



**BEAR VALLEY
WATER DISTRICT**

P.O. Box 5027
Bear Valley, CA 95223
(209) 753-2112

BOARD OF DIRECTORS:
JIM BISSELL
JERRY NELSON
PHILL COFFMAN
BARBARA J. GOODRICH

11 November 2010

Victor Vasquez

CVRWQCB

11020 Sun Center Drive #200

Rancho Cordova, CA 95670-6114

Subject: Order R5-2005-139, Self Monitoring Report (SMR), October 2010

Dear Mr. Vasquez:

Monthly Report, Waste Discharge Requirements, Order R5-2005-139

Enclosed please find tabular summaries of monitoring data from the Bear Valley Wastewater Treatment Facility for the month of October 2010. No effluent was discharged to Bloods Creek during this reporting period. In addition to the standard data tables, we enclose for your convenience updated summaries of data from the Storage/Polishing Reservoir and Treatment Pond effluent.

As previously reported, due to the late snowmelt this year, the first Tri-Annual groundwater-monitoring event took place 13 July; the second one took place 24 August. The first Tri-Annual Report was submitted to your office on 9 September 2010; the second was submitted 25 October. The third Tri-Annual groundwater monitoring occurred on 4 November.

For your convenience, we discuss each of the attachment pages separately.

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The daily and total influent and Bloods Creek discharge flow totals and routine influent monitoring results from the influent composite sampler are presented, as well as routine Treatment Pond monitoring results. We have added columns to report routine monitoring of Bloods Creek for pH and dissolved oxygen, although our NPDES permit only requires such testing during periods when discharge actually occurs.

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Following conclusion of land application activities on 14 October, it was realized that the monthly Polishing Reservoir samples had not been collected yet. So, on 15 October a sample was collected from the ballast pond, which is supplied by the irrigation pumps. That sample represented the very bottom strata of the reservoir and accurately characterized the effluent that was applied during October at all active fields. During most of this reporting period the reservoir was essentially empty and water level was so low that the level did not register on our gage. We note that DO readings on 5 and 13 October were below 1.0 mg/L. This was due to the very shallow, de minimus inventory of effluent.

11 November 2010
Bear Valley Water District
SMR October 2010
Page 2

1.781 MG of Treatment Pond effluent was transferred to the Polishing Reservoir during October. That volume represents 1.68% of total reservoir volume. As the reservoir was emptied during this reporting period, we have demonstrated compliance with Discharge Specification (B)(12) of Order 5-01-208.

Please note that a new column has been added to this page to show modal chlorine contact time in the new contact chamber that has recently been placed in service.

Page 5

The 10-acre North Area loadings are presented.

Page 6

Loadings to the 49 acres of the 68-acre East Area that were utilized during this reporting period are presented.

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Page 7 presents a summary of Treatment Pond effluent sample data from 2010.

Page 8

Page 8 presents a summary of Polishing Reservoir data from samples collected through the outfall sample tap through June, and, during August, September, and October from the irrigation pump discharge during 2010.

Please do not hesitate to contact me at (209) 753-2112 if there are any questions.

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Respectfully,



Julio S. Guerra
General Manager

cc: Board of Directors
Gary Ghio, District Engineer

BEAR VALLEY WASTE WATER TREATMENT FACILITY

Monitoring and Reporting Program No. 5-01-208 & R5-2005-0139
Alpine County

Month: **October**
Year: **2010**

INFLUENT MONITORING						NPDES BLOODS CREEK			TREATMENT POND		
Day	Daily Flow (MGD)	BOD ₅ (mg/L)	pH (SU)	Electrical Conductivity (umhos/cm)	Total Suspended Solids (mg/L)	Discharge to Bloods Creek (MGD)	Dissolved Oxygen (mg/L)	pH (SU)	Dissolved Oxygen (mg/L)	pH (SU)	Freeboard (0.1 ft)
1	0.019		7.5			0.000					
2	0.033		7.8			0.000					
3	0.030		8.0			0.000					
4	0.020		7.6			0.000					
5	0.017	366	7.4	608	382	0.000					2.3
6	0.018		7.6			0.000	3.7	6.99	5.8	7.1	
7	0.019		7.6			0.000					
8	0.034		7.6			0.000					
9	0.065		7.8			0.000					
10	0.044		9.1			0.000					
11	0.017		8.3			0.000					2.3
12	0.018	236	7.5		800	0.000					
13	0.014		7.8			0.000	4.1	6.82	6.2	7.6	
14	0.014		7.8			0.000					
15	0.018		7.8			0.000					
16	0.023		7.7			0.000					
17	0.020		7.1			0.000					2.1
18	0.013		7.6			0.000					
19	0.019	301	7.0		397	0.000					
20	0.013		7.2			0.000	4.3	7.85	5.1	7.2	
21	0.015		7.0			0.000					
22	0.017		7.1			0.000					
23	0.036		7.3			0.000					
24	0.133		7.1			0.000					
25	0.061		6.6			0.000		6.17			
26	0.037	51	7.1		35	0.000		6.33			
27	0.034		7.0			0.000	16.8	7.48	9.3	6.7	
28	0.032		7.1			0.000					
29	0.028		7.5			0.000					2.2
30	0.032		7.3			0.000					
31	0.030		6.8			0.000					
Total	0.923					0.000					
Max	0.133	366	9.1	608	800	0.000	16.8	7.85	9.3	7.6	2.3
Min	0.013	51	6.6	608	35	0.000	3.7	6.17	5.1	6.7	2.1
Avg	0.030	239	7.5	608	404	0.000	7.2	6.94	6.6	7.1	2.2

