# FAIRFIELD-SUIJUN WATER TREATMENT PLANT

# SLOUGH DATA

# 0005 3ML - F.PPI 3ML

# NPDES PERMIT CAOO38024

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# Fairfield-Suisun Sewer District

Richard F. Luthy, Jr. General Manager/District Engineer

June 29, 2000

Ms. Tobi Tyler San Francisco Bay Regional Water Quality Control Board 1515 Clay Street, Suite 1400 Oakland, CA 94612

#### Reference: NPDES Permit CA0038024 Special Study Schedule

RW-100.10.10/00

Chiftennia Residence water JUN 3 0 2000 QUALTY CONTROL BOARD

Dear Ms. Tyler:

This letter transmits the consultant's study plan for the Receiving Water Beneficial Use Assessment (attached), Provision E.6. of the District's NPDES Permit, and addresses scheduling issues for both the Receiving Water Beneficial Use Assessment and the Mercury Study.

#### **Provision E.6. – Receiving Water Study**

H. T. Harvey & Associates has been issued a Notice-to-Proceed for work on the Beneficial Use Assessment. Initial infrared photographic over flights should occur prior to July 4. All work on this study should be complete prior to January 1, 2002. Provision E.6.d. of the District's NDPES Permit requires submission of the final report by June 1, 2001. The District proposes to move the final report due date to February 1, 2002.

Additionally, due to recycled water quality limitations, it is not currently feasible for the District to change from a total coliform standard to a fecal coliform standard in the final effluent. Therefore, the District proposes to not conduct the fecal and total coliform portion of the Receiving Water Study.

> Address: 1010 Chadbourne Rd. Fairfield, CA 94585-9700
> Telephone: (707) 429-8930

> > Fax (707) 429-1280

Ms. Tobi Tyler Page 2 of 2 June 29, 2000

#### **Provision E.3 – Mercury Reduction Study**

Provision E.3.e. of the District's NPDES Permit requires submission of the final report by April 1, 2001. Work on receiving water methyl mercury analyses will not be completed until May 2001, therefore the District proposes to move the final report due date to <u>August 1, 2001</u>.

Thank you in advance for your careful consideration of these proposed changes. Should you have questions, please contact me at (707) 429-8930 or at <u>lbahr@fssd.com</u>.

Sincerely,

Larry Bahr Senior Environmental Scientist

/js

Attachment

Cc: Ms. Shin-Roei Lee, Section Chief, SFRWQCB Mr. Tom Hall, EOA Mr. Talyon Sortor, FSSD

Eisenberg, Olivieri & Associates Environmental and Public Health Engineering

CALIFORNIA REGIONAL WATER

JUN 0 1 1999

QUALITY CONTROL BOARD

June 1, 1999

Mr. Stephen Berger San Francisco Bay Regional Water Quality Control Board 1515 Clay Street, Suite 1400 Oakland, CA 94612

Subject: Receiving Water Study Workplans

mc.

Dear Mr. Berger:

On behalf of the Fairfield-Suisun Sewer District (FSSD), EOA submits the attached Receiving Water Study Workplans in fulfillment of Provision E.6.a. of the District's NPDES Permit Order No. 98-077. This permit provision requires submittal of a workplan that addresses both the potential receiving water impacts of operating under a fecal coliform effluent limit and an assessment of beneficial uses attributed to Boynton Slough.

Separate workplans have been prepared to address each topic for your review and consideration. The District will commence work on each workplan within 60 days of receipt of your approval.

The District is also interested in pursuing a dilution study as part of these receiving water studies, as outlined in Finding 19 of the NPDES permit. This work would also provide information that would be useful in interpreting the results of the fecal coliform study and the freshwater beneficial use study. However, the District is concerned about proceeding with a dilution study without 1) additional guidance on technical requirements acceptable to the Board, and 2) policy guidance from the Board on how, and when, the results would be applied.

As you know, the Novato Sanitary District conducted a dilution study using a well respected computer model previously used by the South Bayside System Authority (and others) in support of SBSA's subsequently RWQCB approved plant capacity expansion. Novato applied for, and was denied, limited dilution credit in its May 25, 1999 NPDES permit reissuance.

Board staff's response to the request for dilution credit was that the issue was "controversial and would be appropriate to be consistently addressed in the triennial Basin Planning process rather than on a permit-by-permit basis." The response further added the opinion that the Board needed to "defer action on the studies until the CTR is promulgated and/or the Basin Plan is amended." (5/19/99 Staff Response to Comments, p. 5)

Mr. Stephen Berger June 1, 1999 Page 2

The District respectfully requests your response on how Board staff intends to address this shallow water dilution issue. The District would be pleased to participate in a technical and/or policy development process with Board staff and other interested parties. Such a group could be charged to develop dilution related technical and policy guidance and potentially draft Basin Plan amendment language.

Please contact Mr. Larry Bahr of the District at (707) 429-8930, or myself if you have any questions. We would also be pleased to meet with your staff at their convenience to discuss the details of the proposed workplans.

Very truly yours, EOA, Inc.

Tom Hall

Thomas W. Hall, Ph.D. Supervising Environmental Engineer

Attachment 1: FSSD Alternative Coliform Limit Workplan Attachment 2: FSSD Freshwater Beneficial Uses Workplan

Cc: Larry Bahr, FSSD Shin-Roei Lee, RWQCB

#### **ATTACHMENT 1**

#### FAIRFIELD-SUISUN SEWER DISTRICT ALTERNATIVE COLIFORM EFFLUENT LIMIT WORKPLAN June 1, 1999

#### BACKGROUND

The purpose of this study is to investigate the potential impacts of changing current effluent limitations for the Fairfield-Suisun Sewer District (FSSD) wastewater treatment plant from a total coliform to a fecal coliform standard. The Basin Plan allows the Regional Water Quality Control Board (RWQCB) to make this substitution providing that it can be demonstrated that there will not be an unacceptable adverse impact on receiving water beneficial uses.

The RWQCB has previously adopted fecal coliform effluent limits in NPDES permits for the East Bay Dischargers Authority, Central Contra Costa Sanitation District, City of San Francisco, East Bay Municipal Utility District, Central Marin Sanitation Agency, South Bayside System Authority, City of San Mateo, and most recently the Cities of South San Francisco/San Bruno, Millbrae, Burlingame, and the San Francisco Airport. Receiving water monitoring supporting those prior actions documented that beneficial uses remained fully protected when the treatment plants operated with fecal coliform effluent limits of 200 to 500 MPN/100 mL.

Operating at this level of disinfection provides water quality benefits due to the associated reduction in chlorinated hydrocarbons (disinfection byproducts) discharged to the Bay. Risks to the public are also reduced due to the decreased production, transportation, storage, and handling of chlorination and dechlorination chemicals.

#### FECAL COLIFORM REGULATORY BASIS AND RATIONALE

Historically, effluent coliform limits in this Region have been expressed as total rather than fecal. However, various non-enteric organisms can show up as positive in the total coliform test, resulting in elevated concentrations that may not be fully representative of the actual threat to water quality from waste of fecal origin.

The current FSSD bacteriological effluent limits are based on total coliform and include a 7day median of 2.2 MPN/100 mL and daily maximum of 23 MPN/100 mL (Order No. 98-077). FSSD disinfects to these levels in part to provide unrestricted (tertiary) recycled water for irrigation and other uses as described in permit Findings 6 and 7. Title 22 reclamation requirements are expressed on a total coliform basis.

During winter months there is limited recycled water demand. Based on other studies around the bay, receiving water beneficial uses during winter months are known to be adversely impacted due to wet weather and other non-point coliform sources. Given these winter conditions, it may be feasible for FSSD to operate during winter, wet weather months with fecal coliform limits and then to switch back to the current total coliform limits during recycled water production months. Finding 25 affirms the Board's intent to allow FSSD to investigate the applicability of alternative fecal coliform limits as allowed under the Basin Plan. The specific Basin Plan language that allows fecal coliform effluent limits to be used instead of total coliform (and less stringent wet weather limits) is specified in footnote (d) to Table 4-2 as cited below:

d(1) The Regional Board may consider substituting total coliform organisms limitations with fecal coliform organisms limitations provided that it can be conclusively demonstrated through a program approved by the Regional Board that such substitution will not result in unacceptable adverse impacts on the beneficial uses of the receiving water.

(2) The Regional Board may consider establishing less stringent requirements for any discharges during wet weather.

Provision E.6 requires the District to conduct a receiving water study that will, in part, evaluate fecal and total coliform concentrations and distribution in Boynton Slough, and evaluate compliance with Basin Plan coliform objectives while operating under a fecal coliform standard. This workplan is prepared in partial fulfillment of the requirements of Provision E.6a.

Permit Effluent Limitation B.3.b provides further guidance to the District on how to proceed with the fecal coliform study required by Permit Provision 6 and described in this workplan:

"The discharger may use alternate limits of bacteriological quality instead of meeting 3.a and 3.b above (total coliform limits) during the study in Provision 6 to determine appropriate limits if the discharger can establish to the satisfaction of the Board that the use of the fecal coliform limits will not result in unacceptable adverse impacts on the beneficial uses of the receiving water."

#### Fecal Coliform Water Quality Objectives

Listed below are the Basin Plan Table 3-1 fecal coliform (MPN/100 mL) water quality objectives for protection of specified receiving water beneficial uses:

•	Water contact recreation:	log mean < 200	$90^{\text{th}}$ percentile < 400
•	Non-contact recreation:	mean < 2000	$90^{\text{th}}$ percentile < 4000

A Department of Health Services memorandum to the SWRCB Executive Director (October 24, 1990) provided clarification of the definition of these uses and included a new category of uses. The 1990 DHS memo defined water contact recreation as body contact uses with substantial likelihood of ingesting water such as swimming, wading, or water skiing (not fishing). Non-contact water recreation was defined as uses that do not require contact with water such as hiking, beachcombing, sightseeing, pleasure boating, and hunting on land.

The DHS memo included a new, separate criterion called Limited Water Contact recreation. Fishing, boating, hunting while standing in water, and bait collection were defined as limited contact recreation activities. Commercial/Sport Fishing was defined as commercial collection of various types fish and shellfish that are not filter feeding bivalve shellfish, including those taken for bait purposes. The recommended receiving water fecal coliform objectives (MPN/100 mL) for Limited Water Contact and Commercial/Sport Fishing are:

• Limited contact recreation: median < 500 90th percentile < 1100

The Fairfield-Suisun Subregional Wastewater Treatment Plant discharges tertiary effluent via a submerged outfall to Boynton Slough, which is part of the Suisun Marsh, and a tributary to Suisun Slough and Suisun Bay. The Basin Plan identifies beneficial uses for Suisun Marsh, Suisun Slough and Suisun Bay. However, as stated in permit Finding 15, beneficial uses have not been established in the Basin Plan specific to Boynton Slough, the upstream tributary to Suisun Slough.

Water contact and non-contact water recreation are the uses listed in the District's NPDES permit that are believed most relevant to evaluation of impacts of alternative fecal coliform levels. Water contact recreation (REC-1) the more restrictive of these two uses.

A study prepared in response to a prior NPDES permit requirement, identified general uses of the overall marsh area. A *Summary Technical Report on Water Quality* (K.P. Lindstrom & Associates, September 1987) found the most popular recreation activities to include duck hunting, fishing, game hunting, boating, and sightseeing. Strong gusty winds during the spring and summer and narrow channels were found to deter sailing in the Marsh (i.e. limited or non-contact recreation).

Water contact activities were fairly limited. Swimming was found not to be a popular activity in the Marsh because of the muddy banks, slough currents, and cold muddy waters. Water-skiing was generally confined to the upper end of Suisun Marsh due to higher boat speeds and wider and deeper channels necessary. Water skiing is theoretically possible in Boynton Slough, but based on its narrowness and relatively remote location (compared to other more accessible and desirable locations), it would appear more appropriate to view the area as providing limited water contact recreation uses.

