

# Monthly Operating Report

## Veolia Richmond CPM, WPCP and Collection System

### *May 2019*

## Executive Summary

- The monthly acute aquatic bioassay test passed with 100% survival of the test organisms.
- There were no violations of the NPDES permit during the period
- Planning and preparations (proposals, air permitting and technical design documents) are underway for several major construction projects planned for the treatment plant in 2019. Those include the new grit-headworks system, aeration system upgrades and electrical cogeneration system among others. A meeting was held with Air District personnel on 5/14. It was a productive meeting and the District requested additional information.

## Wastewater Treatment Plant

- There was single odor complaint in May called in to the plant by a resident on the 3rd. The same resident is thought to have called the Air District inspector who in turn called Veolia staff on May 7. The address of the call was 226 E Scenic Ave in Point Richmond. Staff investigated and detected a low level of odor characterized as “smelling like the primary clarifier” and very low H<sub>2</sub>S levels (2 ppb). There were no unusual conditions at the treatment plant at the time. On May 7 plant staff was notified by an Air District inspector that a complaint was lodged with them by someone driving by the plant on Canal Blvd. The same inspector visited the plant and made no findings of off-site odors. On May 11 a different Air District inspector called the plant and informed staff she detected “musty sewage odor throughout the day.”
- There were no blending events in May

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<b>Table 2</b>	<b>Parameter</b>	<b>Monthly Performance Indicators</b>	<b>Limit/Target</b>
<b>Treatment Plant Operations:</b>			
	Influent Flow, daily average (MGD)	5.57	N/A
	Effluent Flow, daily average (MGD)	6.67	N/A
	Influent BOD <sub>5</sub> , avg. mg/L	314	N/A
	Influent TSS, avg. mg/L	276	N/A
	Effluent TSS, monthly average mg/L	21	30 or less
	Effluent BOD, monthly average mg/L	29	30 or less
	% BOD Removal	90	> 85
	% TSS Removal	92	> 85
	NPDES Effluent Limit Violations	0	0
	Blending events	0	0
	Total volume blended, MG	0	0
	Odor complaints	3	0
	Digested sludge pumped to drying beds, MG	1.616	N/A
	Leachate received, GAL	386,776	N/A
	Leachate received/treated YTD, MG	2.148	N/A

**Maintenance**

Asset Management Work Orders

**Table 3**

Work Order Type	# Completed
Storm Water Pump Stations	73
Sewer Pump/Lift Stations	101
Treatment Plant	83
Corrective	43
Total	300

**Completed Projects - May**

- Completed 1<sup>st</sup> bi-annual 2019 Dystor Cover inspection on both digesters

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- Installed new burner on Heat Exchange Hurst boiler #1
- Replaced the RAS electromagnetic flow meter
- Replaced the chlorine contact basin dewatering pump with a new unit and returned to service
- Overhauled RAS submersible pump

### **Look Ahead; June - July 2019**

- Complete the 23<sup>rd</sup> Street Storm Water Pump Station Motor Control Panel Project.
- Relocate both air compressors to new functional location at plant facility.
- Replace wet-weather pump station bio filter cedar odor bed.
- Rebuild back-up bar-screen carrier unit.
- Replace generator ATS at I.C.I. sewer sanitary lift station.
- Rebuild Flygt NP 3153.090 pump.

### **Collection System Monthly Report**

#### **Sanitary Sewer System Highlights**

Project is currently in second year of cycle for sanitary sewer pipe cleaning (2018-2021).

During the month of May-2019, there were (0) sanitary sewer overflow events. Year-to-Date Wet-weather/Dry-weather YTD SSO totals are as follows:

- Wet-weather (rain event) = 21-YTD
- Dry-weather (non-rain event) SSOs = 0-YTD
- Total SSO's = 21-YTD

Relative to Baykeeper and Contractual CCTV condition assessment production:

1. Status Update of CCTV required by Baykeeper and for Updated 2019 RAA
  - a. A letter regarding project status was submitted to the City on 5/6/2019 noting that a key elements of the project scheduled for completion on 4/30/2019 were not met but that finalization of the project and reporting on status therein would be submitted to the City by 6/14/2019
2. Contract Status of 10-year CCTV cycle production
  - a. Veolia is in the 10th year of a 10-year CCTV cycle. Cycle start date was January 1, 2010
  - b. Number of pipe segments having CCTV greater than 10-years
    - i. (924) pipe segments due in 2019, approximately 38-miles and 21% of total gravity system
    - ii. (8) pipe segments overdue for May-2019

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- iii. (153) pipe segments overdue by 5/31/2019
- c. General production rates of pipe segments CCTV Planned vs. Completed in 2019
  - i. Pipe Segments CCTV Planned through 5/31/2019 = (625)
  - ii. Pipe Segments CCTV Completed through 5/31/2019 = (358)

There were a total of (15) sanitary system calls; see Table 2 for Wastewater Collection System Performance Indicators and the Table-3 for Storm Water Collection System Activity Summary for performance indicators.

