



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Tryon Creek Wastewater Treatment Plant

195 SW Foothills Road, Bldg 310, Lake Oswego, Oregon 97034 ■ Dan Saltzman, Commissioner ■ Dean Marriott, Director

March 10, 2009

Mr. Lyle Christensen
2020 SW Fourth Avenue, Suite 400
Portland OR 97201-4987

Dear Mr. Christensen:

I am enclosing the February 2009, DMR for the City of Portland's Tryon Creek Wastewater Treatment Plant (TCWTP).

All measured parameters were within permit limitations during the month.

Please call me at 823-2318 if you have any questions.

Sincerely,

Greg A. Hettman
Operations Manager,
Tryon Creek WTP



STATE OF OREGON DISCHARGE MONITORING REPORT

CITY OF PORTLAND TRYON CREEK POTW
195 FOOTHILLS ROAD
LAKE OSWEGO OR 97034-3163

PLANT TYPE
TREATMENT SYSTEM
COLLECTION SYSTEM
ACTIVATED SLUDGE
CLASS IV
CLASS IV

MAJOR BASIN
RECEIVING STREAM
COUNTY
WILLAMETTE
WILLAMETTE
CLACKAMAS

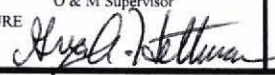
POPULATION EQUIVALENT
PERMIT NUMBER
FILE NUMBER
EXPIRATION

48,976
101614
70735
9/30/2009

DATE	FLOW			PLANT INFLUENT			PLANT EFFLUENT																	
Feb-09	INF	INF PEAK	EFF	pH	BOD	TSS	pH	BOD	BOD Wkly Avg	BOD Rem	BOD Dis lbs	BOD Wkly Avg Dis lbs	TSS	TSS Wkly Avg mg/l	TSS Rem %	TSS Dis lbs	TSS Wkly Avg Dis lbs	EFF TEMP 0 °C	CL2 Res mg/l	E.COLI / 100ml	Total P mg/l	TKN mg/l	NH3 N mg/l	NO3+ NO2-N mg/l
	mgd	mgd	mgd		mg/l	mg/l		mg/l	mg/l	%			mg/l	mg/l	%									
1	5.05	12.50	5.05		250	282		6		98	253		3		99	126		12	0.4					
2	4.64	11.00	4.62	7.0			7.1											11	0.6	2				
3	4.37	8.00	4.34	7.0	235	200	7.2	5		98	181		4		98	145		11	0.5					
4	4.60	10.00	4.57	6.8			6.9											12	0.5	1				
5	4.37	12.00	4.35	6.8	252	232	6.9	6		98	218		7		97	254		12	0.4	<1				
6	4.18	11.00	4.16	6.9			6.9											12	0.5					
7	4.51	12.00	4.50						6			217		5			175	12	0.4					
8	5.06	11.00	5.05		250	230		9		96	379		8		97	337		12	0.4					
9	4.60	9.00	4.58	7.0			6.9											12	0.5	<1				
10	5.39	10.00	5.37	7.0	222	177	7.1	8		96	358		16		91	716		12	0.4					
11	5.18	9.50	5.16	7.0			6.9											11	0.6	3				
12	4.79	12.00	4.76	7.0	205	260	7.0	7		97	278		10		96	397		12	0.5	1				
13	4.57	10.00	4.55	7.0			7.0											12	0.5					
14	4.72	11.80	4.72						8			338		11			483	12	0.4					
15	5.00	10.80	5.00		240	190		16		93	667		9		95	375		12	0.4					
16	4.90	9.50	4.88	6.9			6.8											12	0.4	<1				
17	4.53	9.50	4.51	7.0	250	206	6.9	5		98	188		8		96	301		12	0.3					
18	4.51	10.00	4.48	7.0			7.0											12	0.3	2				
19	4.37	9.50	4.35	6.9	280	264	6.8	7		98	254		7		97	254		12	0.3	2				
20	4.05	9.00	4.03	6.8			6.9											12	0.3					
21	4.36	11.00	4.36						9			370		8			310	12	0.4					
22	4.87	9.50	4.87		315	411		5		98	203		6		99	244		12	0.4					
23	5.38	10.50	5.36	7.0			7.0											12	0.4	<1				
24	6.75	11.50	6.72	7.1			7.0											12	0.5					
25	5.83	11.50	5.80	7.0	220	191	7.0	13		94	629		9		95	436		12	0.4	1				
26	6.14	9.00	6.12	6.9	145	160	6.8	5		97	255		6		96	306		11	0.4	3				
27	5.58	10.60	5.55	6.8			6.8											12	0.6					
28	5.52	11.30	5.51						8			363		7			329	12	0.5					
Max	6.75	12.50	6.72	7.1	315	411	7.2	16	9	98	667	370	16	11	99	716	483	12	0.6	3				
Min	4.05		4.03	6.8	145	160	6.8	5		93	181		3		91	126		11	0.3	<1				
Avg	4.92		4.90		239	234		8		97	322		8		97	324		12	0.44	3				
Sum	137.79		137.34																					

