CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

RESPONSE TO WRITTEN COMMENTS

ON THE NPDES PERMIT REISSUANCE FOR:

Novato Sanitary District Novato, Marin County NPDES Permit No. CA 0037958

Comment letters dated October 15, 2004 and October 16, 2004, were received on this Tentative Order (T.O.) from the Novato Sanitary District (the District). On October 29, 2004, the District submitted additional information to clarify statements made in the original comment letters. The responses are given according to the order of the comments presented. For brevity, some comments are summarized.

Tentative Order

Comment: Monitoring requirements during high flows. The District proposed using 24-hour composite Total Suspended Solids (TSS) sampling as a surrogate for other pollutants when blending at the Novato Plant during high flow conditions. This proposal is supported by a statistical analysis detailed in the comment letters (October 15th and October 29th). The District proposes that TSS monitoring return to the routine sampling frequency immediately upon TSS values returning to compliance.

Response: Monitoring requirements during high flows. Water Board staff concurs in concept with the District's proposal. However the analysis provided by the District did not fully demonstrate that compliance with 45 mg/L of TSS also correlates with compliance with other pollutants parameters. For example, there was one exceedance of Total Coliform when TSS was below 45 mg/L. Also the table showing compliance with 45 mg/L and compliance history with other effluent limits is not convincing because (1) the limits for some toxics have changed, and (2) the data show increases in TSS during blending may not trigger at 45 mg/L, but the copper value could in theory be above the new limit.

Therefore, the Board believes it is appropriate to include bacteria monitoring during blending, and a more comprehensive study to demonstrate that both TSS and trigger value of 45 mg/L, are appropriate surrogates for other pollutants during blending. As such, the T.O. has been modified to include Provision 15, as shown below

15. Blending Monitoring Study

The Discharger shall comply with the following tasks and deadlines:

| Tasks | Compliance Date |
|---|--|
| a. Blending Study Plan. The Discharger shall propose a study plan, acceptable to the Executive Officer. The study plan shall propose monitoring effluent for the purpose of demonstrating that TSS is an appropriate indicator of compliance other with effluent limitations. | 6 months following effective date of permit |

| Tasks | Compliance Date |
|---|-----------------|
| b. Blending Final Report. The Discharger shall submit a report, acceptable to the Executive Officer. The report shall include an analysis of TSS as an indicator of compliance with offluent limitations, and a | June 30, 2006 |
| recommendation for a TSS trigger. The purpose of the TSS trigger is for use in triggering additional monitoring (Table 2 and Table 3 of the SMP) during blending events. | |

Modified the following to the end of the first paragraph of the Self Monitoring Program's Schedule of Sampling (Part B.II., Page 4):

"During blending events, 24-hour composite samples will be collected daily at the individual plants' outfalls and analyzed for TSS and enterococcus. If the TSS or enterococcus values exceed the limitations contained in the Permit (45 mg/L for TSS, and 276 MPN per 100ml for enterococcus), the effluent will be sampled daily for all constituents listed in Tables 2 and 3 below until the flow detectors indicate there have been no bypass events for 24 hours. If there are no enterococcus exceedences associated with blending events at the Novato plant during the first wet season after permit adoption, the District may apply to the Executive Officer for reduction or elimination of enterococcus sampling during blending events."

Comment: Collection System Overflows. In recognition that the Water Board and Bay Area Clean Water Agencies (BACWA) are working on sanitary system overflow (SSO) issues, the District requested that the T.O. include SSO language modeled on the language in Water Board issued NPDES permits regulating East Bay collection agencies that discharge to the East Bay Municipal Utilities District (EB MUD) treatment plant (Orders R2-2004-08, -09, -10, -11, -12, -13, and -14).

Response: Collection System Overflows. Water Board staff is working collaboratively with BACWA to comprehensively address SSOs. Furthermore, Provision 14, Sanitary Sewer Management Plan, requires the District to implement various SSO activities consistent with this collaborative approach. As such, the T.O. has been modified to include SSO language modeled in the above referenced Orders.