**Sanitary Sewer Point Repair:**

(0) Sanitary system repairs performed during the month

**Storm Water System Highlights**

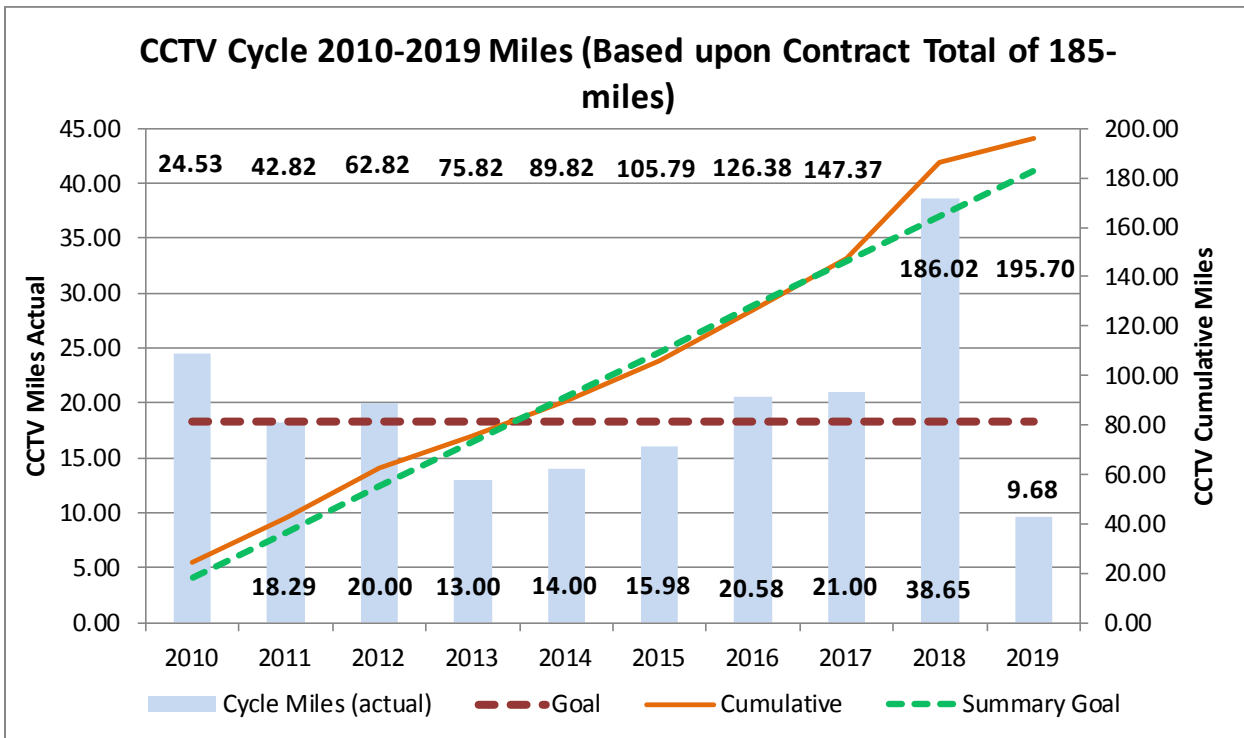
- Cleaned (1) Catch Basins
- Cleaned (2) V-ditches

**Storm Water System Point Repairs**

(1) Storm system repairs performed during the month

**Collection Systems Monthly Performance Indicators**

Veolia is in the 10<sup>th</sup> year of a 10-year CCTV cycle. Cycle start date was January 1, 2010. \*



