flow = 5.30 MGD
- c. Peak influent daily flow = 20.34 MGD
- d. Influent BOD/TSS mg/l = 481 mg/l / 497 mg/l
- e. Effluent BOD/TSS mg/L = 15.9 mg/l / 15.2 mg/l
  - i. Permit Limits for Effluent BOD/TSS mg/L = 30/30
- f. Effluent Coliform = (Monthly Median) 5 MPN / 100 ml
  - i. Permit Limits for Effluent Coliform = (Monthly Median) 240 MPN /100 ml
- g. Plant Odor complaints = 0 YTD Odor Complaints = 3

Non-standard operating conditions – Plant is struggling to maintain dissolved oxygen in the aeration basins because of the age and failure rate of the mechanical aerators. This puts us a risk for exceeding the CA regulatory discharge limits for Ammonia.

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

Total preventive maintenance work orders completed = 234

Total corrective maintenance work orders completed = 12

All wastewater treatment plant mission-critical and redundant systems and equipment were observed and/or maintained and/or repaired as scheduled and/or required

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

Maintenance projects

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- 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
    - I. Cutting, Carlson & Hoffman TA Change Order 6 – submitted on 9/25/20; returned approved 8/4/21
    - II. Sludge Leachate Line Condition Assessment Update - submitted on 3/26/21; still outstanding
    - III. BAAQMD Permitting for ATC Extension - submitted on 4/5/21; resubmitted on 4/27/21; returned approved 8/4/21
    - IV. WWTP Sludge Flush Pump Station Design - submitted 6/18/21; returned approved 7/16/21
    - V. 2021 RAA Inaccessible Line Design - submitted 6/23/21; returned approved 7/16/21
    - VI. Seismic II Analysis TA - submitted 7/13/21
    - VII. SCADA Change Order 3 submitted 7/22/21 - returned approved the same day 7/22/21
    - VIII. First Street Relief Sewer Change Order 2 submitted 7/29/21 - returned approved 8/4/21
    - IX. SBS Facility Improvements Project submitted 8/2/21 - returned approved 8/4/21
  
  - b. O&M
    - i. RAA/SECAP/Master Plan TA – Submitted March 27, 2020, COR responded. TA was not signed but capital work was completed and third party engineer was paid by Veolia. Payment is under dispute.
    - ii. Boiler Burner #2 TA – Submitted May 20<sup>th</sup>, COR responded June 3<sup>rd</sup>. New Boiler Burner was purchased and installed and the contractor was paid by Veolia. Payment is under dispute.
    - iii. NASSCO upgrade from 6.0 to 7 TA – Submitted May 19<sup>th</sup>, Rejected by the COR on 9/23/20. This item is the July 20, 2021 City Council Agenda for approval. Was approved at City Council Agenda on July 22.
    - 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. Collections Camera Cable was replaced by Vendor and paid for by Veolia. Payment 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. Gas detectors were purchased by Veolia. Payment is under dispute.
    - vi. 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. Design for repairs was completed. Received the fully executed TA on July 1, 2021. Job is out for bid.

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- vii. Replacement Mechanical Aerator TA - Submitted 4/28/21, received City Council approval on 5/18/21 and fully executed TA on 5/20/21. Provided PO to the vendor to order. Delivery Estimated in September.
- viii. DAFT Gear Box Drive Unit TA - Submitted 5/12/21, received signed TA on 5/13/21, provided PO to vendor begin prelim work, on 6/15/21 City Council agenda for approval, which was granted
- ix. Second Mechanical Aerator Gear Box Drive Unit TA - Submitted 8/4/21, purchase to establish an inventoried spare unit.

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
    - 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, 2020 and for the new Camera truck and Jetter truck on Dec 13, 2020. The new push camera is on the July 20 City Council Agenda for approval. The new Vactor Trucks and Camera Truck were submitted in the City's Proposed 21/22 Budget.