BEAR VALLEY WASTEWATER TREATMENT FACILITY

Monitoring and Reporting Program No. 5-01-208 & R5-2005-0139

Alpine County

Month: **October**

Year: **2010**

Treatment Pond Effluent Monitoring												Storage/Polishing Reservoir										
Day	Flow (MGD)	BOD (mg/L)	Settleable Solids (ml/L/hr)	TSS (mg/L)	Total Coliform Organisms (MPN/100 ml)	Total Kjeldahl Nitrogen (mg/L)	Ammonia-Nitrogen (mg/L)	Nitrate-Nitrogen (mg/L)	TDS (mg/L)	Total Chlorine Residual (mg/L)	Contact Time (mg/minutes)	Dissolved Oxygen (mg/L)	pH (SU)	BOD (mg/L)	TSS (mg/L)	Ammonia-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrate-Nitrogen (mg/L)	Total Nitrogen (mg/L)	Total Dissolved Solids (mg/L)	Freeboard (Feet) Total Depth: 23.5 ft	
1	0.000																					
2	0.000																					
3	0.000																					
4	0.000																					
5	0.000																					23.0
6	0.000											0.03	6.31									
7	0.000																					
8	0.000																					
9	0.000																					
10	0.000																					
11	0.000																					23.5
12	0.000																					
13	0.000											0.12	6.56									
14	0.000																					
15	0.000													14	23	<0.50	3.8	0.14	3.94	104		
16	0.000																					
17	0.088									20.3	3982											23.5
18	0.096									20.4	3676											
19	0.098									18.6	3280											
20	0.095	10	<0.1	<5.0	<2	15	14	0.24	171	18.0	3267	6.9	7.2									
21	0.095									24.1	4379											
22	0.091									22	4164											
23	0.095									22.1	4020											
24	0.093									7.6	1403											23.5
25	0.132									12.5	1631											
26	0.153									15.1	1710											
27	0.149	<2.0	<0.1	<5.0	<2					12.04	1396	13.2	7.6									
28	0.147									11.6	1365											
29	0.141									11.9	1459											23.5
30	0.144									12	1437											
31	0.163									12.4	1311											
Total	1.781																					
Max	0.163	10.0	<0.1	<5.0	<2	15.0	14.0	0.240	171	24	4379	13.2	7.6	14.0	23	<0.50	3.8	0.14	3.9	104	23.5	
Min	0.000	<2.0	<0.1	<5.0	<2	15.0	14.0	0.240	171	8	1311	0.0	6.3	14.0	23	<0.50	3.8	0.14	3.9	104	23	
Avg	0.054	6.0	<0.1	<5.0	<2	15.0	14.0	0.240	171	16	2655	5.1	6.9	14	23	<0.50	3.8	0.14	3.9	104	23.4	

