



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Tryon Creek Wastewater Treatment Plant

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

October 13, 2009

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

Dear Mr. Christensen:

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

The second of two annual influent flow meter calibrations was completed on September 25th, 2009. Calibration worksheets are available for review in the Columbia Blvd. Instrument shop.

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 ACTIVATED SLUDGE
TREATMENT SYSTEM CLASS IV
COLLECTION SYSTEM CLASS IV

MAJOR BASIN
RECEIVING STREAM
COUNTY

WILLAMETTE
WILLAMETTE
CLACKAMAS

POPULATION EQUIVALENT
PERMIT NUMBER
FILE NUMBER
EXPIRATION

47,340
101614
70735
9/30/2009

DATE	FLOW			PLANT INFLUENT			PLANT EFFLUENT																	
	INF	INF PEAK	EFF	pH	BOD	TSS	pH	BOD	BOD	BOD	BOD	BOD	TSS	TSS	TSS	TSS	TSS	EFF	CL2	E.COLI /	Total	TKN	NH3	NO3+
Sep-09	mgd	mgd	mgd		mg/l	mg/l		mg/l	Wkly Avg	Rem	Dis	Wkly Avg	mg/l	mg/l	Rem	Dis	Wkly Avg	TEMP	Res	100ml	P	mg/l	N	NO2-N
									mg/l	%	lbs	Dis lbs			%	lbs	Dis lbs	0 °C	mg/l				mg/l	mg/l
1	3.82	7.50	3.80	7.0	258	275	7.2	12		95	380		9		97	285		21	0.4		2.08	30.00	28.40	0.31
2	3.95	7.50	3.92	7.2			7.1											21	0.3	<1				
3	3.79	7.00	3.77	7.0	352	410	7.2	10		97	314		5		99	157		21	0.3	27				
4	3.78	10.30	3.75	7.1			7.2											21	0.2					
5	4.86	11.00	4.86						9			298		6			180	20	0.3					
6	4.38	9.50	4.38		294	346		11		96	402		12		97	438		20	0.4					
7	4.75	10.00	4.72	7.0			7.1											20	0.5	5				
8	4.35	9.20	4.33	7.1	274	320	7.1	8		97	289		10		97	361		20	0.4		1.50	30.50	28.20	0.29
9	3.95	8.40	3.92	7.2			7.2											20	0.4	6				
10	4.06	7.60	4.04	7.0	216	148	7.2	9		96	303		9		94	303		20	0.4	<1				
11	3.71	7.00	3.69	7.1			7.2											21	0.2					
12	3.86	9.00	3.84						9			331		10			367	21	0.4					
13	4.43	8.00	4.43		231	190		10		96	370		8		96	296		20	0.5					
14	4.01	9.50	4.00	7.1			7.2											20	0.2	7				
15	3.93	9.60	3.90	7.0	284	322	7.2	10		96	325		6		98	195		21	0.4		0.63	32.10	29.20	0.35
16	4.09	10.50	4.06	7.1			7.0											21	0.7	5				
17	3.92	9.00	3.88	7.0	274	310	7.0	8		97	259		4		99	130		20	0.5	2				
18	3.69	8.50	3.67	7.1			7.1											20	0.4					
19	3.96	10.20	3.96						9			318		6			207	20	0.5					
20	4.38	9.90	4.38		249	254		8		97	292		5		98	182		20	0.4					
21	4.12	10.00	4.11	7.2			7.2											20	0.4	2				
22	3.71	9.50	3.68	7.1	319	350	7.2	10		97	307		<2		99	61		20	0.5		0.77	30.30	31.50	0.52
23	4.05	9.10	4.03	7.0			7.1											20	0.4	2				
24	3.62	9.00	3.60	7.0	316	356	7.2	5		98	150		4		99	120		20	0.4	1				
25	3.65	8.50	3.64	7.1			7.1											20	0.4					
26	3.67	9.70	3.67						8			250		4			121	20	0.5					
27	4.34	10.00	4.34		226	150		7		97	253		3		98	109		20	0.5					
28	3.77	7.50	3.76	7.0			7.1											19	0.5	1				
29	3.88	8.50	3.86	7.0	>380	358	7.0	9		98	290		2		99	64		19	0.3		0.96	29.30	27.30	0.56
30	3.79	9.50	3.77	6.9			7.1											19	0.4	<1				
									8			272		3			86							
Max	4.86	11.00	4.86	7.2	352	410	7.2	12	9	98	402	331	12	10	99	438	367	21	0.7	27				
Min	3.62		3.60	6.9	216	148	7.0	5		95	150		<2		94	61		19	0.2	<1				
Avg	4.01		3.99		283	291		9		97	303		6		98	208		20	0.40	4				
Sum	120.23		119.71																					

