

June 30, 2014

Sincerely.

California Regional Water Quality Control Board San Francisco Bay Region 1515 Clay Street, #1400 Oakland, CA 94612

Attention: Ms. Marcia Liao, P.E.

Re: Self-Monitoring Program Reports

Novato Wastewater Treatment Plant

Transmitted please find the <u>May 2014</u> Monthly and Dry Season 2014 Semi-Annual Self Monitoring Report for the Novato Wastewater Treatment Plant, Water Recycling, and the Reclamation area. This report was prepared by John Bailey, Project Manager, Veolia.

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

John Bailey
Project Manager
Veolia Water West - Novato CA

____ NPDES violation(s) noted this month
____ Final Effluent was discharged to Reclamation for irrigation this month.
____ Wastewater treatment violation(s) noted this month - see attached Evaluation of Violations Report.

X Reclamation area violation(s) noted this month

Overflow(s) occurred this month see Collection System Report





MAY 2014

NOVATO SANITARY DISTRICT VEOLIA WATER WEST OPERATING SERVICES

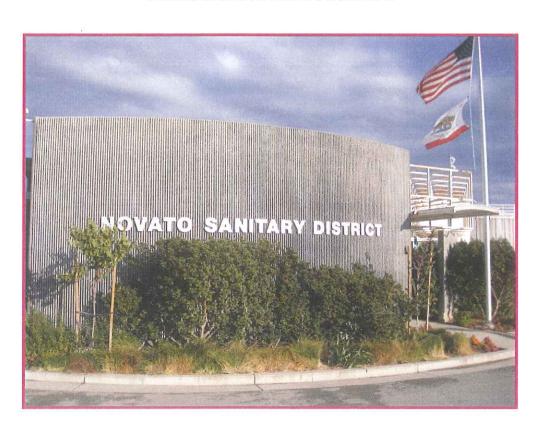
SELF MONITORING PROGRAM

for

THE NOVATO SANITARY DISTRICT

and

RECLAMATION AREA







NOVATO SANITARY DISTRICT SELF-MONITORING PROGRAM Novato Plant

For: May 2014

REPORT SUMMARY

LABORATORY REPORT SUMMARY

Irrigation Wet Well Testing: The Novato Sanitary District (District) reclamation irrigation wet well was sampled on March 26, 2014, April 23, 2014, and May 23, 2014 per the WDR permit requirements. The lab results for these sampling events are included in The Lab Attachment of this report.

Nutrients 13267 Study: Dry season *Nutrients* sampling occurred on May 8, May 14, and May 23, 2014. The lab results for these sampling events will be included in the quarterly report to be submitted in July 2014.

Quarterly Testing: EPA method 1668 C PCB results for samples collected on April 6, 2014 are included in The Lab Attachment of this report per the Mercury/PCB's Watershed permit requirements.

Semi-Annual Testing: The District's dry season semi-annual sampling event for 2014 was completed on May 7, 2014 (except EPA Method 1613 which was sampled on May 23, 2014); results for EPA method 614, 624, 625, and 1613 lab analyses are included in The Lab Attachment of this report.

Whole Effluent Toxicity Testing: The District conducted routine Acute Toxicity monitoring starting on May 6, 2014, as well as quarterly routine Chronic Toxicity monitoring on May 6, 2014. Lab results for the Acute and Chronic Toxicity sampling events are included in The Lab Attachment of this report.

All reported laboratory values with "J" notations or 'flags' are considered "estimated concentration" values. A "J" flag reflects an estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The "J" flag is equivalent to both the "Detected, but not Quantified or DNQ" flag and the 'estimated concentration' definition used by the RWQCB.

Report Notes:

- Monthly effluent monitoring for toxicity was 100% survival for fathead minnow. Oil and grease, cyanide, cadmium, selenium, and silver were not detected. Lead was an estimated concentration (j flag), and the remaining metals, arsenic, chromium, copper, nickel, and zinc were typical of Novato's effluent.
- 2. Quarterly Chronic Toxicity was <1 TU (100/EC₂₅)





OPERATIONS REPORT SUMMARY

Effluent disposal was via Bay Discharge (NPDES Requirements) during the month of May. A total of 16.25 million gallons of recycled water was produced / delivered. Pasture irrigation continued using stored effluent.

TREATMENT PLANT PERFORMANCE SUMMARY: May 2014:

Bay Discharge - NPDES Limits

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	3.74	4.26	N/A	N/A
Max Peak Hour, MGD – Dry Weather Flow	N/A	N/A	N/A	N/A
Influent BOD ₅ , lb/day (month ave/max)	7,700	14,906	N/A	N/A
Influent TSS, lb/day (monthly ave/max)	10,310	13,931	N/A	N/A
Effluent BOD ₅ , mg/L (monthly ave/weekly max)	<7	10	15	30
Effluent TSS, mg/L (monthly ave/weekly max)	<5	8	10	20
Effluent BOD ₅ - % Removal, Minimum	97	N/A	85	N/A
Effluent TSS - % Removal, Minimum	99	N/A	85	N/A
Ammonia, mg/L – (monthly ave/daily max)	0.58	0.90	6	21
pH, su (min / max)	6.9	7.2	6.5	8.5
Enterococcus, mpn (30 day geo mean)	3.1	N/A	35	N/A
Fecal Coliform, mpn (30 day median)	3	N/A	140	N/A
Fecal Coliform, mpn (90th percentile)	11	N/A	430	N/A
Total Coliform, mpn (5 Sample Median / Max	N/A	N/A	240	10,000
Total Permit Exceedances (NPDES)	0			

NA - Not Applicable

Discussion of Violations / Excursions: NONE

Title 22 - Recycled Water Production and Quality

Description	Units	Value	Limit
Volume Produced	Million Gallons	16.25	N/A
Average Turbidity	NTU	1.2	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	2	72
Minimum CT (disinfection)	ml-min/L	<450	450
Minimum Dissolved Oxygen (DO)	mg/L	8.3	1.0
Maximum Total Coliform	mpn/100 ml	<2	2

Total Rainfall. - 0.00

Daily Max - N/A

VIOLATIONS / EXCURSIONS

No NPDES Violations – One pH excursion (WDR) at Reclamation Ponds, no discharge from this location.





