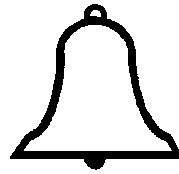


# Santa Margarita Water District



## MEMORANDUM

**TO:** Joann Cofrancesco **DATE:** September 24, 2008  
**FROM:** Dan Ferons *DF*  
**SUBJECT:** Response to Questions Concerning Chiquita Water Reclamation Plant,  
Complaint No. R9-2008-0091

### DISCUSSION:

SMWD provided a draft letter requesting the San Diego Regional Board to consider whether the violations under the subject complaint could be the result of single events and not separate violations. During a follow-up phone conversation you requested additional detail on the operation of the plant on the days in question. I have attached a summary of the operation that details the equipment in operation and the flow split between the trickling filters and the activated sludge portions of the secondary treatment facilities.

**Chiquita Water Reclamation Plant December 2006- January 2007 Summary of Process Events.**

**December 2006**

- **12/25/06:** Plant influent/effluent flow 7.50 MGD/ 7.0 MGD respectively.

Monthly avg flow at 6.7 MGD. No influent BOD recorded for this date, but next day influent BOD recorded at 333 mg/l (33% higher than monthly average)

- **12/26/06:** Plant influent/effluent flow recorded at 9.17 MGD/ 8.1 MGD respectively.

Out of the 9.1 MGD influent flow, 3.78 MGD was sent through the activated sludge system and the remaining 5.3 MGD was sent to the trickling filter/solids contact process. At this time we had one large and 1 small clarifier and S.C.B basin in-service with total rated capacity of 4.5 MGD.

Records indicate the additional small clarifier was out of service for repairs. Also note that although the plants rated capacity is 9 mgd (through the primary clarifiers) the plants TF/SC process has a total rated capacity of 6 MGD (if all three clarifiers were in service) with one small clarifier out of service at this time. Capacity through this system was 4.5 MGD

Effluent settleable solids recorded on 12/26-06 at 15 for the day which raised weekly and monthly averages over permit limits limits.

- **12/27/06:** Plant records indicate that Trabuco Canyon Water District started sending 300,000 gal/day of their flow to Chiquita until further notice.

**January 2007**

- **1/1/07:** Influent/effluent flow recorded at 8.82 MGD and 7.70 MGD respectively. On this day, 4.04 MGD was sent to the activated sludge process, while the remaining 4.76 MGD was sent through the TF/SC process.

Effluent settleable solids recorded at 8 for this day. This raised weekly and monthly averages over permit limits.

Records indicate that we continue to accept Trabuco Canyon Water District flow of 300,000 gal/day through this time.

- **1/2/07:** effluent CBOD recorded at <80 mg/l.
- **1/3/07:** plant influent CBOD recorded at 333 mg/l (30% higher than monthly average)
- **1/4/07:** effluent CBOD recorded at <53 mg/l. These two numbers raised weekly CBOD average over permit limit of 40 mg/l.

DATE	INFLUENT FLOW MGD	EFFLUENT FLOW MGD	INF TSS mg/l	EFF TSS mg/L	% REMOVAL TSS	INF cBOD mg/l	EFF cBOD mg/L	% REMOVAL cBOD	LADERA FLOW	TALEGA FLOW	A.S Influent Total Flow (MGD)	SS
1-Dec-06	6.700	5.300	276	6.4	97.7	188	8.0	95.7	2.60	2.02	4.67	0.5
2-Dec-06	8.200	3.240							1.84	0.998	4.26	
3-Dec-06	5.290	5.240							0.61	0.223	4.94	
4-Dec-06	8.500	8.030	877	6.8	99.2		9.3		1.78	1.38	4.84	0.8
5-Dec-06	7.400	4.090	320	24.8	92.3		14.6		2.29	1.85	4.63	<0.1
6-Dec-06	6.970	2.230	322	25.2	92.2	241	26.0	89.2	2.66	0.713	4.53	0.1
7-Dec-06	7.070	2.390	326	17.2	94.7	190	13.1	93.1	1.52	1.83	4.70	0.3
8-Dec-06	6.640	2.740	319	16.8	94.7	181	14.7	91.9	1.36	1.46	5.12	1.5
9-Dec-06	8.400	4.790							1.04	0.359	3.63	
10-Dec-06	4.580	3.060							0.90	0.644	4.85	
11-Dec-06	8.260	6.390	ns	84.0			17.8		0.54	0.919	4.59	0.5
12-Dec-06	6.590	4.810	328	18.0	94.5		11.0		0.54	0.641	4.57	3
13-Dec-06	6.900	5.220	310	32.0	89.7	248	17.9	92.8	0.06	0.039	4.50	0.5
14-Dec-06	5.920	6.430	290	9.6	96.7	270	10.0	96.3	0.60	1.47	4.41	0.5
15-Dec-06	6.620	3.440	321	22.8	92.9	179	14.4	92.0	0.00	0.461	4.95	0.5
16-Dec-06	8.740	6.890							0.00	0	4.48	
17-Dec-06	4.600	5.300							0.00	0	4.03	
18-Dec-06	7.070	8.520	271	15.4	94.3		7.6		0.00	1.638	4.54	0.1
19-Dec-06	6.840	3.150	327	22.8	93.0		5.6		0.00	0.504	4.41	0.3
20-Dec-06	6.570	5.700	341	11.6	96.6	270	14.3	94.7	0.00	0	4.64	1.5
21-Dec-06	7.130	7.060	302	20.0	93.4	222t	12.3		0.84	5.554	4.38	2
22-Dec-06	6.330	2.870	312	41.2	86.8	204	29.0	85.8	0.10	0.208	5.03	0.7
23-Dec-06	8.360	7.980							0.00	0	3.62	
24-Dec-06	5.190	4.810							0.00	0	4.94	
25-Dec-06	7.520	7.070	314	24.4	92.2		20.3		0.00	0	5.10	<0.1
26-Dec-06	9.170	8.100	344	206.0	40.1		>45		0.52	2.553	3.78	15
27-Dec-06	4.810	3.080	491	23.2	95.3	333	29.7	91.1	0.00	0.504	4.40	0.3
28-Dec-06	7.170	6.990	283	13.6	95.2	302	14.0	95.4	0.00	0	4.68	0.1
29-Dec-06	7.420	7.420	299	20.4	93.2	206	16.0	92.2	0.00	0	4.14	1
30-Dec-06	6.490	6.740							0.00	0	5.14	
31-Dec-06	7.250	7.250							0.08	0	4.61	
MAX	9.170	8.520	877	206.0	99.2	333	29.7	96.3	2.7	5.6	5.14	15
MIN	4.580	2.230	271	6.4	40.1	179	5.6	85.8	0.0	0.0	3.62	0
AVG	6.926	5.365	349	31.5	91.2	234	15.3	92.5	0.6	0.8	4.55	2
TOTAL	214.700	166.330							19.891	25.968		