PLANT EFFLUENT PERMIT

MONTHLY STANDARDS

May 1 -> October 31

BOD 20 mg/l / 1400 lbs BOD

TSS 20 mg/l / 1400 lbs TSS

E. COLI 126 cts/100 ml E. COLI

November 1 -> April 30

30 mg/l / 3100 lbs

30 mg/l / 3100 lbs

126 cts/100 ml

January 1 -> December 31

CL2 max

daily pH range

0.7 mg/l

6.0 -> 9.0

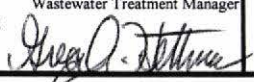
REMARKS

Nutrients are sampled May 1 -> October 31

Digested and TWAS sludges are hauled to Columbia Blvd Treatment Plant.

Influent flow meters calibrated 9/25/2009

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 Hettman
CLASS Oregon T/IV #4600
TITLE Wastewater Treatment Manager
SIGNATURE 

Page 1									
Date	Plant Effluent Nutrients				Flow		Weather		
Sep-09	Total P	NH3-N	NO3+	TKN	Portland	Lake	Temperature		Precip
	mg/l	mg/l	mg/l	mg/l	mgd	Oswego	Max	Min	"
							o F	o F	
09/01/09	2.08	28.40	0.31	30.00	1.21	2.61	81	53	0.00
09/02/09					1.24	2.71	85	58	0.00
09/03/09					1.18	2.61	78	55	0.00
09/04/09					1.21	2.57	83	55	0.57
09/05/09					1.55	3.31			0.40
09/06/09					1.36	3.02	73	53	0.10
09/07/09					1.52	3.23			0.00
09/08/09	1.50	28.20	0.29	30.50	1.41	2.94		51	0.00
09/09/09					1.21	2.74	86	57	0.00
09/10/09					1.23	2.83	83	59	0.00
09/11/09					1.10	2.61	94	57	0.00
09/12/09					1.17	2.69	92	63	0.00
09/13/09					1.40	3.03	78	59	0.00
09/14/09					1.22	2.79	78	55	0.00
09/15/09	0.63	29.20	0.35	32.10	1.24	2.69	85	57	0.00
09/16/09					1.33	2.75	78	54	0.00
09/17/09					1.19	2.73	75	48	0.00
09/18/09					1.11	2.58	89	48	0.17
09/19/09					1.25	2.71	73	46	0.10
09/20/09					1.41	2.97	73	52	0.00
09/21/09					1.28	2.84	84	63	0.00
09/22/09	0.77	31.50	0.52	30.30	1.14	2.57	91	56	0.00
09/23/09					1.25	2.80	90	52	0.00
09/24/09					1.12	2.50	73	50	0.00
09/25/09					1.14	2.51	77	48	0.00
09/26/09					1.15	2.52	75	47	0.00
09/27/09					1.43	2.91	80	48	0.00
09/28/09					1.20	2.58	72	49	0.00
09/29/09	0.96	27.30	0.56	29.30	1.24	2.64	65	46	0.30
09/30/09					1.19	2.60	65	49	0.12
Max	2.08	31.50	0.56	32.10	1.55	3.31	94	63	0.57
Min	0.63	27.30	0.29	29.30	1.10	2.50	65	46	0.00
Avg					1.26	2.75	80	53	0.06
Sum					37.7	82.6			1.76

Page 8	NPDES Peak Mass Limits										
Date	Total			Instantaneous		DML=9382 lbs			DML=4153 lbs		
Sep-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
09/01/09	1.2	2.6	3.8	7.5					7.5	380	285
09/02/09	1.2	2.7	3.9	7.5					7.5		
09/03/09	1.2	2.6	3.8	7.0					7.0	314	157
09/04/09	1.2	2.6	3.8	10.3					10.3		
09/05/09	1.6	3.3	4.9	11.0					11.0		
09/06/09	1.4	3.0	4.4	9.5					9.5	402	438
09/07/09	1.5	3.2	4.7	10.0					10.0		
09/08/09	1.4	2.9	4.4	9.2					9.2	289	361
09/09/09	1.2	2.7	3.9	8.4					8.4		
09/10/09	1.2	2.8	4.1	7.6					7.6	303	303
09/11/09	1.1	2.6	3.7	7.0					7.0		
09/12/09	1.2	2.7	3.9	9.0					9.0		
09/13/09	1.4	3.0	4.4	8.0					8.0	370	296
09/14/09	1.2	2.8	4.0	9.5					9.5		
09/15/09	1.2	2.7	3.9	9.6					9.6	325	195
09/16/09	1.3	2.8	4.1	10.5					10.5		
09/17/09	1.2	2.7	3.9	9.0					9.0	259	130
09/18/09	1.1	2.6	3.7	8.5					8.5		
09/19/09	1.2	2.7	4.0	10.2					10.2		
09/20/09	1.4	3.0	4.4	9.9					9.9	292	182
09/21/09	1.3	2.8	4.1	10.0					10.0		
09/22/09	1.1	2.6	3.7	9.5					9.5	307	61
09/23/09	1.2	2.8	4.0	9.1					9.1		
09/24/09	1.1	2.5	3.6	9.0					9.0	150	120
09/25/09	1.1	2.5	3.6	8.5					8.5		
09/26/09	1.1	2.5	3.7	9.7					9.7		
09/27/09	1.4	2.9	4.3	10.0					10.0	253	109
09/28/09	1.2	2.6	3.8	7.5					7.5		
09/29/09	1.2	2.6	3.9	8.5					8.5	290	64
09/30/09	1.2	2.6	3.8	9.5					9.5		
Max	1.6	3.3	4.9	11.0		N/A	N/A	N/A	11.0	402	438
Min	1.1	2.5	3.6								
Avg	1.3	2.8	4.0								
Sum	38	83	120			N/A	N/A	N/A			