During the wet weather winter season, when FSSD proposes to conduct this fecal coliform chlorination reduction study, the potential for water contact uses recreation uses would appear to be even less likely. As described below, one aspect of this study is to observe and document the level of recreational use that is actually occurring in Boynton Slough.

Therefore, solely for purposes of this workplan and short-term study, it is proposed to assume that water contact recreation uses <u>may</u> exist during summer months, but that during the winter 1999-2000 study period, that there would be only limited contact or non-contact water recreation uses occurring. Therefore, in terms of selecting a target winter objective, either 500 MPN/mL or 2000 MPN/100 mL would be applicable.

#### WORKPLAN TASKS

The primary intent of this workplan is to demonstrate that the receiving water limited water contact recreation beneficial uses will remain fully protected when the treatment plant is operating under a target fecal coliform standard in lieu of a total coliform standard. This will be accomplished by progressively reducing chlorination levels while closely

monitoring both effluent and receiving water fecal coliform levels. This portion of the study is proposed to be conducted December 1999 through February 2000 when effluent is not required to be diverted for reclamation.

The workplan includes the following items:

- chlorine reduction and effluent monitoring plan;
- receiving water monitoring plan;
- receiving water user survey; and
- final report.

Each item is briefly described below.

#### Chlorination Reduction and Effluent Monitoring Plan

One of the goals of this study is to identify a target chlorine residual and contact time (CT) that can be reliably maintained and which will produce an effluent quality that will fully protect beneficial uses. We propose to use 500 MPN/100mL median fecal coliform as the "target" effluent concentration during this chlorination reduction study. It is not possible to "dial in" a precise coliform concentration, but operating in the 500 MPN range will provide the data necessary to evaluate appropriate and achievable median and 90<sup>th</sup> percentile effluent limits. This is believed to be a value that should be protective of the presumed limited or non-contact uses most likely to be occurring in December through February months. It is also believed to be conservative given evidence from indirect tracer studies that the discharge may receive up to 5:1 initial dilution under most tidal conditions.

Chlorine dosage will be reduced in increments of 1 to 2 mg/L from the current dosage. The plant will be operated for 5-7 days at each successive level, with a goal of reaching 500 MPN/100 mL as rapidly as possible, consistent with protection of water quality. Once a 500 MPN/100 mL effluent level has been consistently achieved, the plant will be operated to obtain a minimum of four weeks of stable operating and receiving water data.

If during dry weather periods, receiving water fecal coliform monitoring results show levels attributable to the discharge that consistently approach or exceed the target 500 MPN/100 mL level, effluent chlorination levels will be increased and a revised target in the range of 200 MPN/100 mL adopted.

At the end of the February testing, or sooner if reclamation demand unexpectedly increases, chlorine dosages will be increased back to current levels.

Effluent total and fecal coliform will be measured daily. Chlorine dosage, residual, flow, contact time, and turbidity will be recorded at the time each coliform grab sample is taken. Chlorine residual will be continuously monitored. Daily dosages (usage) and costs of chlorination and dechlorination chemicals will be recorded.



#### ATTACHMENT 2

#### FAIRFIELD-SUISUN SEWER DISTRICT FRESHWATER BENEFICIAL USES WORKPLAN June 1, 1999

#### BACKGROUND

The primary purpose of this study is to investigate whether the warm freshwater habitat Basin Plan beneficial use designation should be applied to Boynton Slough. As stated the Fairfield-Suisun Sewer District's NPDES Permit Finding 15, the Basin Plan has not yet established beneficial uses specific to Boynton Slough. Finding 15 further states that the District will participate in a receiving water study, as specified in Provision E.6, that will in part investigate the appropriate beneficial uses for Boynton Slough. This workplan, and the proposed studies, have been developed in response to these directives.

As summarized in Permit Finding 18.b and c, the 1995 Basin Plan includes formulas for calculating freshwater aquatic life objectives based on site specific hardness levels. The Basin Plan states that freshwater effluent limitations shall apply to discharges to receiving waters with salinities lower than 5 parts per thousand (ppt) at least 75% of the time in a normal water year. FSSD's receiving waters meet these 5 ppt/75% criteria based on monitoring data from Boynton and Suisun Sloughs for the most recent normal water years (1993 and 1996).

The Basin Plan further states that for discharges to tidally-influenced fresh waters that support estuarine beneficial uses, effluent limitations shall be the lower of the marine, or freshwater effluent limitation based on ambient hardness. While Boynton Slough and Suisun Slough are tidally-influenced, they are not listed in the Basin Plan as supporting estuarine beneficial uses. Suisun Slough is designated as warm freshwater habitat. In the FSSD permit, the RWQCB applied the tributary rule and found that the freshwater habitat uses listed for Suisun Slough, the downstream tributary to Boynton Slough, would apply to Boynton Slough.

Based on the above findings, the District's effluent limits were derived from the lower of the former (1990) permit limits or the calculated freshwater water quality objectives based on a conservatively calculated ambient receiving water hardness of 200 mg/L derived from 1993-1995 monitoring data.

#### WORK PLAN TASKS

The District proposes to use two indicators to further evaluate whether Boynton Slough meets the Basin Plan definition for warm freshwater habitat: water quality and vegetation assemblages. For the first, FSSD will continue to collect salinity and hardness data monthly from the eight receiving water monitoring stations as specified in the NPDES Permit's Self Monitoring Program. To expand this water quality database, FSSD will also collect salinity and hardness data when monitoring more frequently at the same stations for other purposes, for example for the fecal coliform study.

Rainfall and delta outflow records will be reviewed and used to help determine which monitoring periods meet the Basin Plan criterion of a "normal" water year, for assessing compliance with the <5 ppt salinity at least 75% if the time freshwater objective criteria. Results will be reviewed to determine, where feasible, the locations of seasonal 5 ppt/75% transition zones.

As a biological indicator of whether or not Boynton Slough meets the second Basin Plan criterion for application of freshwater objectives (i.e. does not support estuarine beneficial uses), the District proposes to assess the dominance and distribution of salt-tolerant and freshwater plant assemblages along Boynton Slough. Vegetation type categories will be inventoried and mapped on the basis of the relative dominance or co-dominance by a qualified aquatic biologist.

Vegetation information serves as an "integrating" indicator of saline influence since vegetative changes typically occur relatively slowly. However, it needs to be recognized from the outset that changes can also occur due to factors unrelated to the discharge, such as changes in local annual runoff and/or Delta outflow. Increased sedimentation could also provide additional substrate that may allow the growth of new and possibly different vegetation.

For these reasons, it is proposed to create a baseline inventory map during early 2000 and then to redo/update it during the same time period in 2001. The District will provide the RWQCB with a copy of the detailed scope of work to be developed in consultation with the aquatic biologist that will be hired to conduct the work. It is expected that vegetative inventory data collection will begin in fall 1999 with the first map estimated to be completed by March 2000.

Available water quality data through March 2001, plus the two vegetation maps and analyses, will be compiled, evaluated and summarized in the final report due to the RWQCB per Provision E.6.d by June 1, 2001.

#### DATE 5-jan-00

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1350	1244	1321	1325	1315	1306	1300	1340
Depth, ft	12	12	7	8	13	9	10	12
D.O. mg/l	7.4	10. <del>6</del>	7.2	7.1	7.3	7.8	8.5	7.4
Temp, C	8.7	9.1	10.4	9.1	8.9	8.8	8.9	9.0
pH, units	7.6	6.6	7.3	7.5	6.8	6.8	6.9	7.5
Secci Disk, inch	13	8	9	8	8	8	7	10
Salinity	2.7	2.3	3.6	3.5	4.9	5.5	6.2	4.9
Conductivity, umho	4720	12360	5900	5200	7750	8700	98300	7750
Turbidity	22.1	47.7	31.5	40.7	38.5	40.4	38.8	31.8
HARDNESS, CaCO3	650	1400	770	780	920	1000	1100	920
PO4, mg/l	0.97	0.14	1.18	1.05	0.27	0.46	0.2	0.32
NO3, mg/l	4.90	0.50	5.40	5.90	0.39	0.30	0.35	0.37
TKN, mg/l	1.21	0.56	1.03	1.12	0.65	0.56	0.47	0.56
NH3, mg/l	0.16	0.17	0.12	0.14	0.13	0.15	0.17	0.13
Organic Nitrogen	1.05	0.39	0.91	0.98	0.52	0.41	0.30	0.43
CHLORO."a" mg/m3	5.6	4.2	5.3	4.3	5.4	4.3	3.2	11.0

13-reb-00								
STATION	CR1	CR2	C1	C2	СЗ	C4	C5	C6
Time	1110	0950	0940	1030	1045	1010	1000	1100
Depth, ft	12	12	9	11	13	12	14	18
D.O. mg/l	8	8.4	6.5	7	8.2	7.4	8.0	8.4
Temp, C	14.3	11.6	14.3	14.3	13.5	13.1	12.0	14.0
pH, units	7.1	6.5	6.6	6.9	7.3	6.8	6.8	7.2
Secci Disk, inch	4	5	3	4	3	3	3	4
Salinity	0.1	0.4	0.3	0.3	0.1	0.1	0.1	0.1
Conductivity, umho	620	1100	959	942	585	574	573	561
Turbidity	106	136	142	134	150	150	159	149
HARDNESS, CaCO3	180	180	180	200	130	110	110	110
PO4, mg/l	0.27	0.2	0.54	0.58	0.29	0.24	0.28	0.2
NO3, mg/l	4.9	0.5	5.4	5.9	1.6	1.0	0.7	1.5
TKN, mg/l	1.12	1.03	1.68	1.68	0.93	0.93	1.12	0.56
NH3, mg/l	<0.1	0.17	0.19	0.33	0.27	0.2	0.1	0.18
Organic Nitrogen	1.02	0.86	1.49	1.35	0.66	0.73	1.02	0.38
CHLORO."a" mg/m3	8.0	2.4	5.8	5.8	1.2	1.2	1.2	2.4

Page 6 of 8

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DATE

# SLOUGH DATA

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	<u>C5</u>	C6
Time	1050	1000	1025	1030	1035	1015	1010	1040
Depth, ft	9	18	7	10	15	10	12	9
D.O. mg/i	7.2	6.9	7.8	6.5	7.2	6.5	6.4	6.9
Temp, C	16.3	14.3	17.0	17.6	16.0	15.1	15.1	16.5
pH, units	7.4	6.4	7.2	7.2	7.2	6.8	6.7	7.3
Secci Disk, inch	9	7	10	11	9	8	7	8
Salinity	0.6	0.3	0.7	0.8	0.7	0.8	0.8	0.7
Conductivity, umho	1442	886	1565	1837	1450	1700	1641	1514
Turbidity	41	114	43	40	64	78	105	54
HARDNESS, CaCO3	360	140	320	370	280	280	250	270
PO4, mg/l	0.25	0.20	1.04	1.23	0.42	0.33	0.26	0.39
NO3, mg/l	1.61	0.37	4.04	3.86	1.52	1.15	0.89	1.32
TKN, mg/i	0.93	0.65	1.21	1.03	1.31	1.03	1.21	1.03
NH3, mg/l	<0.1	<0.1	0.218	0.23	<0.1	0.11	0.19	0.19
Organic Nitrogen	0.93	0.65	0.99	0.80	1.31	0.92	1.02	0.84
CHLORO."a" mg/m3	4.42	0.00	17.70	1.19	3.20	3.40	3.40	2.40

