



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

August 11, 2009



Mr. Lyle Christensen
State of Oregon
Department of Environmental Quality
2020 SW Fourth Avenue, Suite 400
Portland Oregon 97201-4987

Dear Mr. Christensen:

I am enclosing the July 2009, DMR for the City of Portland's Tryon Creek Wastewater Treatment Plant.

All measured parameters were within permit limitations during the month.

Please call me at (503) 823-2494 if you have any questions.

Sincerely,

Daniel D. Clark
Wastewater Treatment Manager

STATE OF OREGON DISCHARGE MONITORING REPORT

CITY OF PORTLAND TRYON CREEK POTW	PLANT TYPE	ACTIVATED SLUDGE	MAJOR BASIN	WILLAMETTE	POPULATION EQUIVALENT	47,485
195 FOOTHILLS ROAD	TREATMENT SYSTEM	CLASS IV	RECEIVING STREAM	WILLAMETTE	PERMIT NUMBER	101614
LAKE OSWEGO OR 97034-3163	COLLECTION SYSTEM	CLASS IV	COUNTY	CLACKAMAS	FILE NUMBER	70735
					EXPIRATION	9/30/2009

DATE	FLOW			PLANT INFLUENT			PLANT EFFLUENT																	
Jul-09	INF	INF	EFF	pH	BOD	TSS	pH	BOD	BOD	BOD	BOD	BOD	TSS	TSS	TSS	TSS	TSS	EFF	CL2	E.COLI /	Total P mg/l	TKN mg/l	NH3 N mg/l	NO3+ NO2-N mg/l
	mgd	PEAK mgd	mgd		mg/l	mg/l		mg/l	Wkly Avg mg/l	Rem %	Dis lbs	Wkly Avg Dis lbs	mg/l	Wkly Avg mg/l	Rem %	Dis lbs	Wkly Avg Dis lbs	TEMP 0 °C	Res mg/l	100ml				
1	4.02	7.50	4.00	6.9			7.0											19	0.4	<1				
2	3.93	7.50	3.91	6.9	242	230	7.1	5		98	163		4		98	130		19	0.5	<1				
3	3.90	8.60	3.88	7.0			7.1											19	0.4					
4	3.75	8.50	3.75						6			203		4			124	20	0.5					
5	4.24	6.50	4.22		346	356		13		96	458		12		97	422		19	0.5					
6	4.04	7.00	4.04	7.0			7.0											19	0.5	14				
7	4.03	7.00	4.01	7.0	310	344	7.1	6		98	201		4		99	134		19	0.5		1.59	30.10	28.40	0.35
8	3.84	8.80	3.83	7.0			7.1											19	0.5	2				
9	4.01	8.50	3.99	7.0	334	399	7.1	4		99	133		2		99	67		19	0.5	<1				
10	3.77	8.30	3.77	7.0			6.9											19	0.4					
11	3.92	9.20	3.92						8			264		6			208	19	0.4					
12	4.36	8.20	4.35		331	293		7		98	254		4		99	145		19	0.4					
13	4.11	8.30	4.09	7.0			7.2											19	0.4	2				
14	4.00	7.20	3.98	7.0	280	304	7.1	6		98	199		4		99	133		19	0.4		2.09	27.10	27.80	0.33
15	3.98	7.00	3.95	7.1			7.2											19	0.4	2				
16	4.02	8.00	4.00	7.0	257	280	7.1	5		98	167		<2		99	67		20	0.4	1				
17	3.85	7.80	3.84	7.1			7.1											20	0.4					
18	3.90	9.00	3.90						6			207		3			115	20	0.5					
19	4.28	8.70	4.28		242	205		7		97	250		4		98	143		20	0.4					
20	4.04	7.50	4.03	7.0			6.9											20	0.5	20				
21	3.95	6.50	3.93	7.0	258	314	6.9	9		97	295		4		99	131		20	0.4		1.39	29.40	26.90	0.33
22	4.02	7.50	3.99	7.0			7.0											21	0.4	4				
23	3.98	7.50	3.96	7.0	303	336	6.9	10		97	331		4		99	132		20	0.4	4				
24	3.78	8.50	3.76	7.0			7.0											20	0.4					
25	4.01	9.20	4.00						9			292		4			135	21	0.3					
26	4.20	8.00	4.20		291	417		12		96	420		4		99	140		21	0.4					
27	4.06	7.80	4.04	7.1			7.1											21	0.4	250				
28	4.05	7.00	4.03	7.0	282	346	7.0	13		95	437		4		99	134		22	0.5	3	2.20	15.90	25.80	0.38
29	4.00	8.20	3.99	7.2			7.0											22	0.4	<1				
30	4.01	7.50	4.00	7.1	143	110	7.1	7		95	233		3		97	100		22	0.5	3				
31	3.85	7.00	3.83	6.9			7.0											22	0.6					
Max	4.36	9.20	4.35	7.2	346	417	7.2	13	9	99	458	292	12	6	99	422	208	22	0.6	250				
Min	3.75		3.75	6.9	143	110	6.9	4		95	133		2		97	67		19	0.3	<1				
Avg	4.00		3.98		278	303		8		97	272		4		99	144		20	0.44	5				
Sum	123.89		123.48																					