BEAR VALLEY WASTEWATER TREATMENT FACILITY

Monitoring and Reporting Program No. 5-01-208 & R5-2005-0139

Alpine County

Month: **October**

Year: **2010**

North Area Disposal Area Monitoring							
DATE	FLOW (MGD)	Rainfall (Inches)	Acreage Applied (Acres)	Total Nitrogen (mg/L)	Nitrogen Application Rate (lbs/acre)	Total Dissolved Solids (TDS) (mg/L)	TDS Application Rate (lbs/acre)
1	0.171	0.09	10		0.56		14.9
2	0.120	0.09	10		0.39		10.4
3	0.000	1.07	10		0.00		0.0
4	0.000	1.13	10		0.00		0.0
5	0.000	0.08	10		0.00		0.0
6	0.000	0.01	10		0.00		0.0
7	0.000	0.02	10		0.00		0.0
8	0.054	0	10		0.18		4.7
9	0.034	0	10		0.11		2.9
10	0.116	0	10		0.38		10.0
11	0.091	0	10		0.30		7.9
12	0.094	0	10		0.31		8.2
13	0.105	0	10		0.35		9.1
14	0.000	0	10		0.00		0.0
15	0.000	0	10	3.94	0.00	104	0.0
16	0.000	0	10		0.00		0.0
17	0.000	0.21	10		0.00		0.0
18	0.000	0.07	10		0.00		0.0
19	0.000	0	10		0.00		0.0
20	0.000	0	10		0.00		0.0
21	0.000	0	10		0.00		0.0
22	0.000	0.03	10		0.00		0.0
23	0.000	1.16	10		0.00		0.0
24	0.000	5.67	10		0.00		0.0
25	0.000	0.09	10		0.00		0.0
26	0.000	0	10		0.00		0.0
27	0.000	0	10		0.00		0.0
28	0.000	0	10		0.00		0.0
29	0.000	0	10		0.00		0.0
30	0.000	0	10		0.00		0.0
31	0.000	0	10		0.00		0.0
Total MG:	0.785	9.72	Total Inches	Total lbs N/acre:	2.58	Total lbs TDS/acre:	68
Avg	0.025	0.608		3.94	0.08	104	2.2
Max	0.171	5.67		3.94	0.56	104	14.9
Min	0.000	0.00		3.94	0.00	104	0.0

MG/acre: 0.078

BEAR VALLEY WASTEWATER TREATMENT FACILITY

Monitoring and Reporting Program No. 5-01-208 & R5-2005-0139

Alpine County

Month: **October**

Year: **2010**

East Area Disposal Area Monitoring							
DATE	FLOW (MGD)	Rainfall (Inches)	Acreage Applied (Acres)	Total Nitrogen (mg/L)	Nitrogen Application Rate (lbs/acre)	Total Dissolved Solids (TDS) (mg/L)	TDS Application Rate (lbs/acre)
1	0.617	0.09	49		0.41		10.9
2	0.421	0.09	49		0.28		7.5
3	0.084	1.07	49		0.06		1.5
4	0.065	1.13	49		0.04		1.1
5	0.000	0.08	49		0.00		0.0
6	0.000	0.01	49		0.00		0.0
7	0.067	0.02	49		0.04		1.2
8	0.743	0	49		0.50		13.2
9	0.524	0	49		0.35		9.3
10	0.478	0	49		0.32		8.5
11	0.542	0	49		0.36		9.6
12	0.416	0	49		0.28		7.4
13	0.141	0	49		0.09		2.5
14	0.000	0	49		0.00		0.0
15	0.000	0	49	3.94	0.00	104	0.0
16	0.000	0	49		0.00		0.0
17	0.000	0.21	49		0.00		0.0
18	0.000	0.07	49		0.00		0.0
19	0.000	0	49		0.00		0.0
20	0.000	0	49		0.00		0.0
21	0.000	0	49		0.00		0.0
22	0.000	0.03	49		0.00		0.0
23	0.000	1.16	49		0.00		0.0
24	0.000	5.67	49		0.00		0.0
25	0.000	0.09	49		0.00		0.0
26	0.000	0	49		0.00		0.0
27	0.000	0	49		0.00		0.0
28	0.000	0	49		0.00		0.0
29	0.000	0	49		0.00		0.0
30	0.000	0	49		0.00		0.0
31	0.000	0	49		0.00		0.0
Total MG:	4.098	9.72	Total Inches	Total lbs N/acre:	2.75	Total lbs TDS/acre:	73
Avg	0.132	0.608		3.94	0.09	104	2.3
Max	0.743	5.67		3.94	0.50	104	13.2
Min	0.000	0.00		3.94	0.00	104	0.0
	MG/acre:	0.084					

**BEAR VALLEY WATER DISTRICT
TREATMENT POND
EFFLUENT METALS 2010**

Parameter	2/12/10	4/2/10	5/5/10	6/2/10	7/7/10	10/27/10	Average
Aluminum (mg/L)	<0.05	0.088	0.11	0.097	0.25	-	0.119
Boron (mg/L)	0.075	0.11	0.057	0.034	0.038	0.049	0.0605
Chloride (mg/L)	-	-	-	-	-	30	
Sodium (mg/L)	-	-	-	-	-	23	
Copper (mg/L)	0.0066	0.009	0.0066	0.004	0.0082	-	0.007
Copper, Dissolved (mg/L)	0.0076	0.0062	0.0064	0.0027	0.007	-	0.0060
Iron (mg/L)	0.591	0.721	0.46	0.27	0.67	0.76	0.579
Iron, Dissolved (mg/L)	0.332	0.36	0.26	0.055	0.32	-	0.265
Manganese (mg/L)	0.115	0.138	0.096	0.058	0.097	0.076	0.097
Manganese, Dissolved (mg/L)	0.108	0.117	0.082	<0.02	0.058	-	0.077

