California Regional Water Quality Control Board
San Francisco Bay Region

Linda S. Adams
Secretary for
Environmental Protection

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Arnold Schwarzenegger
Governor

December 28, 2009
CIWQS ID: 244705 (PG Environmental - TY)

Novato Sanitary District – Novato Wastewater Treatment Plant
ATTN: Beverly James, General Manager (Sent via Email: bevj@novatosan.com)
500 Davidson Street
Novato, CA 94945

RE: Novato Sanitary District – Novato Wastewater Treatment Plant, NPDES No. CA0037958
Inspection Report

Dear Ms. James:

On October 7, 2009, PG Environmental, LLC, a USEPA contractor, conducted a compliance and evaluation inspection at your facility.

The Discharger received a "U" rating for the Effluent and Receiving Waters section of the report due to an effluent exceedance during the period reviewed during the inspection. Although the Discharger received a "U" rating, no response is necessary to this report as it has been determined that the Discharger adequately reported the exceedance to the Regional Water Board and has implemented corrective actions.

If you have any questions concerning this report, please call Tong Yin at 510-622-2418, or email tyin@waterboards.ca.gov.

Sincerely,

Robert Schlipf
Water Resource Control Engineer

Enclosure: Inspection Report

CIWQS Inspection No.: 1971999
Entered by: RS

EPA Region IX and California Water Resources Control Board

NPDES Compliance Evaluation Inspection (CEI) Report

Name and Location of Facility Inspected			**Entry Date**	**Permit Effective Date**
Novato Sanitary District - Novato Wastewater Treatment Plant 500 Davidson Street Novato, CA 94945			10/7/2009 **Entry Time** 9:00 AM	2/1/2005
NPDES Permit Number	**Order Number**	☒ **Major** ☐ **Minor**		**Permit Expiration Date**
CA0037958	R2-2004-0093			1/31/2010
Name(s) & Title(s) of On-Site Representative(s)		**Contact Information**		**Notified of Inspection?**
Ed Mann (Wastewater Facility Manager) Sandeep Karkal (Deputy Manager Engineer) Linda Candelaria (Laboratory Supervisor)		Phone: (415) 892-1694 Fax: (415) 898-2279		☒ **Yes** ☐ **No**
Name, Title & Address of Responsible Official		**Contact Information**		**Official Contacted?**
Beverly James 500 Davidson Street Novato, CA 94945		Phone: (415) 892-1694 Fax: (415) 898-2279 E-mail: bevj@novatosan.com		☐ **Yes** ☒ **No**
Inspector(s) **Primary:** Craig Blett (PG Environmental, LLC) **Other(s):**				**Presented Credentials?** ☒ **Yes** ☐ **No**
Weather Conditions at the Time of the Inspection:		**Facility Receiving Water Name:**		
Sunny; no recent precipitation		San Pablo Bay		

Overview of Areas Evaluated During Inspection

S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated

Permit: S	Flow Measurement: S	Solid Waste Handling & Disposal: S
Records & Reports: S	Self-Monitoring Program: S	Compliance Schedules: N
Facility Site Review: M	Laboratory: S	Pretreatment (POTWs Only): N
Effluent & Receiving Waters: U	Operations & Maintenance: S	Storm Water: N

Prepared By: Craig Blett (PG Environmental, LLC) on 10/7/2009

Reviewed By: Craig Chomiak (PG Environmental, LLC) on 10/27/2009

Facility Narrative

On October 7, 2009 a USEPA contractor inspected the Novato Sanitary District - Novato Wastewater Treatment Plant, in Novato, CA. Discharges from the facility are regulated by Regional Water Board Order No. R2-2004-0093 (NPDES Permit No. CA0037958). The primary purpose of the inspection was to determine the accuracy and reliability of the Discharger's self-monitoring and reporting program. The primary on-site facility representative was Ed Mann (Wastewater Facility Manager). The weather at the time of inspection was sunny with no evidence of recent precipitation.