Page 6 of 8

DATE 15-Mar-00

SLOUGH DATA

#### DATE 4-Apr-00

#### CR2 CR1 C1 C2 C3 **STATION C4** C5 **C8** 1500 1605 1535 1545 1530 1520 1515 Time 1555 9 9 10 Depth. ft 10 13 9 9 16 9.2 D.O. mg/l 8.7 7.1 7.1 8.8 8.2 8.5 7.6 Temp, C 17.8 16.2 18.4 18.8 17.7 17.3 17.3 17.5 pH, units 7.9 7.4 7.8 7.8 7.9 7.7 7.8 7.9 9 Secci Disk, Inch 9 5 9 6 6 6 8 1.9 0.9 8.0 1.1 1.1 Salinity 1.1 1.1 1.1 1915 2090 2220 Conductivity, umho 2060 3420 1826 1730 2110 Turbidity 41 114 43 40 64 18 105 54 400 360 370 350 330 370 HARDNESS, CaCO3 410 360 0.21 1.30 2.00 0.57 0.40 0.27 0.25 PO4, mg/l 0.51 1.20 NO3, mg/l 1.90 0.48 5.90 9.40 2.60 1.80 2.10 1.26 1.40 TKN, mg/l 0.84 0.84 1.31 1.40 1.31 1.21 <0.1 <0.1 < 0.1 <0.1 <0.1 <0.1 <0.1 <0.1 NH3, mg/l 1.40 Organic Nitrogen 0.84 0.84 1.31 1.40 1.31 1.26 1.21 CHLORO."a" mg/m3 14.60 4.40 5.40 5.60 7.80 2.40 4.40 6.60

Page 6 of 8

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# DATE 3-May-00

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1437	1400	1415	1420	1412	1410	1405	1435
Depth, ft	16	18	7	9	12	9	10	14
D.O. mg/l	9.2	8.1	8.0	7.6	8.6	8.2	8.2	7.9
Temp, C	19.1	18.3	19.7	19.8	18.9	18.6	18.5	19.0
pH, units	7.8	6.1	7.5	7.6	7.3	7.1	6.7	7.7
Secci Disk, inch	8	3	7	7	5	6	5	7
Salinity	1.1	1.1	0.9	0.7	1.2	1.3	1.2	1.2
Conductivity, umho	2170	2070	1846	1536	2360	2480	2440	2410
Turbidity	61.7	20.3	65.4	50.7	74.8	93.5	124	63.7
HARDNESS, CaCO3	430	290	360	320	400	400	380	400
PO4, mg/l	0.15	0.10	1.50	1.90	0.42	0.23	0.52	0.34
NO3, mg/l	0.86	0.54	3.74	4.00	1.42	1.16	0.99	1.27
TKN, mg/l	0.98	0.84	1.12	1.12	0.93	0.98	1.07	1.07
NH3, mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Organic Nitrogen	0.98	0.84	1.12	1.12	0.93	0.98	1.07	1.07
CHLORO."a" mg/m3	29.40	0.00	1.00	10.20	18.20	10.20	6.60	15.60

# SLOUGH DATA

DATE 13-Jun-00

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time .	1430	1250	1335	1345	1400	1320	1300	1415
Depth, ft	8	16	10	9	10	13	11	13
D.O. mg/l	7.4	8.2	4.5	5.0	6.1	7.0	7.5	6.5
Temp, C	23.8	25.6	25.9	25.9	27.2	24.5	25.4	25.6
pH, units	7.2	7.7	7.1	7.5	7.5	7.8	7.8	7.8
Secci Disk, inch	8	5	8	7	7	7.	7	8
Salinity	2.4	3.1	1.2	0.8	1.3	1.4	1.7	1.2
Conductivity, umho	1100	5700	2620	1937	2760	2950	3510	2870
Turbidity	66.3	99.1	68.1	62.9	75.8	85.7	78.3	70.1
HARDNESS, CaCO3	550	700	500	410	430	480	500	430
PO4, mg/l	0.48	0.25	1.40	1.80	0.62	0.46	0.38	0.56
NO3, mg/l	0.87	0.55	5.60	7.30	1.40	0.95	0.83	1.20
TKN, mg/l	1.21	1.17	1.26	1.49	1.21	1.21	0.84	1.12
NH3, mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Organic Nitrogen	1.21	1.17	1.26	1.49	1.21	1.21	0.84	1.12
CHLORO."a" mg/m3	3.20	2.40	14.80	0.41	8.30	4.40	0.72	0.00

Page 6 of 8

.

December 1999

5.

Discharge Monitoring Report

FOR

# Fairfield – Suisun

# Wastewater Treatment Plant



# NPDES PERMIT # CA0038024 REPORT

Fairfield-Suisun Regional Treatment Plant

#### SLOUGH DATA

7	DATE
	11-Jun-97

STATION	<u>CR1</u>	CR2	<u>C1</u>	C2	<u>C3</u>	<u>C4</u>	C5	C6
Time	7:35	6:30	7:10	7:15	7:05	6:55	6:50	7:25
Depth, ft	11	13	11	8	12	10	9	15
D.O. mg/l	5.6	8.6	6.8	(5.5)	7.4	7.5	7.8	7.4
Temp, C	20.0	21.5	21.1	21.1	19.7	20.3	21.0	19.8
pH, units	7.6	7.7	7.3	7.4	7.8	7.8	7.8	7.8
Secci Disk, inch	7	9	8	• 7	7	8	8	15
Salinity	2.2	5.5	1.6	1.2	2.8	3.0	4.1	2.9
Conductivity, umho	4280	9750	3200	2580	5340	6000	77150	5420
Turbidity	58.2	<b>41.2</b>	32.9	49.7	55.6	50.3	46.7	47
HARDNESS, CaCO3	660	1000	440	360	600	680	760	600
PO4, mg/i	0.43	0.19	2.08	1.81	0.57	0.43	0.33	0.53
NO3, mg/l	3.20	3.20	6.93	6.29	1.13	0.85	0.70	1.10
TKN, mg/i	0.75	1.96	1.03	1.21	1.12	1.03	0.84	1.16
NH3, mg/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Organic Nitrogen	0.75	1.96	1.03	1.21	1.12	1.03	0.84	1.16
SILICA mg/I	17.1	15.1	23.2	23.8	18.8	18.5	17.3	18.4
CHLORO."a" mg/m3	5.5	1.0	2.2	2.2	0.0	2.2	2.2	2.2

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

25-Jun-97

DATE

STATION	CR1	CR2	<u>C1</u>	C2	C3	<u>C4</u>	<u>C5</u>	<u>C6</u>	
Time	6:45	7:45	7:15	7:20	7:10	7:05	6:55	7:35	
Depth, ft	10	I	7	9	13	10	_11_	13	
D.O., mg/l	7.5	(5.6)	(6.3)	5.0	6.3	6.3	6.4	7.0	
Temp, C	22.5	21.5	22.0	22.0	19.0	21.0	22.0	21.0	
pH, units	7.8	7.6	7.5	7.5	7.7	7.7	7.4	7.6	
Secci Disk, inch	13	9	10	7	9	10	9	10	
Salinity	6.2	2.8	2.8	1.6	3.4	4.0	4.8	3.5	
Conductivity, umho	10320	5350	5210	3240	6310	7240	8570	6460	
Turbidity	38.4	35.6	37.0	58.4	43.4	37.3	36.7	51.0	
HARDNESS, CaCO3	760	1200	580	460	760	790	930	670	
PO4, mg/l	0.43	0.14	1.05	1.60	0.46	0.34	0.26	0.48	
NO3, mg/i	1.32	0.67	5.00	7.90	1.50	1.11	0.87	1.12	
TKN, mg/l	1.17	0.65	1.03	1.07	1.07	1.07	0.86	1.21	
NH3, mg/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Organic Nitrogen	1.17	0.65	1.03	1.07	1.07	1.07	0.86	1.21	
SILICA mg/I	NA								
CHLORO."a" mg/m3	5.5	4.5	0.0	3.4	5.6	4.5	4.3	4.4	



Operations Management International, Inc. 1014 Chadbourne Road Fairfield CA 94533

Tuesday, July 15, 1997 Regional Water Quality Control Board San Francisco Bay Region Surveillance Division 2101 Webster St., Fifth Floor Oakland CA 94612

Attention: Mr. Mark Ruderman

I am pleased to present the Discharge monitoring report for June 1997. No exceptions are noted, however please be aware of the following:

June 11<sup>th</sup> the dissolved oxygen level at one or more sample points CR1 through C6 were below 7.0 mg/l. Based on D.O. values at CR1, CR2 and others we do not believe that the plant effluent caused any reduction in D.O. levels. On June 25<sup>th</sup> the D.O. level for the plant effluent was 6.9 mg/l, which was above all but two slough sample points and above the DO levels at C1 when sampled at approximately the same time on the same date.

E002 and E003 flows were unavailable at the time of publishing and will be sent as they become available. This matter is being actively pursued with the Solano Irrigation District.

(\*On June 25 an effluent pH grab sample for E001-A was inadvertently not analyzed.

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 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,

milmans

Jerry McMackin, OMI Project Manager

Phone: (707) 429-3233 Fax: (707) 426-0719

dmr ref RWQCB file # 2213.2016

manterio Violation - effluent pH bar E-001-A not analyzed on 06/25/97 Data fun E-002 & E-003 Stell not Seibmitted on current in Low D.O. levels in several receiving water that to OMI

1014 Chadbourne Road Fairfield CA 94585 (707) 429-3233 FAX (707) 426-0719

CR2= 8.6 pp Do level ranged o 5-5 to 6-8 PP in 2 of the Statiens

QR2=5.6A

DO levels

ranged B

5.0-6-6-4

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 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,

nachS

Serry McMackin, OMI Project Manager

Phone: (707) 429-3233 Fax: (707) 426-0719

dmr ref RWQCB file # 2213.2016

#### NPDES PERMIT # CA0038024 REPORT

Fairfield-Suisun Regional Treatment Plant

# SLOUGH DATA

DATE	
2-Jul-97	1

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	<u>C4</u>	C5	C6
Time	14:52	13:50	14:27	14:33	14:20	14:11	14:02	15:03
Depth, ft	9	18	6	7	12	8	8	11
D.O. mg/l	6.4	7.4	7.3	4.3	6.6	7.1	6.8	7.3
Temp, C	22.0	22.0	23.0	22.5	22.5	22.0	22.0	22.0
pH, units	7.8	7.7	7.3	7.6	7.9	7.9	7.8	7.9
Secci Disk, inch	10.0	8.0	13.0	19.0	10.0	10.0	10.0	10.0
Salinity	2.6	6.2	2.4	1.1	3.6	4.0	4.7	3.6
Conductivity, umho	4840	10900	4500	2340	6620	7320	8490	6670
Turbidity	46.2	88.1	35.5	60.2	45.7	45.4	37.4	39.5
HARDNESS, CaCO3	630	1200	480	350	1500	820	940	820
PO4, mg/l	0.37	0.16	2.00	2.00	0.46	0.41	0.29	1.10
NO3, mg/l	0.97	0.55	7.21	5.30	1.40	1.10	0.89	1.10
TKN, mg/l	1.07	1.00	1.21	1.68	0.75	1.00	0.93	1.07
NH3, mg/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Organic Nitrogen	1.07	1.00	1.21	1.68	0.75	1.00	0.93	1.07
SILICA mg/l	19.6	15.4	22.1	22	14.9	17.8	16.9	18.2
CHLORO."a" mg/m3	6.50	1.20	3.40	3.40	2.20	6.80	4.60	9.90

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 30-Jul-97

STATION	CR1	CR2	C1 ·	C2	C3	C4	C5	<u>C6</u>	
Time	13:15	12:20	12:50	12:55	12:45	12:35	12:30	13:05	
Depth, ft	12	16	8	9	9	10	6	16	
D.O., mg/l	(6.6)	7.8	(6.3)	6.1	7.9	7.8	7.8	7.9	
Temp, C	20.0	21.0	21.0	20.0	20.0	20.0	21.0	21.0	
pH, units	7.8	7.8	7.7	7.5	7.9	7.8	7.8	8.0	
Secci Disk, inch	10	5	9	9	10	9	9	11 -	
Salinity .	4.0	6.1	3.6	2.6	4.0	5.2	9.7	5.1	
Conductivity, umho	7250	10610	7140	5020	8800	9300	9870	8970	
Turbidity	48	104	48	56	42	46	42	33	
HARDNESS, CaCO3				Pending	from Lab				
PO4, mg/l	0.35	0.20	0.99	1.58	0.71	0.38	0.30	0.40	
NO3, mg/l	0.56	0.48	3.50	6.46	0.85	0.59	0.60	0.64	
TKN, mg/l	1.30	1.40	0.80	1.30	1.20	0.90	0.84	1.03	
NH3, mg/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Organic Nitrogen	1.30	1.40	0.80	1.30	1.20	0.90	0.84	1.03	
SILICA mg/l		Not Analyzed							
CHLORO."a" mg/m3	17.70	5.23	8.68	4.26	14.30	10.90	4.40	7.70	

Page 6

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Operations Management International, Inc. 1014 Chadbourne Road Fairfield CA 94533

Tuesday, January 25, 2000 Regional Water Quality Control Board San Francisco Bay Region Surveillance Division 2101 Webster St., Fifth Floor Oakland CA 94612

Attention: Ms. Shin-Roei Lee

I am pleased to present the Discharge Monitoring Report for December 99. No violations are noted, however please be aware due to SCADA malfunction, no influent flow was reported for December 6.