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	Daniel Clark	The two influent channels feeding the plant were sampled separately July 7, 9 and 12. Influent BOD and TSS values for July 7, 9, and 12 are averages of those composite samples.
				CLASS	Oregon T/IV #4260	
				TITLE	Wastewater Treatment Manager	
				SIGNATURE		
						A malfunction of the effluent flow meter resulted in us reporting the plant effluent flow for July 5 and 6 using the influent flow values.



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

August 18, 2009

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



Dear Mr. Christensen:

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

One correction was made. We modified the July 28th TKN value for Plant Effluent to 27.30 due to lab error and subsequent retesting.

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

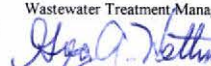
MAJOR BASIN
RECEIVING STREAM
COUNTY
WILLAMETTE
WILLAMETTE
CLACKAMAS

POPULATION EQUIVALENT 47,485
PERMIT NUMBER 101614
FILE NUMBER 70735
EXPIRATION 9/30/2009

DATE	FLOW			PLANT INFLUENT			PLANT EFFLUENT																	
Jul-09	INF	INF PEAK	EFF	pH	BOD	TSS	pH	BOD	BOD Wkly Avg	BOD Rem %	BOD Dis lbs	BOD Wkly Avg Dis lbs	TSS mg/l	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
1	4.02	7.50	4.00	6.9			7.0											19	0.4	<1				
2	3.93	7.50	3.91	6.9	242	230	7.1	5		98	163		4		98	130		19	0.5	<1				
3	3.90	8.60	3.88	7.0			7.1											19	0.4					
4	3.75	8.50	3.75						6			203		4			124	20	0.5					
5	4.24	6.50	4.22		346	356		13		96	458		12		97	422		19	0.5					
6	4.04	7.00	4.04	7.0			7.0											19	0.5	14				
7	4.03	7.00	4.01	7.0	310	344	7.1	6		98	201		4		99	134		19	0.5		1.59	30.10	28.40	0.35
8	3.84	8.80	3.83	7.0			7.1											19	0.5	2				
9	4.01	8.50	3.99	7.0	334	399	7.1	4		99	133		2		99	67		19	0.5	<1				
10	3.77	8.30	3.77	7.0			6.9											19	0.4					
11	3.92	9.20	3.92						8			264		6			208	19	0.4					
12	4.36	8.20	4.35		331	293		7		98	254		4		99	145		19	0.4					
13	4.11	8.30	4.09	7.0			7.2											19	0.4	2				
14	4.00	7.20	3.98	7.0	280	304	7.1	6		98	199		4		99	133		19	0.4		2.09	27.10	27.80	0.33
15	3.98	7.00	3.95	7.1			7.2											19	0.4	2				
16	4.02	8.00	4.00	7.0	257	280	7.1	5		98	167		<2		99	67		20	0.4	1				
17	3.85	7.80	3.84	7.1			7.1											20	0.4					
18	3.90	9.00	3.90						6			207		3			115	20	0.5					
19	4.28	8.70	4.28		242	205		7		97	250		4		98	143		20	0.4					
20	4.04	7.50	4.03	7.0			6.9											20	0.5	20				
21	3.95	6.50	3.93	7.0	258	314	6.9	9		97	295		4		99	131		20	0.4		1.39	29.40	26.90	0.33
22	4.02	7.50	3.99	7.0			7.0											21	0.4	4				
23	3.98	7.50	3.96	7.0	303	336	6.9	10		97	331		4		99	132		20	0.4	4				
24	3.78	8.50	3.76	7.0			7.0											20	0.4					
25	4.01	9.20	4.00						9			292		4			135	21	0.3					
26	4.20	8.00	4.20		291	417		12		96	420		4		99	140		21	0.4					
27	4.06	7.80	4.04	7.1			7.1											21	0.4	250				
28	4.05	7.00	4.03	7.0	282	346	7.0	13		95	437		4		99	134		22	0.5	3	2.20	27.30	25.80	0.38
29	4.00	8.20	3.99	7.2			7.0											22	0.4	<1				
30	4.01	7.50	4.00	7.1	143	110	7.1	7		95	233		3		97	100		22	0.5	3				
31	3.85	7.00	3.83	6.9			7.0											22	0.6					
Max	4.36	9.20	4.35	7.2	346	417	7.2	13	9	99	458	292	12	6	99	422	208	22	0.6	250				
Min	3.75		3.75	6.9	143	110	6.9	4		95	133		2		97	67		19	0.3	<1				
Avg	4.00		3.98		278	303		8		97	272		4		99	144		20	0.44	5				
Sum	123.89		123.48																					