PLANT EFFLUENT PERMIT	May 1 -> October 31	November 1 -> April 30	January 1 -> December 31	REMARKS
MONTHLY STANDARDS	BOD 20 mg/l / 1400 lbs BOD	30 mg/l / 3100 lbs	CL2 max 0.7 mg/l	Nutrients are sampled May 1 -> October 31
	TSS 20 mg/l / 1400 lbs TSS	30 mg/l / 3100 lbs	daily pH range 6.0 -> 9.0	Digested and TWAS sludges are hauled to Columbia Blvd Treatment Plant.
	E. COLI 126 cts/100 ml E. COLI	126 cts/100 ml		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted 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.

NAME Greg A. Hettman
CLASS Oregon T/IV #4600
TITLE O & M Supervisor
SIGNATURE 

PRIMARY TREATMENT						MONTHLY REPORT SUMMARY					
Influent			Effluent			Rem %	Primary				
	mg/l	lbs/day		mg/l	lbs/day		Feed Sludge				
S S	234	9596	SS	86	3564		Flow gal/day	Total Solids %	Volatile Content %		
BOD5	239	9795	BOD5	137	5625	43	12103	6.85	83.8		
Detent Time hrs			Population Equivalent		Flow mgd	Precip "	Detention Time days		Loading lbs VS / ft3 /day		
4.3			48976		4.92	2.96	30				
SECONDARY TREATMENT											
Influent			Effluent			Rem %					
	mg/l	lbs/day		mg/l	lbs/day		Total Solids %	Volatile Content %		Vol Sol Reduct %	
S S	234	9596	SS	8	324		97	63.8			
BOD5	239	9795	BOD5	8	322	97	2.92				
F/M		SVI		SRT days	MLSS mg/l		Total Solids (TWS) %	Capture %		Filtrate Solids mg/l	
0.00		147		0.0	1649		5.41				
RAS Flow mgd		CL2 Res mg/l		CL2 Feed lbs/day							
0.73		0.4		67							
WAS Flow mgd		Aerator Detention Time hrs		Aerator DO mg/l		Sludge Hauled					
.000		7.4		0.0		gal/day lbs /day lbs/mo					
						Digst 5050 1228					
						TWS 10914 4923					
						Total 15964 6151					

Page 1									
	Plant Effluent Nutrients				Flow		Weather		
Date	Total P	NH3-N	NO3+	TKN	Portland	Lake	Temperature		Precip
Feb-09			NO2-N			Oswego	Max	Min	
	mg/l	mg/l	mg/l	mg/l	mgd	mgd	o F	o F	"
02/01/09					1.76	3.29	44	30	0.00
02/02/09					1.58	3.06	52	29	0.00
02/03/09					1.48	2.89	59	31	0.00
02/04/09					1.56	3.04	59	34	0.00
02/05/09					1.51	2.86	51	36	0.20
02/06/09					1.39	2.79	52	41	0.00
02/07/09					1.52	2.99	55	32	0.00
02/08/09					1.76	3.29	47	31	0.10
02/09/09					1.53	3.07	47	31	0.15
02/10/09					1.80	3.59	42	34	0.40
02/11/09					1.76	3.42	47	28	0.00
02/12/09					1.62	3.17	42	33	0.15
02/13/09					1.51	3.07	48	32	0.00
02/14/09					1.58	3.14	50	33	0.10
02/15/09					1.71	3.29	50	35	0.10
02/16/09					1.65	3.25	50	39	0.05
02/17/09					1.50	3.03	45	37	0.00
02/18/09					1.49	3.02		35	0.00
02/19/09					1.46	2.91	57	32	0.00
02/20/09					1.33	2.72	61	37	0.00
02/21/09					1.47	2.89	50	42	0.00
02/22/09					1.70	3.18	55	39	0.10
02/23/09					1.90	3.48	53	42	0.60
02/24/09					2.40	4.34	56	45	0.65
02/25/09					2.13	3.69	54	33	0.26
02/26/09					1.94	4.20	51	30	0.05
02/27/09					1.68	3.89	54	33	0.00
02/28/09					1.84	3.68	52	46	0.05
Max	0.00	0.00	0.00	0.00	2.40	4.34	61	46	0.65
Min	0.00	0.00	0.00	0.00	1.33	2.72	42	28	0.00
Avg					1.66	3.26	51	35	0.11
Sum					46.6	91.2			2.96