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 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,

n VMaak

Jerry McMackin, OMI Project Manager

dmr reef RWQCB file #2213.2016

# NPDES PERMIT # CA0038024 REPORT

Fairfield-Suisun Regional Treatment Plant

#### DATE 5-Nov-97

#### **SLOUGH DATA**

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	_C4	C5	C6
Time	0720	0650	0715	0720	0710	0705	0700	0730
Depth, ft	7	15	10	9	11	8	11	11
D.O. mg/l	3.5	7.8	3.6	3.8	4.3	5.2	5.9	4.2
Temp, C	16.5	17.1	16.3	16.5	16.9	17.1	17.1	16.8
pH, units	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.2
Secci Disk, inch	11	13	11	- 10	11	14	14	14
Salinity	4.9	6.6	3.0	3.2	6.9	7.0	6.8	6.9
Conductivity, umho	8780	11930	10810	6800	12090	12170	11910	12150
Turbidity	36.7	24	30.6	29.7	29.9	23.5	21.0	24.9
HARDNESS, CaCO3	1100	1200	1200	760	1300	1300	1200	1300
PO4, mg/l	0.80	0.10	0.54	1.30	0.30	0.24	0.16	0.29
NO3, mg/l	1.01	0.33	1.34	3.27	0.50	0.30	0.29	0.38
TKN, mg/l	2.05	0.56	1.49	1.49	1.31	1.31	1.03	1.31
NH3, mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organic Nitrogen	2.05	0.56	1.49	1.49	1.31	1.31	1.03	1.31
SILICA mg/I	15.7	17.2	16.2	19.3	18.3	15.8	15.8	16.4
CHLORO."a" mg/m3	24.50	2.36	4.58	6.79	4.58	3.40	2.22	3.40

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 19-Nov-97

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	0810	0710	0745	0750	0740	0730	0720	0807
Depth, ft	9	20	8	9	9	9	13	11
D.O., mg/l	5.0	7.9	4.8	4.7	4.8	4.7	5.5	5.0
Temp, C	12.9	14.3	13.2	13.3	13.3	13.5	13.7	13.3
pH, units	7.1	7.2	7.2	7.3	7.3	7.3	7.3	7.3
Secci Disk, inch	11	13	9	8	9	11	12	11
Salinity	3.4	6.6	4.5	3.2	5.2	5.6	6.0	5.2
Conductivity, umho	6400	11550	8050	6000	9500	10260	10680	9530
Turbidity	30.6	24.1	46.8	49.7	39.6	29.9	25.2	31.8
HARDNESS, CaCO3	750	1100	930	590	1000	1000	1100	1000
PO4, mg/l	1.04	0.12	0.69	1.40	0.40	0.34	0.28	0.37
NO3, mg/l	0.82	0.37	1.60	4.00	0.66	0.53	0.48	0.60
TKN, mg/l	2.40	0.80	1.7	1.8	1.4	1.5	1.4	1.5
NH3, mg/l	<0.5	<.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organic Nitrogen	2.40	0.80	1.7	1.8	1.4	1.5	1.4	1.5
SILICA mg/l	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	49.70	2.06	3.40	5.62	4.27	5.50	4.30	7.70



Operations Management International, Inc. 1014 Chadbourne Road Fairfield CA 94533

Friday, August 15, 1997 Regional Water Quality Control Board San Francisco Bay Region Surveillance Division 2101 Webster St., Fifth Floor Oakland CA 94612

Attention: Mr. Mark Ruderman

I am pleased to present the Discharge monitoring report for July, 1997. Please note the following:

The pH on Tuesday, July 8 1997 for discharge E001-S exceeded 8.5 units from the times of 12:24 PM until 2:09 PM. The maximum value reached was 8.85 units. This is a total of one hour and 45 minutes. Please refer to my letter dated July 9 for additional information.

Problems associated with the effluent pH meter have been resolved. As per our conversation that week we began manual sampling and have also replaced the meter assembly with a new style and brand. As of this writing these actions appear to have corrected the problems.

On July second the Quality assurance for the coliform analysis was out of limits and the test was invalidated.

On July second the dissolved oxygen level at one or more sample points CR1 through C6 were below 7.0 mg/l. The plant discharge did not cause further in slough oxygen levels as the D.O. at the discharge point was above 7 mg/l at the time of sampling, the lowest D.O. value recorded was at a control point. On July 30th the D.O. at the discharge point was a little below 7, but the lowest value was away from this area, suggesting other factors are involved.

Decentry Walter 07/02/97 CR1=6.4 m/L C2: 4.3 m/L CR2: 7-4 m/L C3=6.6 m/L C5=6-8 m/L 07/30/97 CR1=6.6 m/L C1=656 m/L CR2: 7.8 m/L C-26-1 mg/L

08/08/97

#### SLOUGH DATA

DATE 8-Oct-97

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	<u>C4</u>	C5	C6
Time	0920	0820	0855	0900	0850	0845	0835	0910
Depth, ft	12	16	10	9	14	8	7	10
D.O. mg/l	<1	9.7	8.7	6.2	8.2	8.6	9.4	8.4
Temp, C	16.0	18.5	17.0	17.0	17.5	18.0	19.0	18.0
pH, units	7.3	7.5	7.4	7.5	7.5	7.4	7.4	7.8
Secci Disk, inch	NA	ŅA	NA	. <b>NA</b>	NA	NA	NA	NA
Salinity	4.6	10.6	6.3	4.4	6.3	7.2	8.4	6.5
Conductivity, umho	8460	11960	11180	9000	11210	12490	14430	11370
Turbidity	25.1	23.8	19.5	19	26.6	20.3	19.9	22.5
HARDNESS, CaCO3	1000	1900	1200	820	1300	1300	1500	1200
PO4-P, mg/l	2.00	0.17	0.48	1.10	0.29	0.25	0.19	0.27
NO3, mg/l	0.29	0.61	1.10	2.90	0.55	0.42	0.41	0.52
TKN, mg/l	3.30	0.70	1.30	1.20	0.50	1.10	0.70	0.90
NH3, mg/l	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5
Organic Nitrogen	3.30	0.70	1.30	1.20	0.50	1.10	0.70	0.90
SILICA mg/l	23.2	16.4	18.5	20.6	16.9	16.6	16.3	16.6
CHLORO."a" mg/m3	32.5	2.05	4.75	15.60	9.20	3.60	7.80	4.60

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 22-Oct-97

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	C4	C5	C6
Time	0920	0825	0855	0900	0905	0937	0837	0928
Depth, ft	8	11	6	9	13	10	11	18
D.O., mg/l	2.4	8.5	7.1	6.8	7.1	5.8	6.7	6.9
Temp, C	15.0	17.0	16.0	15.5	16.0	17.0	17.0	16.0
pH, units	7.5	7.5	7.4	7.4	7.5	7.4	7.4	7.4
Secci Disk, inch	11	9	13	13	12	17	14	12
Salinity	5.0	8.4	6.7	5.1	7.2	7.7	8.3	7.2
Conductivity, umho	9280	14530	11820	9060	12650	13400	14230	12760
Turbidity	29.4	48.2	25.9	22.8	28.8	19.3	21	24.3
HARDNESS, CaCO3	1200	1500	1300	1100	1500	1600	1600	1400
PO4-P, mg/l	1.37	0.14	0.48	1.07	0.31	0.26	0.16	0.34
NO3, mg/l	0.59	0.27	1.00	2.60	0.42	0.24	0.24	0.32
TKN, mg/l	2.60	0.60	1.40	1.40	1.30	1.20	0.93	1.40
NH3, mg/l	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5
Organic Nitrogen	2.60	0.60	1.40	1.40	1.30	1.20	0.93	1.40
SILICA mg/l	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	29.5	6.60	13.4	23.4	16.7	15.6	7.80	14.6

NPDES PERM	3rd Quarter Phytoplankton Report									
DATE: July 2, 1997		SLOUGH DATA- Phytoplankton								
STATION	CR1	CR2	<u>C1</u>	C2	<u>C</u> 3	C4	<u>C5</u>	C6		
PHYTO clls/ml	14637	3444	6888	4305	5166	6888	5166	12054		
Page	6									



Operations Management International, Inc. 1014 Chadbourne Road Fairfield CA 94533

Thursday, November 13, 1997 Regional Water Quality Control Board San Francisco Bay Region Surveillance Division 2101 Webster St., Fifth Floor Oakland CA 94612

Attention: Mr.Stephen Bergaer

I am pleased to present the Discharge monitoring report for October 1997. No exceptions are noted, however please be aware of the following:

The low dissolve oxygen level observation in a few of the sampling points are due to a sudden temperature drop which causes parts of the slough to turn over. At both monitoring dates, the dissolved oxygen level at C1, the discharge point were above 7.0 mg/l.

Composite samples were not collected on October 15, 20th and 23rd due to a sampler malfunction. Therefore no turbidity or settleable solids are reported for mentioned dates.