Comment: Interim Cyanide Limits. The District has proposed interim performance based limits (IPBLs) for cyanide based on a statistical analysis of pooled cyanide data, similar to the Water Board staff's 2001 Staff Report: Statistical Analysis of Pooled Data from Region-wide Ultra-clean Sampling. The comment letters include, as an attachment, a statistical analysis report supporting this request.

Response: Interim Cyanide Limits. No change was made to the T.O. based on this comment. The District has not provided evidence demonstrating that they cannot comply with the IPBL based on their individual plant performance. The Water Board believes that an IPBL based on individual effluent data is appropriate because there is enough data to statistically calculate a 99.87% value (performance-based value), and the District can comply with this value. A "pooled data" approach for mercury was appropriate because there was not enough ultraclean data for each treatment plant; this rationale is not applicable for this case.

Comment: Ambient background monitoring location. The District requested that the Water Board reconsider using the San Pablo Bay Regional Monitoring station (RMP SPB20) to establish ambient background concentrations for the reasonable potential analysis (RPA). The District's request is based

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on a claim that using RMP SPB20 is inconsistent with other NPDES permits, and results in more final water quality based effluent limits (WQBELs) and IPBLs for semivolatile organic compounds, particularly Heptachlor Epoxide.

Response: Ambient background monitoring location. No change was made to the T.O. based on this comment. The selection of San Pablo Bay RMP station is consistent with the permit reissuance for Las Gallinas Valley Sanitation District (Las Gallinas). The NPDES permit for Las Gallinas, reissued in December 2003 (Board Order No. R2-2003-0108) used station RMP SPB20 for ambient background data, and found reasonable potential and computed WQBELS and IPBLs for the same series of semivolatile pollutants, including heptachlor epoxide. It is anticipated that, during this permit cycle, there will be additional information gathered on ambient background concentrations of semivolatile organics in the effluent and receiving water. It is also possible that the Statewide Implementation Policy (the SIP) will be amended so that ambient background concentrations are no longer a trigger for reasonable potential. Either or both of these developments could allow, in the future, discontinuing WQBELs or IPBLs based solely on ambient background concentrations.

MINOR COMMENTS

The following corrections to typographical or minor factual errors were made at the indicated locations in the T.O or Self Monitoring Program, as appropriate. If suggested minor corrections were not appropriate, they were not made. Deletions are shown in strikeout and additions are shown in <u>underlined</u> text.

Tentative Order (T.O.)

- A. Finding 5 changed to read: "Collection System: The Discharger's wastewater collection system collects and transports wastewater flows to the WWTPs through a series of gravity sewers and interceptors, pump stations, and force mains designed to handle peak dry wet weather flows..."
- B. Finding 7, third paragraph changed to read:

| " The treatment processes vary depending | on influent flow: |
|---|--------------------------------------|
| Wet weather flows above 4.04 mgd | Primary treatment plus nitrification |
| | gravity filtration and disinfection" |
| and to add "all flows at the Ignacio plant receive full | l secondary treatment." |

- C. Finding 15, third sentence changed to read: "The Discharger, together with the North Marine Water District (NMWD), has filed a Notice of Intent for the construction and operation of a recycled water treatment facility...."
- D. Finding 76 changed to read: "The Self Monitoring Program (SMP) attached to this Order (included here by reference), requires monitoring at the individual WWTP outfalls for conventional pollutants, and at the combined outfall (E003) for toxic pollutants, acute toxicity, and chronic toxicity. <u>The SMP provides that sampling and analysis specified at E-003 may be physically collected at E-003, or may be reported as flow-weighted averages of the individual plants' results.</u>
- E. Biosolids/Sludge Requirement D. 3 is changed to read: "Sewage sludge disposed of at the storage lagoons and dedicated disposal site shall be limited to digested sewage sludge generated by the Discharger and sludge from NMWD's water treatment reclamation facility unless an exception is authorized by the Executive Officer.