PLANT EFFLUENT PERMIT		May 1 -> October 31		November 1 -> April 30		January 1 -> December 31		REMARKS		Nutrients are sampled May 1 -> October 31	
MONTHLY STANDARDS		BOD 20 mg/l / 1400 lbs		BOD 30 mg/l / 3100 lbs		CL2 max 0.7 mg/l		Digested and TWAS sludges are hauled to Columbia Blvd Treatment Plant.		The two influent channels feeding the plant were sampled separately July 7, 9 and 12. Influent BOD and TSS values for July 7, 9, and 12 are averages of those composite samples.	
		TSS 20 mg/l / 1400 lbs		TSS 30 mg/l / 3100 lbs		daily pH range 6.0 -> 9.0					
		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 Hettman
CLASS Oregon T/IV #4600
TITLE Wastewater Treatment Manager
SIGNATURE 

A malfunction of the effluent flow meter resulted in us reporting the plant effluent flow for July 5 and 6 using the influent flow values.

Page 1									
Date	Plant Effluent Nutrients				Flow		Weather		
Jul-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	
07/01/09					1.23	2.79	93	56	0.00
07/02/09					1.20	2.74	92	56	0.00
07/03/09					1.16	2.75	100	57	0.00
07/04/09					1.13	2.62	101	57	0.00
07/05/09					1.31	2.93	92	58	0.00
07/06/09					1.21	2.83	78	57	0.00
07/07/09	1.59	28.40	0.35	30.10	1.32	2.72	82	56	0.00
07/08/09					1.18	2.67	82	53	0.00
07/09/09					1.22	2.80	85	55	0.00
07/10/09					1.13	2.64	93	58	0.00
07/11/09					1.20	2.72	87	59	0.00
07/12/09					1.38	2.98	68	56	0.10
07/13/09					1.26	2.85	82	51	0.00
07/14/09	2.09	27.80	0.33	27.10	1.23	2.78	85	53	0.00
07/15/09					1.20	2.77	94	56	0.00
07/16/09					1.21	2.81	95	61	0.00
07/17/09					1.13	2.72	98	58	0.00
07/18/09					1.18	2.72	98	52	0.00
07/19/09					1.35	2.93	89	57	0.00
07/20/09					1.20	2.84	95	60	0.00
07/21/09	1.39	26.90	0.33	29.40	1.19	2.76	90	59	0.00
07/22/09					1.21	2.81	85	59	0.00
07/23/09					1.21	2.77	76	58	0.00
07/24/09					1.14	2.64	92	60	0.00
07/25/09					1.22	2.79	95	63	0.00
07/26/09					1.31	2.88	98	66	0.00
07/27/09					1.20	2.86	107	71	0.00
07/28/09	2.20	25.80	0.38	27.30	1.19	2.87	108	69	0.00
07/29/09					1.19	2.81	110	69	0.00
07/30/09					1.17	2.84	104	63	0.00
07/31/09					1.11	2.74	97	64	0.00
Max	2.20	28.40	0.38	30.10	1.38	2.98	110	71	0.10
Min	1.39	25.80	0.33	27.10	1.11	2.62	68	51	0.00
Avg					1.21	2.79	92	59	0.00
Sum					37.5	86.4			0.10