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 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,

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Jerry McMackin, OMI Project Manager

dmr ref RWQCB file #2213.2016

# NPDES PERMIT # CA0038024 REPORT

9

Fairfield-Suisun Regional Treatment Plant

DATE
2-Dec-97

#### SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1445	1355	1420	1425	1415	1410	1405	1435
Depth, ft	10	20	7	14	13	10	12	12
D.O. mg/1	6.8	8.3	5.5	5.6	7.4	5.8	6.5	6.2
Temp, C	11.1	12.7	11.8	12.7	11.8	12.1	12.3	11.8
pH, units	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.4
Secci Disk, inch	11	11	8	8	8	10	10	10
Salinity	1.8	5.1	2.7	1.8	3.0	3.6	4.2	3.1
Conductivity, umho	3800	9190	5170	3630	5860	6860	7440	5890
Turbidity	40.1	34.8	55.9	55.4	53.6	41.1	32.6	41.4
HARDNESS, CaCO3	430	910	520	390	620	720	800	600
PO4, mg/l	0.58	0.10	0.38	0.84	0.35	0.28	0.21	0.32
NO3, mg/l	0.95	0.44	1.48	4.11	0.93	0.75	0.62	0.93
TKN, mg/l	1.77	0.98	1.59	1.40	1.54	1.40	1.21	1.35
NH3, mg/l	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	1.77	0.98	1.59	1.40	1.54	1.40	1.21	1.35
SILICA mg/t	13.4	16.7	15.2	19.4	14	13.4	14.2	13.4
CHLORO."a" mg/m3	30.10	4.60	10.40	8.20	10.50	8.30	5.90	8.30

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 10-Dec-97

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	C4	C5	C6
Time	1025	0925	0955	1000	0950	0943	0935	1015
Depth, ft	9	20	7	10	12	13	12.7	12
D.O., mg/l	7.7	8.6	6.8	6.5	7.4	6.9	7.5	7.4
Temp, C	9.3	10.9	10.6	11.6	10.3	10.9	11.0	10.2
pH, units	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4
Secci Disk, inch	9	9	8	8	8	9	9	8
Salinity	1.7	3.8	1.7	1.0	2.2	2.7	3.2	2.4
Conductivity, umho	3590	6920	3580	2320	4370	5260	6080	4750
Turbidity	38.6	47.2	58.7	53.3	59.9	49.7	41.2	48.7
HARDNESS, CaCO3	420	720	400	320	540	580	650	560
PO4, mg/t	0.56	0.15	0.79	1.40	0.39	0.35	0.30	0.38
NO3, mg/l	1.08	0.49	2.78	4.57	1.05	0.84	0.69	0.96
TKN, mg/l	1.90	0.98	1.50	1.60	1.60	1.40	1.40	1.50
NH3, mg/l	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	1.90	0.98	1.50	1.60	1.60	1.40	1.40	1.50
SILICA mg/I	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	29.20	ND	3.40	ND	2.40	5.80	2.40	4.60

Page 6

NH3 Detection Limit = 0.5 mg/l

NPDES PERMIT # CA0038024 REPORT 4rd Quarter Phytoplankton Report								
DATE:November, 19	97		SLOUGH	DATA- Phy	toplankton			
STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
PHYTO clis/mi	12053	4304	7749	10331	5166	5166	5166	6027



Operations Management International, Inc. 1014 Chadbourne Road Fairfield CA 94533

Thursday, December 11, 1997 **Regional Water Quality Control Board** San Francisco Bay Region Surveillance Division 2101 Webster St., Fifth Floor Oakland CA 94612

#### Attention: Mr.Stephen Berger

I am pleased to present the Discharge monitoring report for November 1997. Please note there were no flows to discharge points E- 002 and E- 003 in the month of November. No exceptions are noted, however, due to natural causes and the impact of seasonal changes, the receiving waters dissolve oxygen level will fall below 7.0 mg/l at times. Unless the low dissolve oxygen of the receiving water is caused by the effluent discharge, no notation will be given in future reports.

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 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,

Jem, Mi Mact

dmr ref RWQCB file #2213.2016

# SLOUGH DATA

# 7-Jan-98-

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	0950	0900	0925	0930	0920	0915	0910	0940
Depth, ft	12	18	6	10	11	9	7	14
D.O. mg/l	8.5	10.0	8.0	8.2	8.4	9.0	9.3	8.5
Temp, C	8.3	8.6	9.5	10.9	8.3	8.3	8.4	8.5
pH, units	7.2	7.5	7.4	7.4	7.5	7.5	7.5	7.5
Secci Disk, inch	9	10	10	10	9	11	11	11
Salinity	1.9	6.1	2.0	1.4	2.6	3.0	3.6	2.6
Conductivity, umho	3490	11190	3980	2930	5040	5852	6940	5230
Turbidity	42	39.8	47.4	33.8	45.9	37.5	40.1	39.5
HARDNESS, CaCO3	480	1100	500	400	570	630	740	570
PO4, mg/l	0.42	0.15	0.84	1.59	0.40	0.32	0.25	0.38
NO3, mg/l	0.90	0.60	3.40	5.90	1.30	1.00	1.10	1.10
TKN, mg/l	1.70	0.75	1.30	1.10	1.30	1.30	1.00	1.30
NH3, mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organic Nitrogen	1.70	0.75	1.30	1.10	1.30	1.30	1.00	1.30
SILICA mg/l	15	20.2	20.7	22	17.4	15.7	17.2	17.2
CHLORO."a" mg/m3	35.90	1.19	8.85	5.61	16.80	15.60	4.40	15.60

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 21-Jan-98

STATION	CR1	CR2	C1	C2	C3	C4	C5	<u>C6</u>
Time	0855	0750	0825	0830	0815	0810	0805	0845
Depth, ft	11	20	6	9	13	8	10	13
D.O., mg/l	7.4	8.4	7.4	6.4	6.2	5.4	6.4	5.8
Temp, C	10.8	11.0	11.3	11.8	10.9	11.3	11.5	11.1
pH, units	7.7	7.6	7.3	7.3	7.4	7.4	7.4	7.4
Secci Disk, inch	12	10	9	9	5	7	7	6
Salinity	0.7	1.3	0.7	0.6	0.5	0.8	0.8	0.5
Conductivity, umho	1659	1790	1836	1545	1396	1629	2010	1436
Turbidity	31.5	40.1	55	45.2	88.5	77.9	64.8	84.2
HARDNESS, CaCO3	310	290	260	200	200	210	230	180
PO4, mg/l	0.54	0.13	0.80	1.00	0.32	0.28	0.29	0.29
NO3, mg/l	2.17	0.85	3.95	4.71	1.45	1.18	1.22	1.21
TKN, mg/l	1.8	0.9	1.6	1.5	1.4	1.5	1.4	1.5
NH3, mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organic Nitrogen	1.8	0.9	1.6	1.5	1.4	1.5	1.4	1.5
SILICA mg/l	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	10.000	1.19	7.33	3.23	7.81	4.10	5.40	6.50

DATE

#### SLOUGH DATA

STATION	CR1	CR2	<u>C1</u>	<u>C2</u>	C3	C4	C5	C6
Time	0910	0810	0845	0850	0840	0835	0830	0900
Depth, ft	14	22	12	12	16	9	13	20
D.O. mg/l	7.2	8.2	6.5	6.4	7.4	7.3	7.4	7.4
Temp, C	11.3	11.0	11.4	11.5	11.5	11.6	11.5	11.5
pH, units	7.4	7.5	7.2	7.2	7.3	7.3	7.4	7.4
Secci Disk, inch	3	5	2	. 3	2	2	3	2
Salinity	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Conductivity, umho	385	815	565	578	410	451	481	394
Turbidity	275	258	442	446	339	320	278	331
HARDNESS, CaCO3	79	110	100	110	85	77	81	77
PO4, mg/l	0.15	0.15	0.21	0.38	0.26	0.20	0.24	0.17
NO3, mg/1	0.74	0.56	0.86	1.06	0.51	0.53	0.58	0.50
TKN, mg/l	0.93	0.93	1.31	1.40	1.20	1.20	1.10	1.10
NH3, mg/i	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	0.93	0.93	1.31	1.40	1.20	1.20	1.10	1.10
SILICA mg/l	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	4.40	1.00	3.40	1.20	2.20	3.40	2.20	6.60

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 25-Feb-98

DATE

4-Feb-98

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	C4	C5	C6
Time	1320	1230	1257	1300	1255	1247	1245	1315
Depth, ft	8	15	9	10	15	13	13	15
D.O., mg/l	7.4	7.8	6.8	7.3	7.0	6.6	7.5	8.4
Temp, C	12.2	10.7	12.5	13.1	12.0	11.8	11.8	12.0
pH, units	7.6	7.7	7.4	7.3	7.5	7.5	7.5	7.5
Secci Disk, inch	10	5	8	9	6	6	6	6
Salinity	0.2	0.0	0.2	0.4	0.1	0.1	0.1	0.1
Conductivity, umho	900	617	963	1206	746	736	817	740
Turbidity	46	166	78.1	45.5	113	126	119	105
HARDNESS, CaCO3	220	110	190	240	160	150	140	150
PO4, mg/l	0.22	0.21	0.46	0.81	0.23	0.18	0.16	0.19
NO3, mg/l	0.80	0.32	1.20	1.80	0.35	0.56	0.46	0.61
TKN, mg/l	0.75	0.93	1.00	0.37	1.12	1.12	0.89	1.00
NH3, mg/1	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	0.75	0.93	1.00	0.37	1.12	1.12	0.89	1.00
SILICA mg/I	39.5	40.4	36.6	39.2	34.8	34.4	34.8	33.1
CHLORO."a" mg/m3	2.20	3.20	3.10	3.10	5.10	4.10	4.30	4.40

#### **SLOUGH DATA**

#### DATE 11-Mar-98

STATION	<u>CR1</u>	CR2	<u>C1</u>	C2	<u>C3</u>	C4	C5	C6
Time	1330	1230	1315	1305	1300	1255	1245	1325
Depth, ft	7	17	8	10	8	9	8	14
D.O. mg/l	7.9	8.1	7.9	6.4	6.6	7.9	7.8	6.7
Temp, C	15.5	13.3	16.2	16.2	14.8	14.4	14.9	15.0
pH, units	7.5	7.5	7.2	7.2	7.3	7.4	7.3	
Secci Disk, inch	10	5	10	8	7	6	6	7
Salinity	0.7	0.3	0.9	1.1	0.7	0.7	0.6	0.7
Conductivity, umho	1842	1043	2140	2360	1839	1699	1566	1807
Turbidity	31	90	32	31	67	77	78	64
HARDNESS, CaCO3	400	130	320	400	280	250	210	280
PO4, mg/l	0.26	0.23	1.45	1.26	0.54	0.50	0.43	0.52
NO3, mg/l	0.80	0.32	1.20	1.80	0.35	0.56	0.46	0.61
TKN, mg/l	1.07	1.03	1.26	1.49	1.49	1.49	0.98	1.54
NH3, mg/l	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	1.07	1.03	1.26	1.49	1.49	1.49	0.98	1.54
SILICA mg/l	18.5	20	19.8	20.6	18.8	19.6	18.8	18.6
CHLORO,"a" mg/m3	6.60	6.31	7.49	5.14	14.10	15.30	11.90	15.50

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 24-Mar-98

STATION	CR1	CR2	C1	C2	<u>C3</u>	C4	C5	C6
Time	1100	1010	1040	1045	1035	1030	1020	1050
Depth, ft	13	18	10	11	10	11	9	4
D.O., mg/l	6.7	7.7	6.0	<b>5.9</b>	6.7	6.2	6.4	6.4
Temp, C	16.9	16.2	17.7	18.1	17.1	17.1	17.3	17.1
pH, units	7.1	7.4	7.0	7.1	7.3	7.4	7.4	7.4
Secci Disk, inch	11	6	8	11	7	6	6	7
Salinity	0.6	0.3	0.8	0.8	0.8	0.8	0.8	0.8
Conductivity, umho	1692	1150	2050	2060	2030	1952	1848	2020
Turbidity	30	76	49	33	60	76	70	62
HARDNESS, CaCO3	310	240	340	340	310	220	310	310
PO4, mg/l	0.27	0.22	1.05	1.69	0.56	0.43	0.37	0.50
NO3, mg/l	2.54	1.37	5.16	8.52	1.95	1.60	1.20	2.12
TKN, mg/l	1.00	1.00	1.30	1.40	1.20	1.30	1.10	1.20
NH3, mg/l	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	1.00	1.00	1.30	1.40	1.20	1.30	1.10	1.20
SILICA mg/l	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	4.40	3.24	5.45	4.42	5.45	5.45	4.42	5.61