Page 2	PRIMARY TREATMENT															
	INFLUENT									EFFLUENT				Det Time hrs	No. Basins On	
	Date Feb-09	Flow mgd	Peak Q mgd	Susp Sol. mg/l lbs		BOD5 mg/l lbs		Pop Equiv	Temp oC	pH	Susp Sol. mg/l lbs		BOD5 mg/l lbs			
02/01/09	5.05	12.5	282	11870	250	10523	52615			7.0	75	3157	138	5809	4.5	4
02/02/09	4.64	11.0													4.9	4
02/03/09	4.37	8.0	200	7286	235	8561	42804			7.0	79	2874	148	5384	5.2	4
02/04/09	4.60	10.0								6.8					4.9	4
02/05/09	4.37	12.0	232	8450	252	9178	45890			6.8	77	2800	134	4873	5.2	4
02/06/09	4.18	11.0								6.9					5.4	4
02/07/09	4.51	12.0													5.0	4
02/08/09	5.06	11.0	230	9697	250	10540	52698				46	1939	138	5818	4.5	4
02/09/09	4.60	9.0								7.0					4.9	4
02/10/09	5.39	10.0	177	7958	222	9981	49907			7.0	140	6287	189	8488	4.2	4
02/11/09	5.18	9.5								7.0					4.4	4
02/12/09	4.79	12.0	260	10389	205	8191	40956			7.0	100	3985	126	5022	4.7	4
02/13/09	4.57	10.0								7.0					4.9	4
02/14/09	4.72	11.8													4.8	4
02/15/09	5.00	10.8	190	7926	240	10012	50060				81	3379	148	6174	4.5	4
02/16/09	4.90	9.5								6.9					4.6	4
02/17/09	4.53	9.5	206	7778	250	9439	47194			7.0	76	2867	130	4904	5.0	4
02/18/09	4.51	10.0								7.0					5.0	4
02/19/09	4.37	9.5	264	9611	280	10193	50966			6.9	100	3635	145	5271	3.9	3
02/20/09	4.05	9.0								6.8					4.2	3
02/21/09	4.36	11.0													3.9	3
02/22/09	4.87	9.5	411	16707	315	12804	64022				99	4024	156	6341	3.5	3
02/23/09	5.38	10.5								7.0					2.5	3
02/24/09	6.75	11.5								7.1					2.9	3
02/25/09	5.83	11.5	191	9284	220	10693	53466			7.0	80	3884	93	4515	2.9	3
02/26/09	6.14	9.0	160	8195	145	7426	37132			6.9	77	3936	96	4907	2.8	3
02/27/09	5.58	10.6								6.8					3.0	3
02/28/09	5.52	11.3													3.1	3
Max	6.75	12.50	411	16707	315	12804	64022			7.1	140.0	6287.2	189.0	8487.7	5.4	4
Min	4.05		160	7286	145	7426	37132			6.8	46.0	1939.3	93.0	4515.4	2.5	3
Avg	4.92		234	9596	239	9795	48976			6.9	85.8	3564.0	136.8	5625.5	4.3	4
Sum	137.8															

[illegible]

[illegible]

[illegible]