The Novato Sanitary District (Discharger) owns and operates the Novato Wastewater Treatment Plant (Facility) and serves a population of approximately 60,000 residents. The Facility is undergoing a major reconstruction project to expand treatment capacity and treat flows previously treated at the Novato Sanitary District - Ignacio Wastewater Treatment Plant. The new capacity is expected to be 47 mgd. New treatment units are under construction or have recently been placed in service. Following the completion of construction in the fall of 2010, the Facility will have upgraded and expanded primary clarification, aeration, secondary clarification and disinfection capacity. Accordingly, the Discharger received Cease and Desist Order (CDO) No. R2-2008-0029 which prevents the Discharger from discharging through Outfall E-001 to San Pablo Bay, the discharge point from the inactive Ignacio Treatment Plant.

The Facility provides secondary level treatment in a process train which consists of screening, grit removal, primary clarification, biological secondary treatment (suspended growth aeration and biotower filtration), secondary clarification, chlorination and dechlorination. During the discharge season of September 1 through May 31 the effluent is pumped from Outfall E-002 to San Pablo Bay for discharge through Outfall E-003. During the discharge prohibition period of June 1 through August 31, the effluent is pumped from Outfall E-002 to holding ponds for application to Discharger owned property. During periods of high flow, in excess of 9 mgd, the Discharge is allowed to blend fully treated flow with flow that receives primary clarification plus gravity filtration prior to discharge as described previously.

Solids handling consists of gravity thickening and anaerobic digestion. Digested sludge is pumped to storage lagoons at an off-site District property and held for land application. Digester gas is recovered and used to power a micro-generator.

The Facility's current dry weather design capacity is 4.6 million gallons per day (mgd). According to the Facility representative, the average dry weather flow is 3.9 mgd. During the period of January 2009 through August 2009, the maximum daily flow reported by the Discharger was 20.0 mgd on February 16, 2009. At approximately 9:45 AM the instantaneous influent flow as displayed on the Supervisory Control and Data Acquisition (SCADA) monitor was 7.16 mgd.

Facility laboratory personnel and operations staff conduct self monitoring activities. Composite samplers are only operated during sampling periods, typically three 24-hour cycles per week. Laboratory staff prepare and initiate the composite sampler and collect grab samples. At the end of each sampling period, on-site laboratory staff collect the composite sample containers and return them to the laboratory. If grab samples are needed, in addition to those collected during composite sampler setup, laboratory staff collect the samples. The samples are analyzed by Facility laboratory staff or picked up by a contract lab for off-site analysis. The influent and effluent sample locations and methods appeared to provide representative samples.

Discharge monitoring reports (DMRs) and self monitoring reports (SMRs) for the period of May 2009 through August 2009 were reviewed as a component of this inspection. The review included a comparison of reported monitoring results versus requirements and limitations contained within the permit. Two permit limit exceedances were identified during a discussion with the Facility representative. The SMR evaluation also included a comparison of data points in the SMRs submitted to the Regional Water Board against laboratory bench sheets and contract laboratory reports documenting the actual analytical results.

There were no Major Findings reported from the previous inspection.

Major Findings

Effluent and Receiving Waters

1. Regional Water Board Order No. R2-2004-0093, Provision B. - Effluent Limitations, Table 4 requires that the maximum weekly average TSS concentration 45 mg/l or less. The Facility reported in the March 2009 SMR a weekly average TSS of 53 mg/l. The exceedance along with an explanation of the reason for the exceedance was reported to the Regional Water Board with the March 2009 SMR (refer to Exhibit 1). According to the referenced exhibit and the Facility representative, the exceedance was the result of an extended blending period due to heavy rainfall.

2. Regional Water Board Order No. R2-2004-0093, Provision B. - Effluent Limitations, Section 5 requires that the maximum residual chlorine must be 0 mg/l. The Facility reported in the January 2009 SMR a residual chlorine reading of 2 mg/l. The exceedance along with an explanation of the reason for the exceedance was reported to the Regional Water Board with the January 2009 SMR (refer to Exhibit 2). According to the referenced exhibit and the Facility representative, the exceedance was the result of the bisulfite injection pump failure and a delayed startup of the standby bisulfite pump. The Facility has altered the operation of the backup injection pump so that there is no lapse in the injection of sodium bisulfite should the primary pump malfunction.