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STATION	CR1	CR2	C1	C2	СЗ	C4	C5	C6
Time	1310	1210	1240	1245	1235	1230	1220	1300
Depth, ft	10	- 15	8	8	14	9	11	16
D.O. mg/l	8.0	9.1	7.4	7.1	7.4	7.3	7.6	7.3
Temp, C	14.2	13.5	15.4	15.2	14.4	14.0	14.0	14.1
pH, units	7.8	7.6	7.4	7.4	7.6	7.6	7.8	7.6
Secci Disk, inch	10	5	9	10	9	7	5	7
Salinity	0.8	0.2	0.8	0.9	0.8	0.8	0.8	0.8
Conductivity, umho	1967	925	1938	2120	2020	2050	1959	2070
Turbidity	33	93	43	45	68	74	88	64
HARDNESS, CaCO3	380	96	320	370	310	280	260	290
PO4, mg/l	0.21	0.15	1.42	1.34	0.60	0.41	0.33	0.46
NO3, mg/l	1.27	0.33	4.94	4.38	1.92	1.32	0.94	2.04
TKN, mg/l	0.84	0.84	1.31	1.40	1.31	1.26	1.40	1.21
NH3, mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organic Nitrogen	0.84	0.84	1.31	1.40	1.31	1.28	1.40	1.21
SILICA mg/l	15.4	19	19.1	17.9	15.4	15.1	16.2	15.3
CHLORO."a" mg/m3	ND	ND	ND	ND	ND	ND	1.00	7.10

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 22-Apr-98

DATE 8-Apr-98

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1211	1113	1145	1150	1140	1134	1127	1204
Depth, ft	9	18	6	7	14	9	10	14
D.O., mg/	7.3	7.8	6.6	5.5	6.9	6.7	6.7	6.5
Temp, C	20.7	17.8	21.0	21.2	19.6	18.2	18.0	18.7
pH, units	7.9	7.6	7.3	7.4	7.7	7.7	7.6	7.7
Secci Disk, inch	12	7	11	9	7	7	6	8
Salinity	0.8	0.3	0.7	0.8	0.9	0.8	0.8	0.9
Conductivity, umho	1851	1050	1761	1849	2130	2060	1891	2130
Turbidity	31.1	77.6	42.4	47.2	68	76.9	76.2	64.8
HARDNESS, CaCO3	440	200	310	390	390	390	320	400
PO4, mg/l	0.29	0.20	1.78	1.74	0.67	0.41	0.32	0.49
NO3, mg/l	1.77	0.38	8.02	8.70	2.63	1.66	1.21	2.26
TKN, mg/l	1.03	0.93	1.17	1.26	1.26	1.21	1.17	1.26
NH3, mg/l	ND							
Organic Nitrogen	1.03	0.93	1.17	1.26	1.26	1.21	1.17	1.26
SILICA mg/l	NA	NA	NA	NA	AN	NA	NA	NA
CHLORO."a" mg/m3	23.8	11.4	15.8	13.6	13.8	10.2	9.2	13.6

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NPDES PERM	<b>NIT # CA003</b>	8024 REPC	DRT	2nd Quarter Phytoplankton Report				
DATE:Jan. 1998			<b>SLOUGH</b>	DATA- Phyl	oplankton			
STATION	CR1	CR2	C1	C2	C3	C4	C5	<u>C6</u>
PHYTO clis/ml	6027	2583	3444	5168	6888	8610	2583	4305

#### SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1235	1120	1205	1210	1200	1150	1140	1225
Depth, ft	12	19	7	8	13	12	13	16
D.O. mg/l	5.1	7.1	6.1	5.7	6.0	5.6	6.1	5.8
Temp, C	17.5	18.7	18.9	19.0	18.5	18.5	18.7	18.7
pH, units	7.6	7.3	7.3	7.3	7.5	7.6	7.5	7.6
Secci Disk, inch	9	6	9	7	7	6	5	7
Salinity	0.5	0.5	0.8	0.7	0.8	0.9	0.8	0.9
Conductivity, umho	1330	1284	197 <b>9</b>	1822	2050	2110	1855	2150
Turbidity	47.5	100	555	56.9	73.1	84.2	110	77.1
HARDNESS, CaCO3	280	160	290	290	300	300	250	310
PO4, mg/l	0.26	0.22	1.80	2.00	1.00	0.44	0.38	0.48
NO3, mg/l	1.10	0.37	5.80	6.70	3.30	1.40	0.90	1.50
TKN, mg/l	1.03	1.03	1.21	1.40	1.31	1.40	1.31	1.21
NH3, mg/l	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	1.03	1.03	1.21	1.40	1.31	1.40	1.31	1.21
SILICA mg/l	16.4	17.9	21.6	21.3	· 19.5	18.1	18	17.8
CHLORO."a" mg/m3	7.80	3.20	3.40	5.60	3.40	3.20	4.60	2.20

#### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

DATE 20-May-96

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DATE 6-May-96

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	0950	0900	0925	0930	0920	0915	0915	0945
Depth, ft	6	17	7	9	13	9	10	12
D.O., mg/l	6.3	7.8	5.8	5.1	6.6	7.0	7.4	7.0
Temp, C	18.1	17.1	18.8	17.7	17.5	17.2	17.4	17.5
pH, units	7.30	7.50	7.28	7.30	7.45	7.57	7.60	7.55
Secci Disk, inch	8	5	7	7	6	6	6.1	7.1
Salinity	0.7	0.4	0.8	0.8	0.9	0.8	0.8	0.8
Conductivity, umho	1616	1200	1957	1958	2020	2020	1855	2050
Turbidity	48	104	79	75.2	92	94.2	109	77.6
HARDNESS, CaCO3	380	190	330	310	350	290	290	310
PO4, mg/l	0.45	0.18	1.10	2.50	0.66	0.38	0.31	0.49
NO3, mg/l	2.20	0.77	5.70	5.70	2.90	1.80	1.40	2.00
TKN, mg/l	0.84	1.10	1.60	1.50	1.30	1.30	1.40	1.30
NH3, mg/l	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	0.84	1.10	1.60	1.50	1.30	1.30	1.40	1.30
SILICA mg/I	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	8.00	4.59	3.60	13.30	8.80	0.00	4.30	4.40

# SLOUGH DATA

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STATION	<u>CR1</u>	CR2	<u>C1</u>	C2	<u>C3</u>	<u>C4</u>	C5	C6
Time	0845	0750	0820	0825	0830	0810	0750	0835
Depth, ft	7	14	7	8	10	10	8	10
D.O. mg/l	4.9	7.3	6.3	4.4	5.4	6.1	6.0	6.1
Temp, C	22.7	21.3	23.1	22.8	21.9	21.5	21.5	21.6
pH, units	7.8	7.5	7.5	7.5	7.6	7.7	7.6	7.7
Secci Disk, inch	6	5	6	7	6	5	5	6
Salinity	0.8	0.1	0.7	0.7	0.8	0.7	0.5	0.8
Conductivity, umho	1984	714	1752	1744	1855	1725	1446	1855
Turbidity	77	99	79	77	106	108	115	118
HARDNESS, CaCO3	350	280	300	140	360	290	200	300
PO4, mg/l	0.42	0.20	1.50	1.60	0.60	0.37	0.29	0.45
NO3, mg/l	1.0	0.3	4.6	2.0	4.3	1.2	0.8	1.2
TKN, mg/l	1.40	0.80	1.60	1.70	1.40	1.40	1.20	1.40
NH3, mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Organic Nitrogen	1.40	0.80	1.60	1.70	1.40	1.40	1.20	1.40
SILICA mg/I	19.1	19.7	22	18.7	21.1	20.8	20.4	21.2
CHLORO."a" mg/m3	5.60	4.60	10.00	7.80	8.80	5.60	3.40	6.80

NPDES PERMI	NPDES PERMIT # CA0038024 REPORT					r Phytopla	nkton Repo	ort
DATE:June 17, 1998			SLOUGH [	DATA- Phyl	toplankton			
STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
PHYTO clis/ml	9469	3444	6887	3443	3444	6026	2583	6026

# DATE 17- '

#### SLOUGH DATA

DATE 1-Jul-98

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	0655	0650	0725	0730	0735	0715	0710	0745
Depth, ft	6	18	7	10	10	9	9	16
D.O. mg/l	6.2	7.4	5.4	5.5	6.7	6.4	6.6	6.8
Temp, C	22.0	23.2	22.3	22.5	22.4	21.6	22.2	21.6
pH, units	7.90	7.64	7.41	7.43	7.62	7.73	7.65	7.81
Secci Disk, inch	5	5	5	5	6	4	4	5
Salinity	0.8	0.0	0.7	0.7	0.7	0.6	0.4	0.7
Conductivity, umho	1992	512	1704	1687	1820	1606	1606	1793
Turbidity	78.6	108	105	103	117	122	132	121
HARDNESS, CaCO3	260	140	270	260	260	290	230	270
PO4, mg/l	0.36	0.23	1.59	1.73	0.97	0.44	0.34	0.58
NO3, mg/l	1.20	0.50	7.92	7.60	4.27	1.58	1.16	1.73
TKN, mg/l	1.12	0.84	1.59	1.59	1.60	1.40	1.30	1.30
NH3, mg/l	0.12	ND	0.10	0.13	0.10	0.16	ND	ND
Organic Nitrogen	1.00	0.84	1.49	1.46	1.50	1.24	1.30	1.30
SILICA mg/l	NA	NA	NA	NA	NA	NA	NA	NA
CHLORO."a" mg/m3	5.61	2.36	11.40	10.00	10.20	6.79	5.74	5.77

### NPDES PERMIT # CA0038024 REPORT SLOUGH DATA

*....* 

DATE 15-Jui-98

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	0655	0650	0725	0730	0735	0715	0710	0745
Depth, ft	6	18	7	10	10	9	9	16
D.O., mg/l	6.2	7.4	5.4	5.5	6.7	6.4	6.6	6.8
Temp, C	22.0	23.0	22.3	22.5	22.4	21.6	22.2	21.6
pH, units	7.55	7.53	7.77	7.52	7.75	7.74	7.66	7.72
Secci Disk, inch	5	5	5	5	6	4	4	5
Salinity	0.8	0.0	0.7	0.7	0.7	0.6	0.4	0.7
Conductivity, umho	1992	512	1704	1687	1820	1606	1262	1793
Turbidity	109	118	84	123	116	131	142	114
HARDNESS, CaCO3	270	110	320	280	260	210	180	260
PO4, mg/l	1.25	0.20	0.52	1.25	0.57	0.41	0.27	0.50
NO3, mg/l	2.88	0.37	4.24	2.98	1.24	0.79	0.54	1.42
TKN, mg/l	1.52	1.54	1.40	1.63	1.77	1.54	1.17	1.21
NH3, mg/l	0.13	ND	0.12	0.11	ND	ND	ND	ND
Organic Nitrogen	1.39	1.52	1.42	1.29	1.63	1.77	1.17	1.21
SILICA mg/l	17.0	17.2	18.8	23.2	23.0	24.0	24.5	24.4
CHLORO."a" mg/m3	9.16	2.37	6.95	10.30	7.97	6.79	6.95	7.98

DATE

SLOUGH DATA

16-Sep-98

STATION	CR1	CR2	C1	C2	<u>C3</u>	<u>C4</u>	C5	<u>C6</u>
Time	1345	1240	1315	1320	1310	1305	1300	1335
Depth, ft	10	13	10	9	13	10	12	14
D.O. mg/l	8.4	8.8	7.1	6.3	8.4	7.4	7.3	8.0
Temp, C	19.8	21.1	20.3	20.2	20.5	21.1	21.5	20.6
pH, units	7.9	7.8	7.4	7.7	7.9	7.8	7.3	8.0
Secci Disk, inch	5	5	5	5	5	5	5	5
Salinity	1.1	1.0	0.8	0.7	1.1	1.1	1.1	1.1
Conductivity, umho	2.43	2.22	2.08	1685	2390	2420	2460	2400
Turbidity	116	118	90	98	122	108	107	103
HARDNESS, CaCO3	350	230	210	230	270	270	280	280
PO4, mg/l	0.42	0.18	1.80	1.90	0.53	0.39	0.29	0.52
NO3, mg/l	1.08	0.30	7.50	8.10	1.80	0.88	0.68	1.14
TKN, mg/l	1.31	0.56	1.21	1.40	1.31	0.93	0.75	1.21
NH3, mg/l	0.13	0.19	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Organic Nitrogen	1.18	0.37	1.21	1.30	1.31	0.93	0.75	1.21
CHLORO."a" mg/m3	10.2	4.6	19.0	11.2	8.9	8.0	2.2	15.7