Trabuco Canyon starting to send 300,000 gal/day

DATE	INFLUENT FLOW MGD	EFFLUENT FLOW MGD	INF TSS mg/l	EFF TSS mg/L	% REMOVAL TSS	INF cBOD mg/l	EFF cBOD mg/L	% REMOVAL cBOD	LADERA FLOW	TALEGA FLOW	A.S. Influent Total Flow (MGD)	SS
1-Jan-07	8.820	7.770					ndr		0.65	1.24	4.04	8
2-Jan-07	6.057	3.410	360	78.0	78.3		<80		0.08	0.819	4.47	1
3-Jan-07	6.800	5.440	246	29.0	88.2	334	28.0	91.6	1.43	0.355	4.52	0.5
4-Jan-07	7.220	5.180	256	13.6	94.7	227	<53		2.34	0.291	5.48	0.5
5-Jan-07	7.270	4.500	242	14.8	93.9	188	15.2	91.9	0.80	0.985	3.25	0.3
6-Jan-07	6.410	6.420							1.10	0.415	4.72	
7-Jan-07	7.800	5.770							1.08	0.297	4.98	
8-Jan-07	7.470	7.470	319	30.0	90.6		34.0		1.78	0.938	4.51	<0.1
9-Jan-07	7.124	7.120	280	26.4	90.6		4.9		3.67	0.373	4.54	0.3
10-Jan-07	6.740	2.570	371	29.2	92.1	240	31.0	87.1	0.74	0.885	4.50	1
11-Jan-07	7.020	4.900	331	14.0	95.8	115	16.0	86.1	0.35	0.446	4.40	0.5
12-Jan-07	6.100	6.470	296	10.4	96.5	210	12.0	94.3	0.45	1.13	3.40	0.3
13-Jan-07	5.760	2.920							0.63	0.488	5.54	
14-Jan-07	7.220	6.560							1.07	0.362	3.65	
15-Jan-07	7.420	5.490	285	29.2	89.8				0.23	1.227	4.89	0.1
16-Jan-07	7.870	6.490	304	9.6	96.8		20.0		1.47	0.869	4.00	3
17-Jan-07	6.210	3.230	324	18.8	94.2	311	17.0	94.5	0.73	0.734	4.45	0.5
18-Jan-07	6.840	4.820	441	11.2	97.5	287	16.0	94.4	0.53	1.6	4.28	0.3
19-Jan-07	6.180	3.890	367	14.8	96.0	299t	13.6		1.15	1.36	5.18	0.1
20-Jan-07	5.930	3.960							1.65	0.489	3.29	
21-Jan-07	8.700	3.830							0.00	0	4.81	
22-Jan-07	6.510	8.490	330	13.6	95.9		12.5		0.00	1.55	4.50	0.1
23-Jan-07	6.610	4.490	ns	12.0			13.9		0.00	0.84	4.31	0.6
24-Jan-07	6.300	4.890	329	11.2	96.6	246	12.9	94.8	2.29	0.796	4.46	0.9
25-Jan-07	6.700	4.690	223	12.0	94.6	293t	14.1		1.21	2.75	4.89	2
26-Jan-07	6.500	2.080	428	40.0	90.7	195	31.0	84.1	2.58	0.995	3.86	0.6
27-Jan-07	5.600	2.063							1.76	0.835	4.75	
28-Jan-07	6.900	2.840							0.62	0.54	4.55	
29-Jan-07	7.770	5.780	137	13.2	90.4				0.43	0.958	4.41	3
30-Jan-07	6.930	6.000	ns	15.2					0.50	0.604	4.40	0.1
31-Jan-07	6.400	5.350	281	8.0	97.2				0.05	1.05	4.47	0.3
MAX	8.820	8.490	441	78.0	97.5	334	34.0	94.8	3.7	2.8	5.54	8
MIN	5.600	2.063	137	8.0	78.3	115	4.9	84.1	0.0	0.0	3.25	0
AVG	6.877	4.996	308	20.6	93.0	235	18.3	91.0	1.0	0.8	4.44	1
TOTAL	213.181	154.883							31.383	26.221		

Trabuco Canyon flow of 300,000 continues