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- F. Biosolids/Sludge Requirement D. 9, second sentence, is changed to read: "The Discharger shall submit a copy of this report to the Board by February 28 of the following year."
- G. Provision E.10 is changed to read:

"During the wet weather discharge period (November 1 through April 30), treated wastewater from the storage ponds may be discharged directly through the combined outfall, if it meets the requirements of the Discharger's Reclamation Pond Wet Season discharge Sediment Control and Monitoring Plan.

Water held in the reclamation ponds before being discharged through the combined outfall during the dry weather discharge months (May, September, and October) may be discharged if it meets all the requirements in this Order. Pre-discharge monitoring of water held in the reclamation ponds is required during the dry weather discharge period (May 1 – 31 and September 1 – October 31, annually."

Self Monitoring Report

- H. Self Monitoring Program Part V.B, Modifications to Self-Monitoring Program, Part A: is modified to include: <u>"Section C1: reference to influent samples (for the Novato Plant) excluding sidestreams from</u> <u>sludge storage pond supernatant, digester supernatant, filter backwash, and DAF supernatant. It is not</u> <u>possible to obtain an influent sample that does not contain these sidestreams."</u>
- I. Self Monitoring Program Part II.B, Tables 1, 2, and 3 are modified to read:

| SAMPLING STATION | | A-001 | A-002 |
|--|----------------|-----------------------------------|-----------------------------------|
| TYPE OF SAMPLE | Notes | C-24 | C-24 |
| | | [1] [2] | [1] [2] |
| Flow Rate (MGD) (1) | [3] | Cont/D | Cont/D |
| BOD ₅ 20°C, or CBOD (mg/L & kg/d) | [15] | 2/W | 2/W |
| Total Suspended Solids (mg/L & kg/d) | [15] | 5 - <u>3</u> /W (2) | 5 - <u>3</u> /W (2) |
| Pretreatment Requirements µg/L or ppb | [13] | М | М |

 Table 1.
 Schedule of Influent Sampling, Analyses And Observations.

Footnote for Table 1.

[1] Influent flow monitoring is not required because neither the Ignacio plant (A-001) nor the Novato Plant (A-002) has influent flow measuring.

 Table 2.
 Schedule Of Individual Plants' Effluent Sampling, Analyses And Observations

| SAMPLING STATION | | E-001 and E-002 | | All P | All OV |
|--|--------------------|-----------------|---------|-------|--------|
| TYPE OF SAMPLE | Notes | G [1] | C-24 | 0[1] | 0 [1] |
| | | | [1] [2] | | |
| Flow Rate (MGD) | [3] | | Cont/D | | |
| BOD ₅ 20°C, or CBOD (mg/L & kg/d) | [15] | | 2/W | | |
| Oil and Grease (mg/L & kg/d) | [4] [5] | | М | | |

| SAMPLING STATION | | E-001 and E-002 | | All P | All OV |
|---------------------------------------|-----------------|--------------------------|--------------|-------|--------|
| TYPE OF SAMPLE | Notes | G [1] | C-24 | 0[1] | 0 [1] |
| | | | [1] [2] | | |
| Total Suspended Solids (mg/L & kg/d) | [15] | | <u>53</u> /W | | |
| pH (s.u.) | [14] | Ð <u>5</u> /W | | | |
| Temperature (°C) | | D <u>5</u> /W | | | |
| Standard Observations | | | | М | Е |
| Pretreatment Requirements µg/L or ppb | [13] | М | | | |
| Chlorine Dosage, mg/L | [12] | D | | | |
| Enterococcus (MPN/100 ml) | [16] | 3/W | | | |