PERMIT: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
1. Current copy of facility NPDES permit available on-site.	S
2. Correct name and mailing address of permittee identified on NPDES permit.	S
3. Facility is as described in permit.	S
4. a. Notification given to Regional Water Board of process/production modifications, collection system expansions, etc. that impacted quality/quantity of discharge or changes to the facility or increased discharge. b. Permit modification received, if required, prior to changes. ***The Facility is in the process of a major reconstruction project (refer to Photos 2 and 3). New process units are brought online as they are constructed and tested. The Facility representative indicated that the Regional Water Board is notified when a new process is brought on-line.***	S N
5. Recent permit modifications, amendments or compliance orders on file.	S
6. Number of discharge outfalls the same as listed in the permit.	S
7. Name of receiving waters listed correctly in the permit.	S
8. Permit status (i.e., Current, Expired, or Extended)	Current
9. Permit renewal application submitted to the Regional Water Board at least 180 days prior to the expiration date. ***A Report of Waste Discharge (ROWD) was submitted to the Regional Water Board in July 2009.***	S
10. Other:	N
Notes: ***This section was rated "satisfactory" because all items reviewed were rated satisfactory.***	

RECORDS/REPORTS: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
1. NPDES records maintained for the time period required (5 years): The following records and reports were requested and observed: ***- Current permit, monitoring and reporting program, and standard provisions*** ***- Four months of DMRs and SMRs (May 2009 through August 2009)*** ***- Latest Biosolids Report*** ***- Latest Annual Report*** ***- Maintenance records and backlog summary*** ***- Operator log book*** ***- Flow meter calibration records*** ***- Laboratory certification records*** ***- Sample chain of custody*** ***- Spill and bypass records*** ***- Operations and Maintenance manuals***	Yes
2. a. Did the facility document any spills or bypasses during the period reviewed?	No
b. Spills and bypasses reported and documented as required by the permit (i.e.- as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances).	N
c. Follow-up written documentation given as required by the permit (within 5 days in most cases).	N
3. Discharge Monitoring Report (DMR) and/or Self Monitoring Report (SMR) evaluation:	
a. The responsible person or designee signs and certifies the DMRs/SMRs.	S
b. The facility monitors more frequently than required by the permit.	No
c. All data collected are summarized on the DMRs/SMRs.	S
d. Data reported on DMRs/SMRs is consistent w/ analytical results.	S
e. Coliform concentrations calculated as required by the permit (e.g., median, geometric mean).	S
f. Numerical values for minimum detection limits are reported on DMRs/SMRs when laboratory reports "Not Detected" or "0" (for example, MDL= 3, Report: "<3" on DMR).	S
g. "Less than values" properly carried through loading calculations.	S
h. Flow measurement period used for loading calculations brackets the sampling period.	S
i. Influent and effluent loading rates properly calculated, if required.	S
j. Number Exceeding (N.E.) properly reported on all DMRs and annual reports.	M
3j. The Facility reported a BOD percent removal exceedence on the SMR for March 2009, when no exceedance occurred. The Facility representative indicated the reporting error was clerical and would be corrected. The exceedances identified in the 'Major Findings' section of this report were properly reported on the corresponding SMRs.	
4. Reports completed in the time frame and frequency as required by the permit (not all reports required for all facilities):	
a. Discharge Monitoring Reports/Self-Monitoring Reports	S
b. Biosolids Monitoring Reports	S
c. Biosolids Management Reports	N
d. CSO/ I&I Reports	N
e. Compliance Schedule Reports	N
f. Pretreatment Reports	N
g. Other:	N

RECORDS/REPORTS: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
5. Sampling and analytical records (for water and biosolids) include:	
a. Dates, times, and location of sampling	S
b. Names of individuals performing sampling	S
c. Analytical methods	S
d. Results of analyses	S
e. Dates of analyses	S
f. Time of analyses, as necessary to verify holding times	S
g. Analysts' names or initials	S
h. Instantaneous flow at grab sample stations, if required	S
6. Plant records include:	
a. Daily plant operational records or log book	S
b. Equipment maintenance records and schedules	S
c. CSO/lift station check records or log book	N
d. Records of auxiliary power checks	S
e. Spill Prevention Control and Countermeasure (SPCC) plan	N
f. Pollution Prevention Plan (P3)	N
g. Influent and Effluent flow measurement records maintained for the past three years	S
h. Other:	N
7. All records and reports required by the permit appear to be organized and available for inspection.	S
8. Other:	N

Notes:
This section was rated "satisfactory" because the inspector did not believe checklist item 3j. was significant enough to down grade the overall rating to marginal.