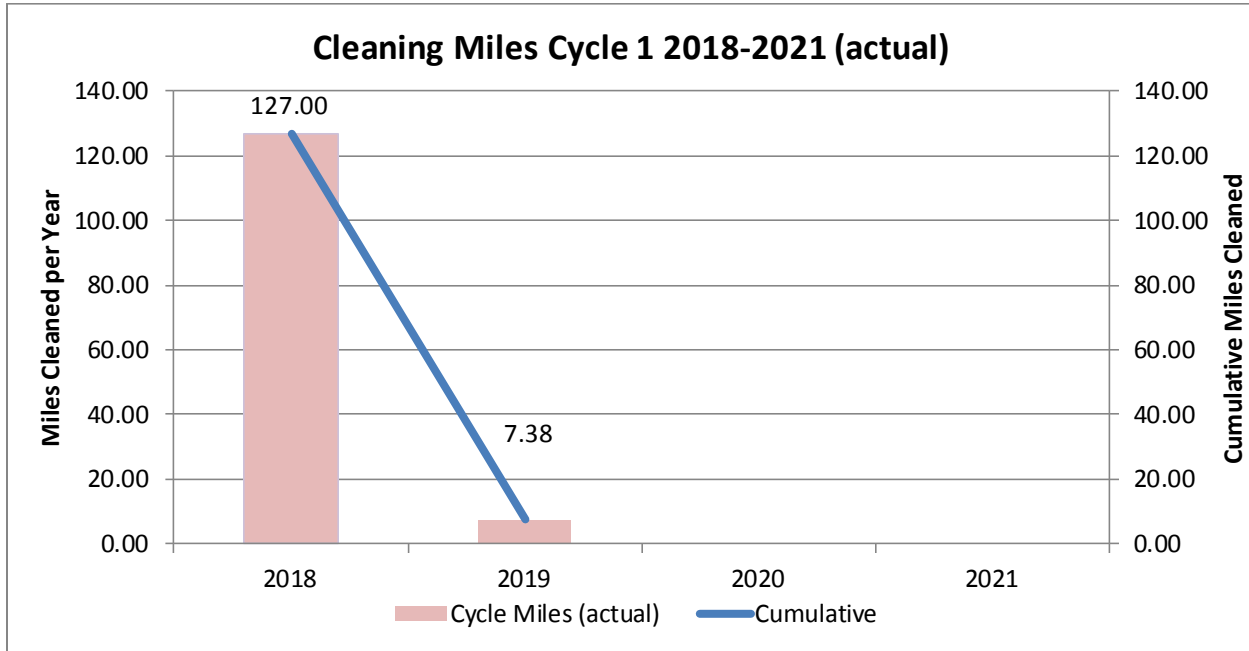
\*Notes:

1) Goal mileage is based upon 18.5-miles/year to correspond with Contract Amendment #1 system mileage of 185-miles and recently reported City GIS mileage of 183-miles

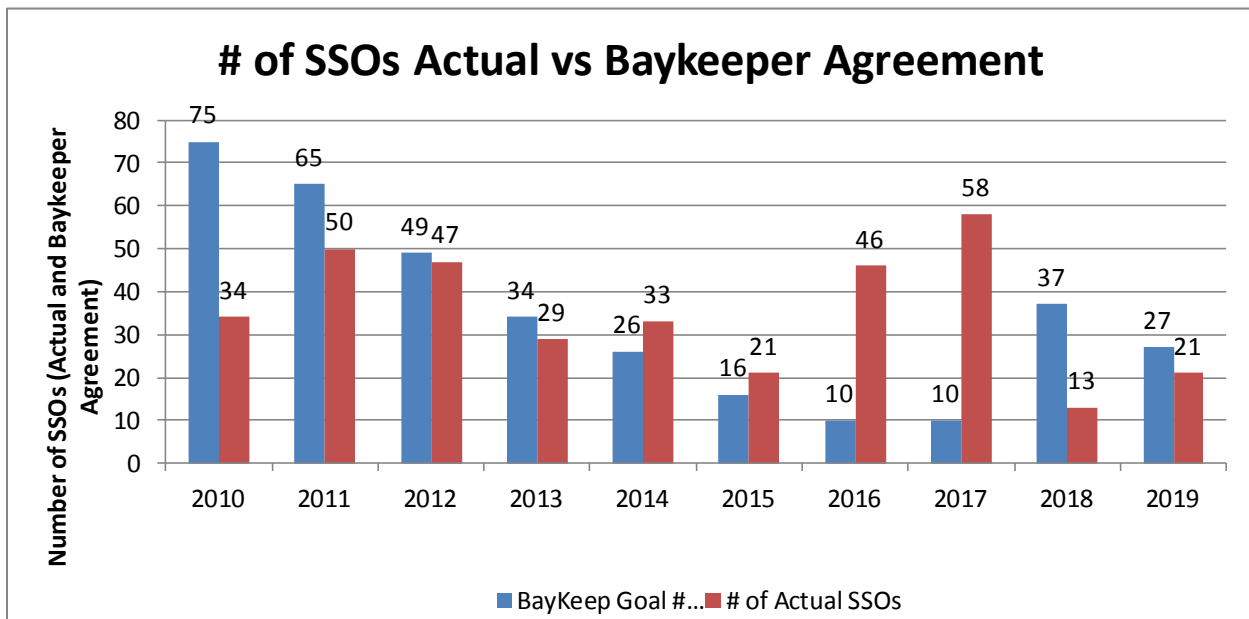
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Veolia is in the 1<sup>st</sup> year of a 4-year sewer cleaning cycle. Cycle start date was January 1, 2018.