Table 3. Schedule Of Combined Plants' Effluent Sampling, Analyses And Observations

| SAMPLING STATION | | E-003 | | All P | All OV |
|--|-----------------|----------------|----------|-------|--------|
| TYPE OF SAMPLE | Notes | G [1] | C-24 | 0[1] | 0 [1] |
| | | | [1] [2] | | |
| Flow Rate (MGD) | [3] | | Cont/D | | |
| Chlorine Residual & Dosage (mg/L & kg/d) | [12] | H or co | ntinuous | | |
| Enterococcus (MPN/100 ml) | [16] | 5/W | | | |
| Acute Toxicity (% survival) | [6] | | М | | |
| Chronic Toxicity | [7] | | Q | | |
| Ammonia Nitrogen (mg/L & kg/d) | | 3/W | | | |
| Copper (μ g/L) | | | М | | |
| Lead $(\mu g/L)$ | | | М | | |
| Mercury (µg/L) | [9] | М | | | |
| Nickel (µg/L) | | | М | | |
| Cyanide (µg/L) | [10] | М | | | |
| 4,4'-DDE (µg/L) | | 2/Y | | | |
| 4,4'-DDD (µg/L) | | 2/Y | | | |
| Dieldrin (µg/L) | | 2/Y | | | |
| Heptachlor Epoxide (µg/L) | | 2/Y | | | |
| 2,3,7,8-TCDD and congeners | [11] | 2/Y | | | |

Footnote [3] Flow monitoring: Effluent and influent flows

Footnote [14] Daily minimum and maximum for pH shall be reported.

- Footnote [16] <u>The approved methods for the Enterococcus analysis are Enterolert, Membrane Filtration,</u> <u>or multiple tube fermentation.</u> The Discharger may submit a request to the Executive Officer for a reduction in sampling frequency once it has collected 24 months of data demonstrating consistence compliance with the effluent bacterial limitations.
- J. Table 5 is changed to read:

| Constituents | Sample Locations, Frequency, and Analytical | | | |
|----------------------|---|----------------|-----------------|--|
| | Method. | | | |
| | Influent A-001 | Effluent E-001 | Sludge [2] | |
| | and A -002 | and E-002 | | |
| VOC / 624 | 2/Y <u>624</u> | 2/Y <u>624</u> | 2/Y <u>8260</u> | |
| BNA / 625 | 2/Y <u>624</u> | 2/Y <u>624</u> | 2/Y <u>8260</u> | |

| Metals [1] | М | М | 2/Y |
|------------|---|---|-----|
| | | | |

2/Y = twice each calendar year (at about 6 month intervals, once in the dry season April and once in the wet season November)

K. Section III.B.1 is changed to read: The Discharger shall collect 24-hour composite samples of WWTP's effluent at the compliance point station specified in Table-1-3...

Fact Sheet

- L. Section I.D. is changed to read: The Discharger's wastewater collection system collects and transports wastewater flows to the WWTPs through a series of gravity sewers and interceptors, pump stations, and force mains designed to handle peak dry wet weather flows.
- M. Section II. B. third paragraph is changed to delete reference to wet weather flow treatment.
- N. Section II.C. paragraph 1, 5th sentence is changed to read: By January, February 2005, the Discharger will have installed flow measuring sensing devices in the Novato plant so that blending events can be explicitly identified as the occur.
- O. Section II.D. Table 1 is changed to reflect that: The correct median TSS for the Novato Plant is 3.6 mg/L and the correct median TSS for the Ignacio Plant is 22 mg/L.
- P. Section III.C. is changed to read: During the wet weather discharge period (November 1 through April 30 annually), water from the storage ponds may be discharged directly through the combined outfall, if it meets all effluent limits at the time of discharge. During the wet weather discharge period (November 1 through April 30), treated wastewater from the storage ponds may be discharged directly through the combined outfall, if it meets the requirements of the Discharger's Reclamation Pond Wet Season Discharge Sediment Control and Monitoring Plan. This Plan was approved by the Executive Officer in October 1999 and is adequate to prevent entrainment of pond sediments into the discharge.
- Q. Section I. vii, the third sentence is deleted because it does not apply.
- R. The provision references in Section I, parts. viii, ix, xiii, and xiv are renumbered to be consistent with the T.O.