FACILITY SITE REVIEW: **OVERALL RATING: M**

INSPECTED ITEM	EVAL
1. All treatment units and supporting equipment are in service and mechanically functioning properly. ***The Facility's existing treatment process train consists of the following:*** ***- Two mechanically cleaned bar screens (both in service) and one manually cleaned bar screen (backup)*** ***- Two vortex grit chambers (both in service)*** ***- One circular primary clarifier*** ***- Three aeration basins (all in service)*** ***- One trickling filter tower*** ***- Two circular secondary clarifiers (both in use)*** ***- One anthracite media filter (used for blending when influent flows exceed 9 mgd)*** ***- One chlorine contact basin*** ***- One soduim bisulfite injection system*** ***The solids treatment train consists of the following:*** ***- Two gravity belt thickeners (in use eight hours each day)*** ***- One anaerobic digester*** ***- Two sludge storage lagoons***	S
2. Hydraulic and organic loadings are consistent with the fact sheet and plant design criteria. a. Are there signs of overloading to the facility and collection system, including I&I and septage loading?	S S
3. Peak flows remain within the established plant capacity. a. If flows have exceeded capacity, has the Regional Water Board been notified?	S N
4. Lift stations are properly monitored, maintained, have a back-up power source and are not subject to chronic spills and/or overflows.	N
5. Odors are adequately controlled, resulting in limited complaints. ***The Facility has active odor control. The primary clarifier and aeration basins are covered. Foul air is scrubbed and processed through a soil bed treatment process.***	S
6. Residual chlorine monitoring is well documented and sampling/monitoring is representative of the discharge. a. If a UV system is used, the dosage intensity, tubes, and alarms are adequate, maintained and documented.	S N

FACILITY SITE REVIEW: **OVERALL RATING: M**

INSPECTED ITEM	EVAL
7. Housekeeping procedures are adequate to prevent release of pollutants to the environment:	
a. Adequate dikes and secondary containment	S
b. Spill containment and clean-up	S
c. Signs of spillage to soil, groundwater, or surface water	S
d. Storm water and leachate management from storage piles	S
e. Leaking pipes, pumps, etc.	S
f. Drum and chemical storage areas	S
g. Minimization of pollutants entering storm water outfalls	M
h. Other open dumps or debris piles	S
i. Other:	N
7g. Multiple storm inlets were found not to be protected from construction disturbance runoff (refer to Photo 4).	
8. Signs of tank deterioration and/or settlement.	S
9. Safety concerns are present that may interfere with proper operation, maintenance, and/or monitoring.	S
10. Material Safety Data Sheets (MSDS) are available for stored chemicals.	S
11. Equipment available for spill clean-up and containment.	N
12. Other:	N
Notes: ***This section was rated "marginal" due to checklist item 7g.***	

EFFLUENT AND RECEIVING WATERS: **OVERALL RATING: U**

INSPECTED ITEM	EVAL
1. Recent DMR history (last ***4*** months) (outfall number(s) ***E-002***):	
a. Violations of discharge limits	U
b. Spills/bypasses	S
c. Fish kills or other receiving water impacts	S
d. WET testing results are in accordance with the permit	S
e. If effluent limit violations have been identified, what actions has the facility taken to eliminate or reduce their recurrence?	S
1a. According to the Facility representative, a TSS exceedance was experienced in March 2009 due to a large blending event and a chlorine residual exceedance was experienced in January 2009 due to a malfunction of the dechlorination injection equipment. Additional details are provided in the 'Major Findings - Effluent and Receiving Waters' section of this report and Exhibits 1 and 2.	
1e. The Facility is expanding treatment capacity which is expected to reduce blending events.	
2. DMR spot check conducted for the months of: ***May through August 2009***	
a. Internal lab sheets and contract lab results properly transferred to DMRs	M
b. Monthly average, weekly, maximum, etc., values correctly calculated per the permit	S
c. Influent and effluent loadings reported	S
d. DMR is accurate and complete for each outfall	S
2a. Laboratory personnel do not consistently apply analytical results rounding procedures. Most results are rounded to whole numbers (e.g., bench sheet value 8.8 mg/l reported as 9 mg/l) while some results are reported as calculated on the laboratory bench sheets (e.g., bench value 5.7 mg/l reported as 5.7 mg/l).	
3. Appearance of effluent during inspection:	
a. The effluent(s) was viewed during the inspection	Yes
b. Excessive foam, scum, or sheens present	M
c. Cloudy and/or color	S
d. Excessive solids	S
e. Other:	N
3a. Scum and foam buildup were observed on the surface of the effluent pump wet well holding pond (refer to Photo 5) and on the surface of the chlorine contact pond. The Facility representative was unable to explain the presence of scum and foam.	
4. Appearance of receiving water(s) during inspection:	
a. The receiving water(s) was viewed during the inspection	No
b. Distinctly visible foam or sheens on receiving water	N
c. Biosolids accumulation or deposits of solids below discharge point(s)	N
d. Distinctly visible plume from discharge(s) to receiving water	N
e. Discharge creates objectionable odor at or near receiving water(s)	N
f. Other:	N
The receiving water was not viewed as a component of this inspection.	
5. Other:	N