# SLOUGH DATA

DATE
14-Oct-98

STATION	CR1	CR2	C1	C2	<u>C3</u>	C4	C5	C6
Time	1210	1110	1145	1150	1140	1130	1125	1200
Depth, ft	14	16	8	9	6	9	10	17
D.O. mg/l	3.8	8.8	4.5	2.7	5.1	5.1	6.7	5.0
Temp, C	17.2	17.3	17.3	17.3	17.5	17.6	17.4	17.4
pH, units	7.5	7.5	7.5	7.4	7.5	7.4	7.5	7.5
Secci Disk, inch	7	6	5	6	6	6	5	6
Salinity	1.2	0.8	1.1	1.1	1.1	1.1	0.8	1.1
Conductivity, umho	2560	1983	2520	2400	2470	2310	2040	2420
Turbidity	60.6	103	104	95.1	110	92.6	99.1	89.5
HARDNESS, CaCO3	430	280	370	360	330	320	240	380
PO4, mg/l	0.74	0.37	0.82	2.50	0.52	0.42	0.44	0.45
NO3, mg/l	0.74	0.37	0.82	2.50	0.52	0.42	0.44	0.45
TKN, mg/l	1.59	0.65	1.49	1.21	1.49	1.5 <del>9</del>	0.93	1.60
NH3, mg/l	0.19	0.10	<0.1	<0.1	0.10	0.13	0.13	0.11
Organic Nitrogen	1.40	0.55	1.49	1.21	1.39	1.46	0.80	1.49
CHLORO."a" mg/m3	33.70	3.56	14.50	8.85	13.40	16.70	20.10	14.50

# SLOUGH DATA

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No	v-98	

STATION	CR1	CR2	<u>C1</u>	<u>C2</u>	<u>C3</u>	<u>C4</u>	C5	C6
Time	1412	1305	1345	1350	1340	1330	1320	1405
Depth, ft	10	18	7	9	7	11	12	13
D.O. mg/l	8.7	9.0	5.3	5.2	5.4	5.5	7.3	7.2
Temp, Č	14.9	15.2	15.1	15.1	15.3	15.3	15.5	15.4
pH, units	7.7	6.5	7.6	7.5	7.5	7.4	6.2	7.5
Secci Disk, inch	4	4	4	4	4	4	4	4
Salinity	1.2	3.2	1.3	1.2	1.3	1.4	1.4	1.3
Conductivity, umho	2670	5860	2750	2560	2830	2950	3080	2850
Turbidity	137	142	131	145	128	136	150	117
HARDNESS, CaCO3	360	640	370	330	370	340	360	360
PO4, mg/l	0.66	0.25	0.75	0.74	0.53	0.42	0.38	0.49
NO3, mg/l	0.93	0.39	0.66	2.02	0.49	0.42	0.42	0.48
TKN, mg/l	1.7	1.0	1.7	2.0	1.7	1.6	1.4	1.6
NH3, mg/l	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Organic Nitrogen	1.30	0.80	1.50	1.80	1.50	1.40	1.20	1.40
CHLORO."a" mg/m3	10.0	10.0	8.9	11.2	16.7	<u>15.5</u>	10.9	16.1

# SLOUGH DATA

STATION	CR1	CR2	<u>C1</u>	C2	C3	C4	C5	C6
Time	1310	1210	1245	1230	1240	1235	1225	1305
Depth, ft	9	20.1	10.5	10.5	14.5	13	14	16
D.O. mg/l	6.7	9.4	6.6	6.7	6.9	7.4	8.1	7.4
Temp, C	11.5	11.9	11.9	12.4	12.0	12.1	12.2	11.9
pH, units	7.3	7.5	7.5	7.4	7.5	7.4	7.5	7.4
Secci Disk, inch	5	4	5	6	5	4	4	5
Salinity	0.9	1.2	1.1	0.8	1.2	1.4	1.6	1.2
Conductivity, umho	2060	2750	2390	2020	2640	3010	3330	2660
Turbidity	95	131	115	108	116	116	122	104
HARDNESS, CaCO3	340	420	360	380	380	500	460	370
PO4, mg/l	0.62	0.18	0.56	1.00	0.40	0.42	0.40	0.46
NO3, mg/l	1.18	0.41	1.26	4.31	1.07	0.85	0.71	1.05
TKN, mg/l	1.40	0.75	1.60	1.60	1.49	1.54	1.35	1.35
NH3, mg/l	<0.1	<0.1	0.12	0.14	0.13	0.16	0.15	0.13
Organic Nitrogen	1.40	0.75	1.48	1.46	1.36	1.38	1.20	1.22
CHLORO."a" mg/m3	5.6	7.8	6.5	4.4	9.2	11.6	6.8	7.8

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Page 6

DATE 2-Dec-98

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1215	1110	1150	1155	1145	1135	1130	1205
Depth, ft	11	14	10	10	9	11	13	12
D.O. mg/l	9.1	12.2	10.0	8.6	8.7	9.2	10.0	9.1 ·
Temp, C	6.6	6.7	6.7	7.2	6.1	6.2	6.2	6.1
pH, units	7.6	7.3	7.1	7.2	7.2	7.4	6.5	7.1
Secci Disk, inch	12	9	9	8.5	7.5	8.5	8	8
Salinity	0.8	3.1	1.0	0.8	1.1	1.1	1.1	1.1
Conductivity, umho	2150	6020	2350	1904	2470	2450	2470	2470
Turbidity	32	44	39	42	60	58	58	58
HARDNESS, CaCO3	330	580	320	320	320	320	<b>`</b> 290	320
PO4, mg/l	1.05	0.34	2.10	1.91	0.56	0.38	0.29	0.44
NO3, mg/l	3.10	0.62	3.61	11.60	1.57	1.14	0.72	1.20
TKN, mg/l	2.40	0.47	1.03	1.12	1.21	1.35	1.35	1.35
NH3, mg/l	<0.1	0.20	<0.1	0.11	0.13	0.16	0.23	0.14
Organic Nitrogen	2.40	0.27	1.03	1.11	1.07	1.19	1.12	1.21
CHLORO."a" md/m3	32.8	2.4	16.7	16.8	5.8	9.3	14.9	6.3

Page 6

DATE 13-Jan-99

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1035	915	1015	1020	1010	0900	0955	1030
Depth, ft	13	11	9	9	10	10	12	14
D.O. mg/l	8.2	8.8	6.9	7.4	6.4	7.6	7.1	8.3
Temp, C	8.2	9.2	13.0	12.2	11.0	10.9	10.7	10.8
pH, units	7.5	7.5	7.2	7.4	7.5	7.6	7.6	7.6
Secci Disk, inch	6	3	7	6	5	4	3	2
Salinity	0.7	0.1	0.3	0.3	0.4	0.1	0.1	0.1
Conductivity, umho	1690	710	1165	1117	1300	787	700	703
Turbidity	73.8	179	75.2	84.3	102	186	271	213
HARDNESS, CaCO3	380	210	280	270	260	230	160	170
PO4, ma/l	0.53	0.25	1.23	1.24	0.94	0.38	0.29	0.37
NO3. ma/l	1.32	1.15	4.43	4.88	2.37	1.69	1.34	1.51
TKN, ma/l	1.87	0.93	1.26	1.35	1.40	1.40	1.40	1.31
NH3, mg/l	<0.1	0.12	0.11	0.11	0.19	0.12	0.11	0.11
Organic Nitrogen	1.87	0.81	1.15	1.24	1.20	1.28	1.29	1.20
CHI ORO "a" mg/m3	8.80	2.22	3.25	2.22	4.42	4.40	3.20	5.80

Page 6

# DATE 10-Feb-99

## FSSD NPDES PERMIT # CA0038024 Fairfield-Suisun Wastewater Treatment Plant SLOUGH DATA

DATE 10-Mar-99

STATION	CR1	CR2	<u>C1</u>	C2	C3	C4	C5	C6
Time	0910	0750	0820	0830	0815	0810	0805	0855
Depth, ft	7	8	8	9	10	9	12	12
D.O. mg/l	8.1	7.9	7.5	8.5	8.6	8.1	7.8	8.7
Temp, C	10.4	10.2	11.6	12.0	10.7	9.9	9.7	9.8
pH, units	7.6	7.5	7.6	7.2	7.2	7.4	7.5	7.6
Secci Disk, inch	10	10	11	10	8	8	8	9
Salinity	0.6	0.6	0.4	0.6	0.7	0.7	0.7	0.7
Conductivity, umho	1632	1310	1510	1317	1420	1660	1710	1680
Turbidity	32.2	52.9	37.4	44.9	70.1	76	70.8	79.7
HARDNESS, CaCO3	410	220	410	360	340	310	260	360
PO4, mg/l	0.66	0.22	2.65	2.43	1.60	0.57	0.35	0.51
NO3, mg/l	2.40	0.49	9.70	7.50	4.50	1.10	2.00	2.50
TKN, mg/l	0.79	1.68	1.07	1.31	0.89	1.26	0.89	1.26
NH3, mg/l	<0.1	0.12	<0.1	<0.1	<0.1	0.11	0.11	<0.1
Organic Nitrogen	0.79	1.56	1.07	1.31	0.89	1.15	0.78	1.26
CHLORO."a" mg/m3	46.80	3.56	12.60	11.20	8.80	2.90	5.80	7.80

# SLOUGH DATA

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STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	0900	0800	0830	0840	0825	0820	0815	0850
Depth, ft	7	8	8	9	10	9	12	12
D.O. mg/l	8.1	7.9	7.5	8.5	8.6	8.1	7.8	8.7
Temp, C	10.4	10.2	11.6	12.0	10.7	9.9	9.7	9.8
pH, units	7.6	7.5	7.6	.7.2	7.2	7.4	7.5	7.6
Secci Disk, inch	10	10	11	10	8	8	8	9
Salinity	0.6	0,6	0.4	0.6	0.7	0.7	0.7	0.7
Conductivity, umho	1632	1310	1510	1317	1420	1660	1710	1680
Turbidity	27	59	31	27	48	50	56	45
HARDNESS, CaCO3	320	190	300	310	160	300	270	310
PO4, mg/i	0.84	0.23	2.60	2.50	1.80	0.64	0.42	0.69
NO3, mg/l	1.06	0.58	11.70	8.88	7.06	2.25	1.60	2.49
TKN, mg/l	1.12	0.47	1.12	0.75	1.12	1.49	1.39	1.59
NH3, mg/l	0.2	0.16	ND	ND	ND	ND	ND	ND
Organic Nitrogen	0.92	0.31	1.12	0.75	1.12	1.49	1.39	1.59
CHLORO."a" mg/m3	15.6	4.2	4.3	2.9	6.5	4.1	3.1	6.5