BEAR VALLEY WATER DISTRICT

POLISHING RESERVOIR

DATA FROM OUTFALL TAP/IRRIGATION PUMP 2010

Parameter	RESERVOIR OUTFALL SAMPLE TAP GRAB 12/30/09	RESERVOIR OUTFALL SAMPLE TAP GRAB 1/15/10	RESERVOIR OUTFALL SAMPLE TAP GRAB 2/24/10	RESERVOIR OUTFALL SAMPLE TAP GRAB 6/16/10	RESERVOIR OUTFALL SAMPLE TAP COMPOSITE 6/17/10	RESERVOIR OUTFALL SAMPLE TAP COMPOSITE 6/20/10	RESERVOIR OUTFALL SAMPLE TAP COMPOSITE 6/22/10	RESERVOIR OUTFALL SAMPLE TAP COMPOSITE 6/29/10	RESERVOIR GRAB IRRIGATION PUMP 8/4/10	RESERVOIR GRAB IRRIGATION PUMP 8/25/10	RESERVOIR GRAB IRRIGATION PUMP 9/8/10	RESERVOIR GRAB IRRIGATION PUMP 10/15/10
Aluminum (mg/L)	0.241	0.167	0.088	0.051	<0.050	<0.050	<0.050	<0.050	0.091	-	-	-
Aluminum, Dissolved (mg/L)	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	-	-	-	-
Aluminum, Acid Soluble (mg/L)	-	-	-	-	<0.050	<0.050	<0.050	<0.050	-	-	-	-
Boron (mg/L)	-	-	0.074	<0.050	-	-	-	-	0.03	-	-	-
Copper by ICP (mg/L)	0.0047	0.0044	0.0066	-	-	-	-	-	0.012	-	-	-
Copper by ICP/MS (mg/L)	-	-	-	0.003	0.0028	0.0027	0.0028	0.0019	-	-	-	-
Copper, Dissolved (mg/L)	<0.003	<0.003	0.0057	-	-	-	-	-	0.0087	-	-	-
Copper, Dissolved by ICP/MS (mg/L)	-	-	-	0.0015	0.0024	0.0015	0.0011	0.0024	-	-	-	-
Copper, Acid Soluble by Icp/MS (mg/L)	-	-	-	0.0033	0.0027	0.0022	0.0024	0.002	-	-	-	-
Iron (mg/L)	5.65	7.03	6.1	1.6	1.4	2.1	1.8	3.0	2.3	-	1.4	1.6
Iron, Dissolved (mg/L)	2.52	2.37	0.486	0.7	0.55	0.73	0.56	0.77	1.5	-	-	-
Iron, Acid Soluble, (mg/L)	-	-	-	1.5	1.3	2.0	1.8	2.9	-	-	-	-
Manganese (mg/L)	0.643	0.647	0.38	0.24	0.26	0.39	0.37	0.47	0.32	-	0.12	0.22
Manganese, Dissolved (mg/L)	0.515	0.531	0.29	0.22	0.24	0.34	0.34	0.18	0.32	-	-	-
Manganese, Acid Soluble (mg/L)	-	-	-	0.24	0.26	0.38	0.36	0.47	-	-	-	-
BOD (mg/L)	20	16	15	-	-	-	-	-	56	5.8	4.5	14
CBOD (mg/L)	11	15	-	6.0	3.5	4.2	2.5	6.9	3*	3	2.6	-
TSS (mg/L)	58	66	25	8.2	11	12	14	15	5.5	<5.0	11	23
Na (mg/L)	29	29	-	-	-	-	16	-	-	-	-	-
Cl (mg/L)	20	20	-	-	-	-	15	-	-	-	-	-
Fl (mg/L)	-	<0.10	<0.10	<0.10	-	-	<0.10	-	-	-	-	-
TKN (mg/L)	18	16	21	12	12	-	-	12	10	5.0	3.4	3.8
NO3-N (mg/L)	<0.050	<0.050	0.21	<0.050	11	-	-	<0.050	0.11	0.41	0.17	0.14
NH3-N (mg/L)	-	11	20	11	<0.050	-	-	11	8.2	3.6	2.5	<0.50
TDS (mg/L)	197	185	236	110	120	102	99	98	106	93	103	104
EC (umho/CM)	333	341	-	247	235	244	233	237	-	-	-	-
TC-15 (MPN/100 ml)	80	23	4	20	-	-	-	-	-	-	-	-
FC-15 (MPN/100 ml)	<2	<2	<2	<2	-	-	-	-	-	-	-	-
Hardness (mg/L)	-	63	-	28	32	34	36	34	-	-	-	-
Alkalinity, Total (mg/L)	-	-	-	72	74	78	72	78	-	-	-	-
Turbidity (NTU)	-	40	-	5.39	-	-	-	-	-	-	-	-
pH (SU)	7.0	-	6.9	5.94	-	-	-	-	-	-	-	-

* Estimated "J Flag" Values