VEOLIA WATER

COPY

November 16, 2011

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Mailed 11/18/11

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

Attention: Ms. Tong Yin, Ph.D.,P.E.

Re: Self-Monitoring Program Reports
Novato Wastewater Treatment Plant

Enclosed please find the ***October 2011*** Monthly Self Monitoring Report for the Novato Wastewater Treatment Plant, and the Reclamation area. This report was prepared by Bob Adamson, Acting Laboratory Supervisor and John Bailey, Project Manager Veolia Water.

"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."

Sincerely,

John Bailey
Project Manager
Veolia Water West - Novato CA

____ NPDES violations noted this month
__X__ Wastewater was diverted to Reclamation for irrigation this month.
__X__ Wastewater treatment violations noted this month - see attached Evaluation of Violations Report.
__X__ Reclamation facility violations noted this month - see attached Evaluation of Violations Report.
____ Overflows occurred this month- see attached Overflow Report

OCTOBER 2011

NOVATO SANITARY DISTRICT
VEOLIA WATER WEST OPERATING SERVICES

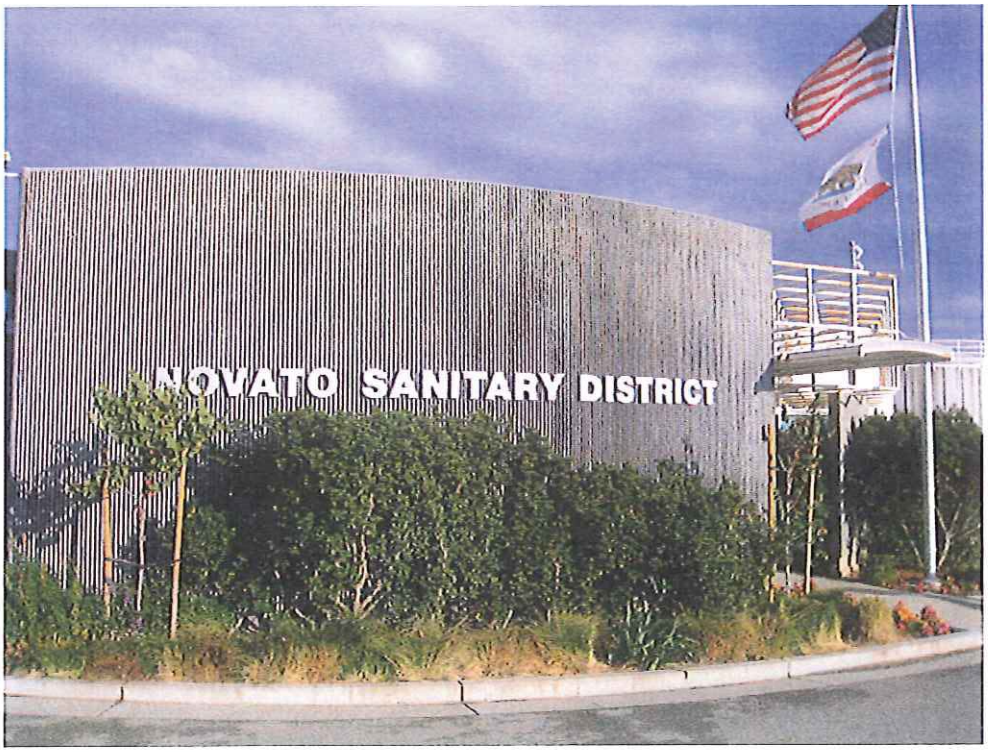
SELF MONITORING PROGRAM

for

THE NOVATO SANITARY DISTRICT

and

RECLAMATION AREA



NOVATO SANITARY DISTRICT
SELF-MONITORING PROGRAM

Novato Plant

For: October 2011

NOTES

ANALYTICAL NOTE:

- All BOD analysis is analyzed by Standard Methods 5210 B.
- All TSS analysis is analyzed by Standard Methods 2540 D.
- The District continued the TIE and resumed chronic toxicity compliance testing in October. The October toxicity result was 8.0 TUc. A meeting with Aqua Science will be scheduled to discuss the next step in the TIE process and results of the October TIE investigation will be forthcoming. The bullet item that follows was extracted from the September 2011 SMR and provides TIE background.
- The District initiated a TIE on February 16, 2011, due to the February 2, 2011 chronic toxicity EC_{25} (%) result of 8.6 TUc. The Water Board staff has received reports of the Phase I TIE report with the results of the initial findings under a separate correspondence dated March 23, 2011. Part of the first phase of the TRE plan is to investigate the District's internal process streams. A chronic toxicity tests were performed on March 28, 2011 and April 18, 2011 as part of the internal processes investigation. The April chronic toxicity test resulted in a 43.5 TUc value. Water Board was notified and a TIE on the April samples was initiated on May 10, 2011. Another TIE was initiated on June 23, 2011. *Aqua Science* laboratory completed a site visit on August 11, 2011 to view facilities to determine if sampling equipment or protocol may have affected the observed toxicity results. A summary of the events and the results are included in the Interim Phase I report and are included in the *Appendices* of this SMR. The District will resume compliance chronic testing in October along with the TIE testing.
- TSS results on October 19 and October 24 are reported with exception. The QA/QC duplicate exceeded 5%. The sample results are consistent with what we would anticipate. The inclusion or exclusion of the results would have no affect on compliance status.
- A "J" symbol reflects estimated analytical result value detected below the Reporting Limit (R.L.) and above the Method Detection Limit (MDL). The "J" flag is equivalent to the DNQ Estimated Concentration flag.
- Value results of "< 1.0" are reported as "1.0 MPN/100 mL to complete the calculation of the geometric mean.