Page 8	NPDES Peak Mass Limits										
Date	Total			Instantaneous		DML=9382 lbs			DML=4153 lbs		
Feb-09	Portland mgd	Lake Oswego mgd	Combined mgd	Peak mgd	Minimum mgd	"O" Limit mgd	BOD lbs	TSS lbs	"P" Limit mgd	BOD lbs	TSS lbs
02/01/09	1.8	3.3	5.0	12.5					12.5	253	126
02/02/09	1.6	3.1	4.6	11.0					11.0		
02/03/09	1.5	2.9	4.4	8.0					8.0	181	145
02/04/09	1.6	3.0	4.6	10.0					10.0		
02/05/09	1.5	2.9	4.4	12.0					12.0	218	254
02/06/09	1.4	2.8	4.2	11.0					11.0		
02/07/09	1.5	3.0	4.5	12.0					12.0		
02/08/09	1.8	3.3	5.1	11.0					11.0	379	337
02/09/09	1.5	3.1	4.6	9.0					9.0		
02/10/09	1.8	3.6	5.4	10.0					10.0	358	716
02/11/09	1.8	3.4	5.2	9.5					9.5		
02/12/09	1.6	3.2	4.8	12.0					12.0	278	397
02/13/09	1.5	3.1	4.6	10.0					10.0		
02/14/09	1.6	3.1	4.7	11.8					11.8		
02/15/09	1.7	3.3	5.0	10.8					10.8	667	375
02/16/09	1.7	3.2	4.9	9.5					9.5		
02/17/09	1.5	3.0	4.5	9.5					9.5	188	301
02/18/09	1.5	3.0	4.5	10.0					10.0		
02/19/09	1.5	2.9	4.4	9.5					9.5	254	254
02/20/09	1.3	2.7	4.1	9.0					9.0		
02/21/09	1.5	2.9	4.4	11.0					11.0		
02/22/09	1.7	3.2	4.9	9.5					9.5	203	244
02/23/09	1.9	3.5	5.4	10.5					10.5		
02/24/09	2.4	4.3	6.7	11.5					11.5		
02/25/09	2.1	3.7	5.8	11.5					11.5	629	436
02/26/09	1.9	4.2	6.1	9.0					9.0	255	306
02/27/09	1.7	3.9	5.6	10.6					10.6		
02/28/09	1.8	3.7	5.5	11.3					11.3		
Max	2.4	4.3	6.7	12.5		N/A	N/A	N/A	12.5	667	716
Min	1.3	2.7	4.1								
Avg	1.7	3.3	4.9								
Sum	47	91	138			N/A	N/A	N/A			

City of Portland

Tryon Creek Treatment Plant

Tryon Creek Wastewater Treatment Plant, 195 SW. Foothills Rd., Lake Oswego, OR 97034
(503) 823-2320, FAX (503) 823-2322

DATE: 3/9/2009
TO: Pat McDougal, City of Lake Oswego
FAX (503) 635-0269
FROM: City of Portland
SUBJECT: Rainfall and Flow Data

DATE	Flow		Temperature		Rain
	Portland	Lake Oswego	Maximum	Minimum	
2/1/2009	1.76	3.29	44	30	0.00
2/2/2009	1.58	3.06	52	29	0.00
2/3/2009	1.48	2.89	59	31	0.00
2/4/2009	1.56	3.04	59	34	0.00
2/5/2009	1.51	2.86	51	36	0.20
2/6/2009	1.39	2.79	52	41	0.00
2/7/2009	1.52	2.99	55	32	0.00
2/8/2009	1.76	3.29	47	31	0.10
2/9/2009	1.53	3.07	47	31	0.15
2/10/2009	1.80	3.59	42	34	0.40
2/11/2009	1.76	3.42	47	28	0.00
2/12/2009	1.62	3.17	42	33	0.15
2/13/2009	1.51	3.07	48	32	0.00
2/14/2009	1.58	3.14	50	33	0.10
2/15/2009	1.71	3.29	50	35	0.10
2/16/2009	1.65	3.25	50	39	0.05
2/17/2009	1.50	3.03	45	37	0.00
2/18/2009	1.49	3.02		35	0.00
2/19/2009	1.46	2.91	57	32	0.00
2/20/2009	1.33	2.72	61	37	0.00
2/21/2009	1.47	2.89	50	42	0.00
2/22/2009	1.70	3.18	55	39	0.10
2/23/2009	1.90	3.48	53	42	0.60
2/24/2009	2.40	4.34	56	45	0.65
2/25/2009	2.13	3.69	54	33	0.26
2/26/2009	1.94	4.20	51	30	0.05
2/27/2009	1.68	3.89	54	33	0.00
2/28/2009	1.84	3.68	52	46	0.05
Max	2.40	4.34	61	46	0.65
Min	1.33	2.72	42	28	0.00
Avg	1.66	3.26	51	35	0.11
SUM	46.55	91.24			2.96