- 7.4-miles of target 46-miles/year completed
  - Mileage does not include 5.7-miles of pre-cleaning performed for CCTV
- Percentage of annual target miles completed = 16.0%
  - Percentage of year elapsed = 42%



SSO performance compliance with past and current 2018 Baykeeper Settlement Agreement



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**Sanitary System Performance Indicators**

**Table 2**

Performance Indicator	Monthly Actual	Target/Limit
Service Calls (Public Facilities/Assets)	15	N/A
Service Call Response Time (minutes)	<30	<30
Private Lateral Service Calls; Regular/After Hours	5/5	N/A
Regular/OT Hours Spent on Private Lateral Calls	10/30	N/A
Point Repairs Completed	0	N/A
Manhole Inspections	0	N/A
Manhole Repairs	0	N/A
CCTV (Closed Circuit TV) (ft.)	30,298	7,000
GPS Surveys	0	As needed
Cleaning (ft.)	35,261	20,130
Cleaning QA/QC Events	0	8
SSOs for current month – Mainline	0	3.1/Mth
Total Mainline SSO Volume (gallons)	0	0
Total Mainline SSO Volume Recovered (gallons)	0	100%
% Mainline SSO Volume Recovered	0%	100%
# SSOs – Wet Weather (localized capacity issue)	0	0
# SSOs – Engineered Overflow Structure	0	0
Total SSO Volume from Engineered Overflow Structure	0	N/A
SSOs – Private Laterals	0	N/A
General Maintenance	0	N/A
Potential SSOs Eliminated due to Smart Cover Monitors	0	N/A
SSOs – Mainline – Resulting in Property Damage	TBD	0
Total Wet Weather SSOs Year to Date	21	27 Combined Wet Weather/Dry Weather Annual - Baykeeper
Total Dry Weather SSOs Year to Date	0	
Number and Percentage of SSOs During 2019 with Discharge Reaching Storm Water Conveyance	21 of 21 = 100%	N/A

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**Storm Water System Performance Indicators**

**Table 3**

<b>Performance Indicator</b>	<b>Monthly Actual</b>	<b>Target/Limit</b>
Storm Point Repairs	1	N/A
Storm Manhole Repairs	0	N/A
Storm Manhole Inspections	0	N/A
Storm Service Calls	6	N/A
Storm CCTV (ft)	0-segments (0-ft.)	N/A
Storm GPS Surveys	0	N/A
Storm Pipe Cleaning (ft)	319	N/A
Storm General Maintenance Cleaning (Linear feet of V-Ditches, Culverts or Creeks)	1-segments (730-LF)	N/A
Pump Stations/Inlet/Outlet Channels Cleaned	2	N/A
Catch Basins/Inlets/Storm Drains Cleaned	2	N/A
Storm Vaults Cleaned/Inspected	0	N/A
GSRD (trash capture device) Cleaning/Inspections	0	4/year
Flap Gate/Duck Bill Inspections	0	4/year

**CAPITAL IMPROVEMENT PROGRAM**

**2019 Risk Model Update and Risk Assessment Analysis (RAA).** *V.W. Housen & Associates (VWHA)*

- Provided an updated RAA Report that addressed comments and questions received from SF Baykeeper.
- Veolia Capital Program Management (CPM) has started vetting Year One priority line segments listed in the 2019 RAA and will be establishing a Year 2 Sewer Repair list.

**Baykeeper (BK) Sewer Pipe Rehabilitation – Year I & II.** *Bay Hawk and W.R. Forde (Year I)*

- The BART point repair portion of the project was completed in May. Year I of this project is 100% complete as of May 2019.