Page 8	NPDES Peak Mass Limits										
Date	Total			Instantaneous		DML=9382 lbs			DML=4153 lbs		
Jul-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
07/01/09	1.2	2.8	4.0	7.5					7.5		
07/02/09	1.2	2.7	3.9	7.5					7.5	163	130
07/03/09	1.2	2.7	3.9	8.6					8.6		
07/04/09	1.1	2.6	3.8	8.5					8.5		
07/05/09	1.3	2.9	4.2	6.5					6.5	458	422
07/06/09	1.2	2.8	4.0	7.0					7.0		
07/07/09	1.3	2.7	4.0	7.0					7.0	201	134
07/08/09	1.2	2.7	3.8	8.8					8.8		
07/09/09	1.2	2.8	4.0	8.5					8.5	133	67
07/10/09	1.1	2.6	3.8	8.3					8.3		
07/11/09	1.2	2.7	3.9	9.2					9.2		
07/12/09	1.4	3.0	4.4	8.2					8.2	254	145
07/13/09	1.3	2.9	4.1	8.3					8.3		
07/14/09	1.2	2.8	4.0	7.2					7.2	199	133
07/15/09	1.2	2.8	4.0	7.0					7.0		
07/16/09	1.2	2.8	4.0	8.0					8.0	167	67
07/17/09	1.1	2.7	3.9	7.8					7.8		
07/18/09	1.2	2.7	3.9	9.0					9.0		
07/19/09	1.3	2.9	4.3	8.7					8.7	250	143
07/20/09	1.2	2.8	4.0	7.5					7.5		
07/21/09	1.2	2.8	3.9	6.5					6.5	295	131
07/22/09	1.2	2.8	4.0	7.5					7.5		
07/23/09	1.2	2.8	4.0	7.5					7.5	331	132
07/24/09	1.1	2.6	3.8	8.5					8.5		
07/25/09	1.2	2.8	4.0	9.2					9.2		
07/26/09	1.3	2.9	4.2	8.0					8.0	420	140
07/27/09	1.2	2.9	4.1	7.8					7.8		
07/28/09	1.2	2.9	4.1	7.0					7.0	437	134
07/29/09	1.2	2.8	4.0	8.2					8.2		
07/30/09	1.2	2.8	4.0	7.5					7.5	233	100
07/31/09	1.1	2.7	3.9	7.0					7.0		
Max	1.4	3.0	4.4	9.2		N/A	N/A	N/A	9.2	458	422
Min	1.1	2.6	3.8								
Avg	1.2	2.8	4.0								
Sum	38	86	124			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	303	10309	SS	139	4689		Flow gal/day	Total Solids %	Volatile Content %			
BOD5	278	9497	BOD5	170	5799	39	1200	12.70	82.7			
Detent Time hrs			Population Equivalent			Flow mgd	Precip "		Detention Time days			
3.2			47485			4.00	0.1		Loading lbs VS / ft3 /day			
SECONDARY TREATMENT												
Influent			Effluent			Rem %	Primary					
mg/l lbs/day			mg/l lbs/day				Feed Sludge					
S S	303	10309	SS	4	144		Flow gal/day	Total Solids %	Volatile Content %			
BOD5	278	9497	BOD5	8	272	99	2.64	62.5	Vol Sol Reduct %			
F/M		SVI				97						
0.00		182										
RAS Flow mgd			CL2 Res mg/l			MLSS mg/l	Total Solids (TWS) %					
0.57			0.4			1429	6.00					
CL2 Feed lbs/day			Aerator			Capture %						
69			Detention Time hrs			Filtrate Solids mg/l						
WAS Flow mgd			#VALUE!			Sludge Hauled						
.000						gal/day lbs /day lbs/mo						
						Digst 4465 983						
						TWS 8810 4410						
						Total 13274 5393						

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: 8/11/2009
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	
7/1/2009	1.23	2.79	93	56	0.00
7/2/2009	1.20	2.74	92	56	0.00
7/3/2009	1.16	2.75	100	57	0.00
7/4/2009	1.13	2.62	101	57	0.00
7/5/2009	1.31	2.93	92	58	0.00
7/6/2009	1.21	2.83	78	57	0.00
7/7/2009	1.32	2.72	82	56	0.00
7/8/2009	1.18	2.67	82	53	0.00
7/9/2009	1.22	2.80	85	55	0.00
7/10/2009	1.13	2.64	93	58	0.00
7/11/2009	1.20	2.72	87	59	0.00
7/12/2009	1.38	2.98	68	56	0.10
7/13/2009	1.26	2.85	82	51	0.00
7/14/2009	1.23	2.78	85	53	0.00
7/15/2009	1.20	2.77	94	56	0.00
7/16/2009	1.21	2.81	95	61	0.00
7/17/2009	1.13	2.72	98	58	0.00
7/18/2009	1.18	2.72	98	52	0.00
7/19/2009	1.35	2.93	89	57	0.00
7/20/2009	1.20	2.84	95	60	0.00
7/21/2009	1.19	2.76	90	59	0.00
7/22/2009	1.21	2.81	85	59	0.00
7/23/2009	1.21	2.77	76	58	0.00
7/24/2009	1.14	2.64	92	60	0.00
7/25/2009	1.22	2.79	95	63	0.00
7/26/2009	1.31	2.88	98	66	0.00
7/27/2009	1.20	2.86	107	71	0.00
7/28/2009	1.19	2.87	108	69	0.00
7/29/2009	1.19	2.81	110	69	0.00
7/30/2009	1.17	2.84	104	63	0.00
7/31/2009	1.11	2.74	97	64	0.00
Max	1.38	2.98	110	71	0.10
Min	1.11	2.62	68	51	0.00
Avg	1.21	2.79	92	59	0.00
SUM	37.54	86.36			0.10