REPORT NOTE:

- Values are reported to significant figures, as required by permit limits.
- All laboratory values with "J" or "DNQ" values are "estimated concentration" values. The electronic system does not accommodate written parameters; this notification is to satisfy requirement E-11, 4b. of the District's NPDES permit of identifying all "J" or "DNQ" values as "estimated concentration" values.

- Below is a summary of the last 11 reports.

Tabular Summary of Effluent Test Results (most sensitive endpoint) Chronic Toxicity Testing

Test Date	May-10	Jun-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	Oct-11
EC_{25}	>100	>100	>100	10.8	>100	>100	11.6	58	2.3	4.9
NOEC	100	<6.25	100	12.5	100	100	6.25	50	<6.25	12.5
Tuc ($100/EC_{25}$)	<1.0	<1.0	<1.0	9.3	<1.0	<1.0	8.6	1.7	43.5	8.0

OPERATION NOTE:

Discharge in October consisted of both Bay Discharge and Reclamation Discharge to storage ponds. Reclamation Discharge occurred on October 1st & 2nd and 5th – 17th. Bay Discharge occurred on October 3rd & 4th and 18th – 31st. The reason for the interruption in Bay discharge was a process upset described below under *Evaluation of Violations*. Effluent was directed to the Reclamation Storage Ponds while the nitrification process recovered.

VIOLATIONS FOR OCTOBER 2011

NPDES VIOLATION (DISCHARGE)	PARAMETER	RESULT	DATE
Instantaneous Chlorine Residual	Chlorine	0.3 mg/L	10/5/2011
Maximum Weekly BOD	BOD	17 mg/L	10/2 – 10/8/2011

WDR VIOLATION (RECLAMATION)	PARAMETER	RESULT	DATE
E-004	pH	9.1	10/13/2011
E-007	pH	9.3	10/5/2011
E-008	pH	9.2	10/5/2011

EVALUATION OF VIOLATIONS FOR OCTOBER 2011

Chlorine Residual and Weekly BOD, NPDES – E002:

On October 4th sodium hypochlorite was overfed to the influent junction structure. This in turn resulted in a chlorine residual at our effluent monitoring station and a high effluent BOD value (37 mg/L).

The cause of overfeed was a preset under tensioning of a back pressure valve on the sodium hypochlorite feed pumps. The back pressure valve prevents product from flowing (siphoning) by gravity through the pump. The feed pumps had previously been used to feed sodium hypochlorite to the No. 3 water system. The No. 3 system operates at a system pressure of 75 psi. This 75 psi system pressure essentially acts as a backpressure on the hypochlorite feed pumps and masked the under-tensioning of the backpressure valve. To address the odor issues, the feed pumps were switched over and used to feed hypochlorite for odor control at the Influent Junction Structure (IJS). The head differential (backpressure) between the (full) sodium hypochlorite tank and the IJS is approximately negative 20 feet, versus the positive 75 psi system backpressure from the No. 3 water system. The lack of backpressure set up a siphon allowing product to flow at a high rate from the hypochlorite tank to the IJS.

A chlorine residual of 0.3 mg/L was measured at our effluent monitoring station, E002. A sample taken downstream at the old dechlorination station in Ignacio showed no chlorine present. Upon discovering the problem all flow was directed to the reclamation ponds and flow to the Bay was halted. It is believed that no chlorine reached the receiving waters. We are reporting this finding for possible future consideration by the Regional Board with regard to mandatory minimum penalties (MMP).

pH WDR - E-004, E-007, E-008:

A wide fluctuation in pH is normal for pond operations. This is a naturally occurring condition due primarily to photosynthesis and the oxygen / carbon dioxide cycle.
Note - An online technical article describing this cycle can be found at: http://aquanic.org/publicat/usda_rac/efs/srac/464fs.pdf . **No discharge from this location occurs.**

COLLECTION SYSTEM OVERFLOWS FOR OCTOBER 2011

The Novato Sanitary District Collection System had no overflows for October 2011:

SSO-No Spill Certification Confirmation Number 2305584