NOVATO SANITARY DISTRICT SELF-MONITORING PROGRAM

For: May 2014

COLLECTION SYSTEM OVERFLOWS FOR MAY 2014

The Novato Sanitary District Collection System had two overflows in May 2014:

- 1. Tuesday, May 15, 2014, 829 Rae Ln., Novato CA, 20 gallon SSO, CIWQS Event ID 806186, Certification ID 746671, Category III event.
- 2. Tuesday, May 20, 2014, Topaz Dr. at Albatross Dr. 30 gallon SSO, CIWQS Event ID 806391, Certification ID 241601, Category III event.

EVALUATION OF OVERFLOWS FOR MAY 2014

<u>829 Rae Ln.:</u> This SSO was a Category III event with an estimated discharge volume of approximately 20 gallons going to the street and gutter pan. There was full recovery (100%) for this discharge due to the fact it was an intermittent, low volume event that was fully contained on the street and in the gutter pan. This discharge was determined to be the result of a partial blockage from unknown debris in the main line.

Initial actions

- 1. This overflow was reported to Novato Sanitary District at 20:45 on 5/15/2014 and discharged onto the street and gutter pan.
- 2. Tim O'Connor, Collection System Superintendent arrived on site at 21:46 and found evidence of a sewer discharge. The rodding inlet was not overflowing when he arrived. Dasse de longh, Collection System Lead Worker and Aaron Hendricks, CSWI arrived on site at approximately 22:25 on 5/15/2014 and cleared the partial stoppage at 22:30 with a hydro-flusher.
- 3. <u>Recovery</u>: As stated above, staff was able to recover all of the discharge, i.e. recovered 100 percent (20 gallons) of the discharge.
- 4. <u>Volume Estimation</u>: Volumetric calculation, Water Height Above the Pick-hole Method, Comparative Volume method, Visual Estimation, and reporting party/local resident interviews were used to calculate the duration and volume of this event.
- 5. The discharge was determined to be a Category Three event due to the fact that the discharge was fully contained on the street and in the gutter pan.





Follow-up actions

- The street area around the discharge manhole and the gutter pan was washed down and cleaned by District staff. All wash down and discharge water was recovered during this process.
- District staff cleaned and televised the sewer main downstream from the discharge rodding inlet.
- Eight educational door hanger packets explaining the proper techniques for disposing of waste grease and flushable wipes were distributed to all homes tributary to the discharge line segment.

Subsequent Analysis and Actions

- 1. This line segment had been last cleaned on schedule on 5/23/2013 using a hydro-flusher, and was on a thirty-six (36) month cleaning frequency.
- 2. CCTV inspection immediately after the discharge event showed the line segment to have some defects, with a small hole in the pipe just below the rodding inlet, but was otherwise in good condition. There was no indication that the defects found during the CCTV inspection contributed to the cause of this discharge.
- 3. The cleaning schedule has been adjusted to a 12 month cleaning frequency as a precautionary measure.
- 4. This event was reported into the CIWQS database on May 16, 2014 as a Category III event, SSO Event ID # 806186 and was certified in CIWQS on June 6, 2014, Certification ID # 746671. All reporting requirements were met for this spill event.

<u>Topaz Dr. at Albatross Dr.:</u> This SSO was a Category III event with the estimated discharge volume of approximately 30 gallons going to the street, gutter pan and a storm drain catch basin. There was full recovery (100%) for this discharge due to the fact it was a low volume event that was fully contained on the street, gutter pan and storm drain catch basin. This discharge was determined to be the result of root intrusion (primary cause) collecting wipes and grease (secondary causes) that created a blockage in the main line.

Initial actions

- 1. This overflow was reported to Novato Sanitary District at 08:28 on 5/20/2014 and discharged onto the street, gutter pan, and a storm drain catch basin.
- 2. Tim O'Connor, Collection System Superintendent, Larry Foged, CSW II and Bob Stiles, CSWI arrived on site at 08:44 on 5/20/2014. Larry and Bob cleared the partial stoppage at 08:50 with a hydro-flusher.
- 3. Recovery: As stated above, staff was able to recover all of the discharge, i.e. recovered 100 percent (30 gallons) of the discharge.
- Volume Estimation: Volumetric calculation, Water Height Above the Pick-hole Method, Comparative Volume method, and reporting party interviews were used to calculate the duration and volume of this event.
- 5. The discharge was determined to be a Category Three event due to the fact that the discharge was fully contained on the street, gutter pan, and a storm drain catch basin.





Subsequent Analysis and Actions

- 1. Although there is adequate anecdotal evidence that this line segment has been cleaned on prior occasions, a suspected glitch in the maintenance software apparently caused it to be dropped from the cleaning schedule. It has been re-entered into the system, added to the hydroflusher schedule on a twelve (12) month cleaning frequency, and the software vendor has been notified. CCTV inspection on the day of the discharge event showed the line segment to have moderate to heavy root intrusion at several locations. This line segment has been added to the District's annual Root Abatement Program for FY 2013/14.
- 2. This event was reported into the CIWQS database on May 26, 2014 as a Category III event, SSO Event ID # 806391 and was certified in CIWQS on June 5, 2014, Certification ID # 241601. All reporting requirements were met for this spill event.