PRIMARY TREATMENT						MONTHLY REPORT SUMMARY					
Influent			Effluent			Rem %	Primary				
	mg/l	lbs/day		mg/l	lbs/day		Feed Sludge				
S S	291	9732	SS	94	3182		Flow gal/day	Total Solids %	Volatile Content %		
BOD5	283	9468	BOD5	164	5519		11412	9.43	86.9		
Detent Time hrs			Population Equivalent		Flow mgd	Precip "	Detention Time days		Loading lbs VS / ft3 /day		
2.8			47340		4.01	1.76	32				
SECONDARY TREATMENT											
Influent			Effluent			Rem %					
	mg/l	lbs/day		mg/l	lbs/day						
S S	291	9732	SS	6	208						
BOD5	283	9468	BOD5	9	303		Total Solids %	Volatile Content %		Vol Sol Reduct %	
F/M		SVI		SRT days	MLSS mg/l	97	2.87	67.9			
0.00		87		0.0	2129		Total Solids (TWS) %	Capture %		Filtrate Solids mg/l	
							4.98				
RAS Flow mgd			CL2 Res mg/l		CL2 Feed lbs/day	Sludge Hauled					
0.92			0.4		96	gal/day lbs /day lbs/mo					
WAS Flow mgd			Aerator Detention Time hrs		Aerator DO mg/l	Digst 5197 1244					
.000			9.0		0.0	TWS 12037 4994					
						Total 17233 6238					

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: 7/14/2009
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	
6/1/2009	1.36	2.98	91	62	0.00
6/2/2009	1.34	2.99	80	57	0.00
6/3/2009	1.35	2.96	88	60	0.00
6/4/2009	1.47	3.18	87	57	0.30
6/5/2009	1.28	2.85	68	55	0.10
6/6/2009	1.40	2.99	74	55	0.00
6/7/2009	1.55	3.22	74	55	0.00
6/8/2009	1.35	3.01	78	51	0.00
6/9/2009	1.36	3.01	83	57	0.00
6/10/2009	1.37	2.89	79	57	0.20
6/11/2009	1.35	2.87	80	55	0.00
6/12/2009	1.26	2.77	81	58	0.10
6/13/2009	1.31	2.89	79	56	0.00
6/14/2009	1.49	3.18	81	55	0.00
6/15/2009	1.33	2.98	87	54	0.00
6/16/2009	1.34	2.97	82	60	0.00
6/17/2009	1.31	2.88	84	60	0.00
6/18/2009	1.28	2.81	85	57	0.00
6/19/2009	1.42	2.91	80	54	0.05
6/20/2009	1.32	2.83	70	49	0.00
6/21/2009	1.37	2.86	75	49	0.00
6/22/2009	1.30	2.82	79	48	0.00
6/23/2009	1.30	2.85	82	52	0.00
6/24/2009	1.32	2.88	82	54	0.00
6/25/2009	1.19	2.71	75	50	0.00
6/26/2009	1.19	2.72	81	48	0.00
6/27/2009	1.24	2.77	89	54	0.00
6/28/2009	1.35	2.90	83	47	0.00
6/29/2009	1.29	2.86	82	46	0.00
6/30/2009	1.24	2.74	82	51	0.00
Max	1.55	3.22	91	62	0.30
Min	1.19	2.71	68	46	0.00
Avg	1.33	2.91	81	54	0.03
SUM	39.99	87.28			0.75