EFFLUENT AND RECEIVING WATERS: **OVERALL RATING: U**

INSPECTED ITEM	EVAL
Notes: ***This section was rated "unsatisfactory" because effluent limit exceedances were identified in records that were reviewed.***	

FLOW MEASUREMENT: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
1. Flow Measurement devices and methods:	
Influent Measurement:	
Primary Device: *Parshall flume*	S
Secondary Device: *Ultrasonic transducer*	S
Effluent Measurement:	
Primary Device: *Weir*	S
Secondary Device: *Ultrasonic transducer*	S
Other method of estimating flow: *In-line propeller meter*	S
Effluent flow up to 10 mgd is measured using a rectangular sharp-crested weir. Flows over 10 mgd are measured by a propeller meter located in the effluent force main.	
2. Flow measurement devices designed to meet permit requirements ("continuous measured," "continuous record," etc.).	S
3. Flow measurement location is representative of the actual discharge (considering return and bypass lines, etc.).	S
4. Flumes:	
a. Approach channel straight for at least 10 times the maximum head height in flume	N
b. Flow enters flume evenly distributed across the channel and free of turbulence, boils, or other disturbances	N
c. The flume is clean and free of debris or deposits	N
d. All flume dimensions appear accurate, level, and plumb	N
e. Flume head is being measured properly	N
f. Flume is appropriately sized to measure the existing range of flows	N
g. No obstructions downstream causing inaccurate flow measurement due to excessive "submergence" in flume	N
h. Proper flow tables being used	N
The flume was covered and therefore unable to be viewed.	

FLOW MEASUREMENT: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
5. Weirs:	
a. Approach channel straight for at least 10 times the maximum head height	S
b. Flow in the approach channel is evenly distributed and free of turbulence, boils, or other disturbances	S
c. No solids accumulation in the bottom of the approach channel	S
d. Weir crest is located at least two times the maximum head height off the floor of the flow channel	S
e. The weir plate is level, plumb and without distortions	S
f. Weir is beveled on downstream side if plate is >1/8 inch thick	N
g. No leakage around the weir plate	S
h. Measuring point located at least 3 times the maximum head height behind (upstream of) the weir	S
i. There is free-fall and access for air below the nappe of the weir (i.e., water doesn't cling to the weir plate)	S
j. Weir sized properly to measure the existing range of flows	S
k. Proper flow tables being used for weir type and size	S
5j. The weir can measure flows up to 10 mgd.	
6. Secondary flow device properly installed and maintained, and operating without interference from foam, turbulence, webs, etc.	S
7. Date of last flow meter calibrations:	
Influent: *12/23/2008*	S
Performed by: *KBL*	
Effluent: *1/15/2009*	S
Performed by: *Facility Instrument Technician*	
8. Calibration checks by plant personnel routinely performed.	S
9. Calibration records (external and internal checks) maintained.	S
10. Other:	N
Notes: ***This section was rated "satisfactory" because all items reviewed were rated satisfactory.***	