**Cutting/Carlson & Hoffman Boulevard Projects.** *V. W. Housen & Associates (VWHA).* *These projects replace pipelines which have NASSCO Pipeline Assessment Certification Program (PACP) Structural Grade 4 and 5 level defects in the sewer sheds that flow to Cutting Boulevard. The intention is the reduction of inflow and infiltration which will reduce the need to upsize the*

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*Cutting Boulevard interceptor, thereby reducing overall cost and construction impact to the City. Construction W.R. Forde, \$7,674,491 for both projects.*

- Approximately 23,260 LF has been installed through May 2019.
- The Contractor had one crew working in May.
- Post CCTV is complete; manhole testing and final paving has begun.
- Final paving is forecast to be complete by the end of June; street striping to follow
- Approximately 1,500 linear feet of easement remains on hold until the City reconciles easement with the County

**MacDonald and Virginia Project.** *V. W. Housen & Associates. These projects replace pipelines which have NASSCO Pipeline Assessment Certification Program (PACP) Structural Grade 4 and 5 level defects in the vicinity of MacDonald and Virginia. The intention is the reduction of inflow and infiltration which will reduce the need to upsize the Cutting Boulevard interceptor, thereby reducing overall cost and construction impact to the City.*

- Bid ready documents were provided on April 30.
- Bidding through the City's BidsOnline process began in May; bids are due in late June 2019, and construction to begin in the fall of 2019.
- Baykeeper construction deadline is June 30, 2021.

**Manhole Rehabilitation Project FY18/19.** *Bay Hawk. In-house design continued to replace manholes within the City's collection system.*

- Bay Hawk installed two new manholes in May – one at S. 21<sup>st</sup> and the other at 41<sup>st</sup> Street.
- City budget for this effort was reduced to \$250K for this fiscal year, which will also be the annual amount moving forward.
- Project is approximately 50% complete as of May 2019.

**Sewer Master Plan Update.** *V.W. Housen & Associates. The purpose of this project is to update the City's wastewater collection system hydraulic model to a full-pipe model. This effort includes system-wide flow monitoring during the 2017-18 wet weather season; update the City's Risk Management Model to reflect current CCTV inspection and O&M data; develop recommendations to address pipeline capacity issues and rehabilitation and replacement (R&R) needs; develop an updated Capital Improvement Program (CIP) that builds upon the existing CIP; develop an updated Master Plan report that incorporates the work described above. Project is 50% complete.*

- Flow monitors were installed on November 30, 2018; flow monitoring continued through March 31, 2019. VWHA received data on April 29<sup>th</sup>
- Parcel flows have been assigned to modeled manholes, and dry weather calibration has been completed. The basis for dry weather flow calibration is data collected through early February 2019. Wet weather calibration will be completed by June 15. Preliminary capacity results will be provided by June 19<sup>th</sup>.
- The due date for an updated capacity plan is July 15, 2019 as required by SF Baykeeper.

**Trash Capture Device Meeker Ditch Installation Project.** *Harris & Associates/Contech Engineering. In March 2017, CalTrans and the City of Richmond entered into a Cooperative Implementation Agreement (CIA) for improvement to the State Highway System as a watershed stakeholder with the City's jurisdiction. Pursuant to Attachment IV of the CalTrans NPDES Permit, CalTrans and the City of Richmond are to collaboratively implement the Water Capture Facility, hereinafter referred to as a Trash Capture Project.*



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- Due to the public not adhering to the traffic control that was in place, the City and Veolia staff worked with the Contractor to revise the Traffic Control Plan to shut down the entire street in May
- Boring conflict tentatively to be completed by the end of June per Comcast
- Forde's shoring subcontractor is ready to begin pile driving
- Comcast cutover for their customers is set for June 20, 2019

**WWTP High Priority Projects.** *Engineers: Carollo Engineers; This project is a result of the WWTP Critical Improvements Project Design. The purpose of this project is to replace aging infrastructure and to improve treatment reliability and operating efficiency. Secondary Clarifiers Construction is 100% complete. Grit/Aeration/Blower Building design is going through Carollo's internal QA/QC check before getting released for bidding purposes.*

- As-Needed SRF Application Assistance
  - Attended regular SRF conference calls and provided updates on the status of the application review.
  - Conducted SRF calls with Veolia and the State on as-needed basis.
- WWTP Critical Improvements – Bid Documents
  - Continued preparation of bid documents.
  - Conducted hazardous materials survey and incorporated in bid documents.
  - Prepared condition assessment plan for raw sewage pipes for Veolia/City review. Conduct condition assessment of raw sewage pipes.
  - Began preparation of project memorandum addressing Veolia treatment capacity questions.
- ESDC - Secondary Clarifier
  - Continued preparation of record drawings.
- Cogeneration CEQA Environmental Analysis
  - Submitted draft project description of Cogeneration Project for Veolia/City review.
  - Discussed Veolia/City review comments and incorporated into revised draft project description.