DATE 12-May-99

# SLOUGH DATA

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STATION	CR1	CR2	<u>C1</u>	<u>C2</u>	<u>C3</u>	C4	C5	C6
Time	1345	1255	1325	1330	1320	1310	1305	1340
Depth, ft	7.9	18.5	6.5	9.7	5.5	9.1	8.5	11.6
D.O. mg/l	10.6	7.9	7.2	6.3	7.9	7.8	7.8	8.4
Temp, C	19.5	17.9	19.4	19.8	18.7	18.2	18.2	18.6
pH, units	8.3	7.6	7.6	7.6	8.1	7.8	7.6	8.0
Secci Disk, inch	10	8	10	10	10	9	9	9
Salinity	0.7	0.3	0.7	0.8	0.8	0.8	0.7	0.8
Conductivity, umho	1741	1050	1786	1910	1977	1902	1693	1974
Turbidity	46.3	148	67.5	61.8	76.3	85.6	99.8	64.2
HARDNESS, CaCO3	360	210	330	350	350	330	310	340
PO4, mg/l	0.55	0.15	1.76	1.84	0.63	0.43	0.28	0.63
NO3, mg/l	1.07	0.50	5.10	8.10	9.10	1.90	1.20	2.40
TKN, mg/l	0.56	0.75	0.98	1.45	1.11	0.56	0.47	0.37
NH3, mg/l	<0.1	<0.2	<0.2	0.24	<0.2	<0.2	<0.2	<0.2
Organic Nitrogen	0.56	0.75	0.98	1.21	1.11	0.56	0.47	0.37
CHLORO."a" mg/m3	59.8	11.4	21.4	15.8	31.8	15.2	15.8	26.5

DATE	
8-Jun-99	)

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	<u>C4</u>	C5	C6
Time	1220	1115	1150	1200	1145	1135	1130	1210
Depth, ft	8.8	16	7.2	6.1	11.6	7.8	8.3	10.6
D.O. mg/l	9.0	8.8	5.7	5.9	6.6	7.8	7.7	7.4
Temp, C	18.1	18.1	18.9	18.7	18.2	18.2	18.2	17.9
pH, units	8.0	7.5	7.5	7.3	7.7	7.7	7.4	7.7
Secci Disk, inch	7	5	6	4	6	5	5	6
Salinity	0.7	1.0	0.8	0.7	0.9	1.0	0.9	1.0
Conductivity, umho	1636	2190	1834	1829	2100	2170	2115	2220
Turbidity NTU	72	113	102	151	117	103	107	102
HARDNESS, CaCO3	510	300	360	350	420	400	380	420
PO4, mg/l	0.48	0.26	1.51	1.23	0.85	0.52	0.46	0.62
NO3, mg/l	0.99	0.59	6.58	4.58	3.46	1.48	1.30	1.64
TKN, mg/l	0.75		1.21	1.77	1.03	1.31	1.21	0.65
NH3, mg/l	ND	ND	ND	ND	ND	ND	ND	ND
Organic Nitrogen	0.75	0.56	1.21	1.77	1.03	1.31	1.21	0.65
CHLORO."a" mg/m3	45.9	3.6	23.6	69.5	12.5	12.2	13.4	14.6

#### DATE 7-Jul-99

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	<u>C3</u>	<u>C4</u>	C5	C6
Time	1055	1000	1030	1035	1040	1020	1010	1045
Depth, ft	8	14	5	7	10	7	9	15
D.O. mg/l	7.2	7.6	5.6	4.9	6.4	6.9	6.8	6.8
Temp, C	20.3	22.4	21.8	21.5	20.8	21.2	21.7	20.8
pH, units	7.8	7.3	7.4	7.4	7.6	7.2	6.9	7.8
Secci Disk, inch	7.5	9	8.5	8	7	8.5	8	8
Salinity	0.9	3.4	0.6	0.6	1.2	1.5	1.8	1.4
Conductivity, umho	2070	6220	1581	1575	2500	3060	3480	2920
Turbidity	98.2	53.4	77.9	78.7	73.9	62.4	63.4	70.2
HARDNESS, CaCO3	440	700	310	350	450	390	470	410
PO4, mg/l	0.41	0.23	2.54	2.35	1.27	0.52	0.40	0.50
NO3, mg/l	0.56	0.49	8	7.1	4.1	1.1	0.77	1.1
TKN, mg/l	1.16	0.84	1.10	1.20	1.10	1.10	0.84	0.75
NH3, mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Organic Nitrogen	1.16	0.84	1.10	1.20	1.10	1.10	0.84	0.75
CHLORO."a" mg/m3	27.9	7.7	7.7	14.5	7.8	6.6	8.8	10.0

Page 6 of 8

.

#### DATE 4-Aug-99

# SLOUGH DATA

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	<u>C4</u>	C5	C6
Time	1007	0904	0942	0947	0936	0928	0920	1017
Depth, ft	9	16	6	8	9	8	7	9
D.O. mg/l	6.3	7.9	5.6	4.6	7.4	7.6	7.8	7.3
Temp, C	20.3	20.8	21.4	21.4	20.4	19.9	20.2	20.0
pH, units	7.5	7.3	7.0	7.2	7.1	7.3	7.2	7.4
Secci Disk, inch	6	8	6	6	6	8	7	8
Salinity	1.3	4.0	0.6	0.5	1.7	2.6	3.2	2.4
Conductivity, umho	2750	7260	1631	1396	3410	4980	6000	4550
Turbidity	86.7	77.7	94.2	99.1	70,6	50.7	58.8	70.5
HARDNESS, CaCO3	470	800	310	260	480	640	700	660
PO4, mg/1	0.42	0.22	2.40	2.30	1.40	0.52	0.40	0.62
NO3, mg/i	0.53	0.42	4.10	2.30	3.00	1.20	0.69	0.91
TKN, mg/l	1.03	0.50	1.40	1.30	1.20	0.98	0.75	0.79
NH3, mg/l	<0.1	<0.1	0.13	0.12	0.1	<0.1	<0.1	<0.1
Organic Nitrogen	1.03	0.50	1.27	1.18	1.19	0.98	0.75	0.79
CHLORO."a" mg/m3	15.30	9.70	10.70	8.50	8.70	7.50	9.70	8.60

### DATE 15-Sep-99

# SLOUGH DATA

STATION	CR1	CR2	<u>C1</u>	C2	<u>C3</u>	C4 ·	<u>C5</u>	C6
Time	0750	0700	0730	0735	0725	0720	0715	0745
Depth, ft	7	10	8	9	12	9	7	14
D.O. mg/l	8.4	10.8	7.8	7.4	8.0	8.8	9.8	9.1
Temp, C	17.5	19.0	19.9	19.3	18.3	18.5	19.1	18.2
pH, units	8.1	7.8	7.7	. 7.7	7.7	8.0	7.9	8.0
Secci Disk, inch	8	5	9	8.8	9	10	9	10
Salinity	2.5	6.6	0.7	0.7	2.2	4.3	4.9	3.9
Conductivity, umho	4240	10440	1599	1583	3710	4300	4900	3900
Turbidity	56.2	108	49.5	55	50.6	40.1	39.5	36.5
HARDNESS, CaCO3	640	1100	490	400	540	810	940	840
PO4, mg/l	1.30	0.20	2.40	2.20	1.70	0.50	0.30	0.60
NO3, mg/l	0.63	0.42	6.60	4.80	3.90	0.85	0.57	1.0
TKN, mg/l	0.56	0.28	0.75	1.03	0.65	0.84	0.65	0.65
NH3, mg/l	<0.1	<0.1	<0.1	0.12	0.11	<0.1	<0.1	<0.1
Organic Nitrogen	0.6	0.3	0.8	0.9	0.6	0.8	0.7	0.7
CHLORO."a" mg/m3	4.7	7.1	1.2	2.4	6.6	5.9	5.9	9.3

# DATE 6-Oct-99

# SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1405	1310	1337	1345	1335	1330	1320	1400
Depth, ft	9	14.5	6.5	9.0	11.0	9.4	8.5	13.0
D.O. mg/l	4.6	10.1	7.9	7.6	8.3	8.5	9.2	7.3
Temp, C	17.7	18.3	18.1	18.0	18.3	18.5	18.4	18.4
pH, units	7.2	7.4	7.6	7.4	7.6	7.6	7.5	7.2
Secci Disk, inch	10	7	10	8	10	11	10	11
Salinity	3.4	7.6	4.4	3.5	4.5	4.9	5.6	4.6
Conductivity, umho	5550	11680	7090	5600	7330	7950	8930	7440
Turbidity	33.1	106	43	55.4	44.6	45.1	48.2	34.1
HARDNESS, CaCO3	690	1200	710	530	860	900	960	980
PO4, mg/l	0.74	0.19	0.48	0.82	0.38	0.34	0.25	0.40
NO3, mg/l	0.55	0.39	1.20	1.30	0.63	0.58	0.41	0.56
TKN, mg/l	1.40	0.51	1.00	0.93	0.93	0.89	0.65	1.03
NH3, mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Organic Nitrogen	1.40	0.51	1.00	0.93	0.93	0.89	0.65	1.03
CHLORO."a" mg/m3	1.2	5.6	5.8	4.6	11.1	8.8	13.6	13.6

#### DATE 3-Nov-99

SLOUGH DATA

STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1225	1135	1205	1205	1200	1150	1145	1220
Depth, ft	10	12	7	9	12	8	8	13
D.O. mg/l	6.5	7.2	7.3	6.7	6.8	7.3	7.2	7.3
Temp, C	15.9	16.3	16.0	15.9	16.1	16.2	16.5	17.0
pH, units	7.5	7.2	5.8	7.5	7.6	7.4	7.3	7.7
Secci Disk, inch	8.0	10.0	8.0	8.0	8.0	9.0	9.0	9.0
Salinity	2.8	11.6	5.3	4.6	5.9	7.1	8.4	5.9
Conductivity, umho	4730	17450	8570	7490	9380	11250	13190	9370
Turbidity	28.9	49.8	59.5	60.3	54	38.7	40.1	43.4
HARDNESS, CaCO3	750	2000	1100	930	1200	1600	1600	1200
PO4, mg/l	1.44	0.19	0.44	0.71	0.38	0.30	0.23	0.37
NO3, mg/l	0.69	0.27	0.43	0.69	0.21	0.12	0.17	0.21
TKN, mg/l	2.40	LE	1.60	1.50	0.65	1.03	0.56	1.12
NH3, mg/l	0.59	LE	0.33	0.39	0.28	0.26	0.24	0.26
Organic Nitrogen	1.81	LE	1.27	1.11	0.37	0.77	0.32	0.86
CHLORO."a" mg/m3	8.00	2.21	12.10	7.80	11.20	5.30	24.40	8.10

LE, Lab Error. TKN result is higher than NH3. One of the test results were not accurate.

Could not reanalyze, sample was discarded before the data was validated

# SLOUGH DATA

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STATION	CR1	CR2	C1	C2	C3	C4	C5	C6
Time	1040	0945	1015	1020	1010	1005	0100	1030
Depth, ft	16	12	9	9	12	10	10	16
D.O. mg/l	5.8	8.6	5.7	5.2	6.1	6.2	6.4	6.4
Temp, C	12.2	12.6	14.6	13.4	12.1	12.1	12.3	12.2
pH, units	7.1	6.6	7.4	7.4	7.4	7.2	6.9	6.6
Secci Disk, inch	9	7	10	9	9	9	9	9
Salinity	2.6	7.5	3.7	2.1	5.2	5.1	6.3	5.2
Conductivity, umho	4480	11500	5090	3920	8270	9090	1000	8300
Turbidity	40.1	67.2	35.1	46.7	40.6	33.6	37.8	34
HARDNESS, CaCO3	710	1200	690	530	970	1000	1100	950
PO4, mg/l	1.05	0.15	1.48	2.29	0.35	0.28	0.19	0.38
NO3, mg/l	2.80	0.55	7.10	5.80	1.50	0.55	0.40	0.91
TKN, mg/l	1.82	0.75	1.12	1.26	1.03	0.65	1.03	1.21
NH3, mg/l	0.38	0.24	0.19	0.26	0.23	0.22	0.25	0.21
Organic Nitrogen	1.44	0.51	0.93	1.00	0.80	0.43	0.78	1.00
CHLORO,"a" mg/m3	11.50	1.00	1.00	1.00	2.10	0.90	1.20	10.70