SELF-MONITORING PROGRAM: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
1. Sampling locations, type, methods, and frequencies conform to the NPDES permit for all required samples (including influent, effluent, biosolids, receiving stream, etc.). ***Effluent samples are taken from the discharge pipe of the effluent pump station. Additional details concerning the Facility's self-monitoring activities can be found in the 'Facility Narrative' section of this report.***	S
2. Sampling locations and methods provide representative samples.	
a. Grab samples are collected during peak flow conditions rather than low-stress conditions	S
b. Composite sampling procedures comply with the permit (time vs. flow weighted)	S
c. Other:	N
3. Automatic samplers and other sampling equipment are properly cleaned.	S
4. Samples are preserved using methods listed in 40 CFR, Part 136 (e.g., chilled, acidified).	S
5. Sample containers are as listed in 40 CFR, Part 136.	S
6. Chain-of-custody is maintained and documented.	S
7. Samples are collected using approved protocols:	
a. Coliform sample taken directly into sterilized container	S
b. BOD samples are taken prior to disinfection or reseeded	S
c. Oil and grease collected directly into a glass container	S
d. Other:	N
8. Other:	N

Notes:
This section was rated "satisfactory" because all items reviewed were rated satisfactory.

LABORATORY: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
1. On-site lab is ELAP-certified?	Yes
a. List parameters analyzed on-site that are used for DMR reporting: *BOD, pH, temperature, TSS, accute bioassay, DO, residual chlorine, ammonia, enterococcus*	
b. List additional parameters analyzed for internal monitoring and process control: *Total solids, alkalinity, hardness, volitile acids*	
ELAP Certification No. 1092, expires 1/31/2010.	
2. EPA-approved analytical procedures are used in the on-site laboratory?	S
3. Adequate equipment and procedures used for on-site analyses:	
a. BOD and CBOD	S
b. TSS	S
c. pH	M
d. Dissolved Oxygen	S
e. Residual Chlorine	S
f. Temperature	S
g. Other:	N
3c. One of the pH buffers used in the laboratory had expired. The laboratory staff indicated that they would immediately replace the buffer.	
4. On-site laboratory records include:	
a. Laboratory SOPs	S
b. Calibration and maintenance of equipment	S
c. Equipment operating instructions and manuals	S
5. Adequate spare parts and supplies for on-site analyses.	S
6. Results of latest external DMR QA study are available and are acceptable. Date of last report: ***9/20/2009***	S
7. Satisfactory refrigeration in use.	S
8. Certified contract laboratory(s) being used:	S

LABORATORY: **OVERALL RATING: S**

INSPECTED ITEM		EVAL
Laboratory Name: ***Caltest*** Visited? ***No*** Address: ***1885 N Kelly Rd., Napa, CA 94558*** Phone: (***707***) ***266-1001*** Parameters: ***Metals, O&G***	Laboratory Name: ***AQUA-Science*** Visited? ***No*** Address: ***17 Arboretum Dr., Davis, CA 95616*** Phone: (***530***) ***753-5456*** Parameters: ***Chronic Toxicity***	
9. EPA-approved analytical procedures are identified on contract lab report.		S
10. Holding times being met by on-site and/or contract laboratory. a. pH measured in situ or within 15 minutes of sample collection. b. Residual chlorine measured in situ or within 15 minutes of sample collection.		 S S
11. Other:		N
Notes: ***This section was rated "satisfactory" because the inspector did not believe checklist item 3c. was significant enough to down grade the overall rating to marginal.***		

OPERATIONS AND MAINTENANCE: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
1. Preliminary treatment units (bar screens, comminuters, grit channels, etc.) properly maintained with wastes properly disposed. ***Grit and screenings are disposed of in a landfill.***	S
2. Adequate oxygen maintained in aerated treatment systems.	S
3. No operational problems caused by hydraulic "short-circuiting" in treatment units.	S
4. Biosolids wasting/return rates adequate to maintain system equilibrium.	S
5. Operation and Maintenance (O&M) Manuals and supporting information organized and maintained for use:	
a. Plant O&M Manual	S
b. Equipment manuals	S
c. Plant engineering drawings	S
d. Collection system drawings available or in development	N
e. Maintenance records/costs	S
6. Routine and preventive maintenance items are scheduled and performed on time.	S
7. The amount of maintenance activities and parts in back-log is acceptable.	S
8. Operational problems contributing to plant upset, excessive odors, effluent violations, etc.	S
9. Level of operator certification as required by the permit and staffing level as specified in O&M Manual. ***Staffing consists of:*** ***- Four Grade V's*** ***- Two Grade III's*** ***- One Grade II***	S
10. Auxiliary power available as required by the permit and operates the necessary treatment units. ***The Facility maintains two 750 KW generators.***	S
11. Alarm systems for power and equipment failure.	S
12. Treatment control procedures are established for emergencies.	S
13. Hydraulic surges are handled without excessive solids wash-out or bypasses.	S
14. Spare pumps and parts readily available.	S
15. Facility appears to be well operated and maintained.	S

OPERATIONS AND MAINTENANCE: **OVERALL RATING: S**

INSPECTED ITEM	EVAL
16. Other:	N

Notes:
This section was rated "satisfactory" because all items reviewed were rated satisfactory.

BIOSOLIDS/SOLID WASTE HANDLING AND DISPOSAL: OVERALL RATING: S

INSPECTED ITEM	EVAL
1. Biosolids/solid waste disposal/reuse method(s) (e.g., land application, landfill, etc.): Land application	S
2. Biosolids/solid waste disposal/reuse location(s): District dedicated land disposal site, Marin County.	S
3. The above processes are in accordance with the permit.	S
4. Storage at facility:	
a. Adequately sized for periods of inclement weather	N
b. Controls leachate, runoff, and public access	N
Sludge is pumped to a District property and was not viewed as a component of this inspection.	
5. Recent analytical results for metals (biosolids) are within permit limits.	N
6. Biosolids land application records include:	
a. Farm maps and land owner agreements	N
b. Soil nutrient analyses done within the last year for active sites	N
c. Records showing loading rate to each site	S
d. Pathogen/Vector reduction records (pH or temperature logs, etc.)	S
7. Other:	N

Notes:
This section was rated "satisfactory" because all items reviewed were rated satisfactory.

Novato Sanitary District - Novato WWTP (NPDES No. CA0037958) Photo Log
Inspected by: Craig Blett (PG Environmental, LLC)

Photo 1: Facility Entrance.

Photo 2: Primary clarifier under construction (looking westerly).

Photo 3: New disinfection unit under construction (looking southerly).

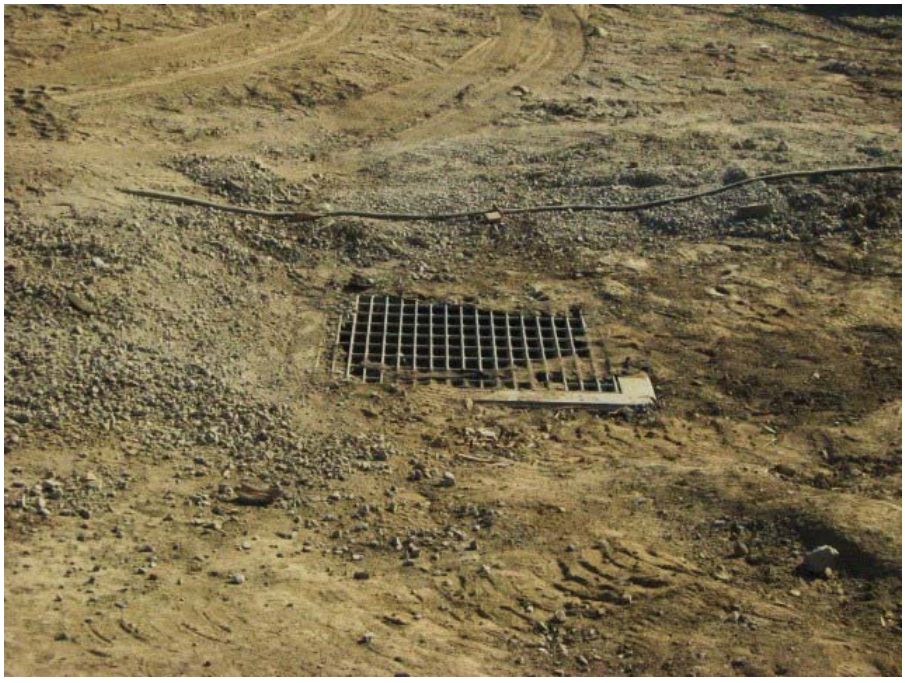

Photo 4: Site storm drain without protection. Drain chamber appeared to be completely filled with sediment.

Photo 5: Brown scum on surface of effluent pump station wet well holding pond.

CB 10-7-09

Novato Sanitary District
Self-Monitoring Report – March 2009

WDR VIOLATION (RECLAMATION)	PARAMETER	RESULT	DATE
NONE			

EVALUATION OF VIOLATIONS FOR MARCH 2009

- The Novato Facility exceeded the weekly TSS average of 45 mg/L, with a value of 53 mg/L during the first week of March 2009.

This exceedence was due to the affects of extended blending hours at the Novato facility. Heavy rain in February combined with extended rainy periods in the first week of March resulted in 144.1 hours of continual blending.

COLLECTION SYSTEM OVERFLOWS FOR MARCH 2009

The Novato Sanitary District Collection System had following overflows for March 2009:

Sunday, March 8, 2009, 20 Pinto Lane, Novato CA 94947, 2500 gallon SSO, Event ID 734863, Certification ID 708760.

Thursday, March 19, 2009, 32 Truman Drive, Novato CA 94947, 75 gallon SSO, Event ID 735312, Certification ID 274153.

EVALUATION OF OVERFLOWS FOR MARCH 2009

20 Pinto Lane: This stoppage was caused by a root blockage in the main line. District personnel cleared the blockage and recovered approximately 100 gallons of the overflow water. The overflow occurred in a rural/residential easement area and went undetected for approximately 4 days. There was no visible impact to receiving waters (Vineyard Creek). Staff televised the sewer main and found root intrusion at multiple points in the main. The cleaning schedule has been adjusted to a shorter interval as the District evaluates root abatement/repair options.

32 Truman Drive: This stoppage was caused by a root blockage in the main line that manifested at the lateral cleanout of 32 Truman Dr. District staff used hand rods in a steep open ground easement area to clear the stoppage. Staff televised the sewer main and found root intrusion at multiple points in the main. The cleaning schedule has been adjusted to a shorter interval as the District evaluates root abatement/repair options. No waterways, drainage ditches, or storm drains were impacted as a result of this overflow.

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Exhibit 1: SMR with report of March 2009 TSS exceedance.

CB 10-7-09

Novato Sanitary District
Self-Monitoring Report – January 2009

WDR VIOLATION (RECLAMATION)	PARAMETER	RESULT	DATE
NONE			

EVALUATION OF VIOLATIONS FOR JANUARY 2009

- **Final Effluent Chlorine Residual Limit:** The final effluent chlorine residual limit of 0.0 mg/L, was exceeded on Friday, January 23, 2009 with a value of 2.0 mg/L for 20 minutes.

This exceedence was the result of equipment failure. The bisulfite pump operating in lead position experienced a motor failure. The standby pump is programmed to begin operation after the lead pump reaches 90% of maximum speed or the bisulfite residual drops to 1.0 mg/L. This pump however only comes on to assist the lead pump and ramps up at a very slow pace. This allowed the effluent chlorine level to reach 2.0 mg/L before dechlorination was resumed. We are investigating the possibility of program changes that allow the standby pump to start at a much higher feed rate to avoid this problem in the future.

COLLECTION SYSTEM OVERFLOWS FOR JANUARY 2009

The Novato Sanitary District Collection System had following overflows for January 2009:

Friday, January 2, 2009, 2235 Laguna Vista, Novato CA, 5 gallon SSO, Event ID 731377, Certification ID 170334.

Sunday, January 4, 2009, 950 Ignacio Blvd, Novato CA, 100 gallon SSO, Event ID 731378, Certification ID 420961

Wednesday, January 14, 2009, 68 Margarita Terrace, Novato CA, 70 gallon SSO, Event ID 732107, Certification ID 942858

Friday, January 27, 2009, 2141 Leese Lane, Novato CA, 75 gallon SSO, Event ID 732824, Certification ID 166147

EVALUATION OF OVERFLOWS FOR FEBRUARY 2008

2235 Laguna Vista: This stoppage was caused by root intrusion in the downstream manhole. The overflow manifested at the lateral cleanout at 2235 Laguna Vista next to the foundation of the house. District personnel cleared the blockage and recovered 100% of the overflow and wash down water. There is no impact to drainage ditches, surface waters

Exhibit 2: SMR with report of January 2009 residual chlorine exceedance.