



CITY OF PORTLAND ENVIRONMENTAL SERVICES

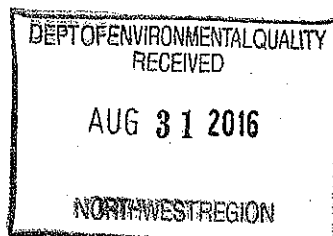


Tryon Creek Wastewater Treatment Plant

195 SW Foothills Road, Bldg 310, Lake Oswego, Oregon 97034 ■ Nick Fish, Commissioner ■ Michael Jordan, Director

August 31, 2016

Mr. Mark W. Hynson
DEQ Northwest Region Office
700 NE Multnomah Street
Suite No. 600
Portland, Oregon 97232



Dear Mr. Hynson:

I am re-submitting a correction to our July 2016 DMR for the City of Portland's Tryon Creek Wastewater Treatment Plant (TCWTP).

There was an operator error in copying some of the Effluent TSS data where several cells on the spreadsheet were not included but actual permit required lab data exist.

The TSS for July 13th was reported as 7 but there should be no value for that date.

The TSS for July 17, 18 and 19 showed no values but should have shown 5, 3, and 7.

The correction resulted in a few calculated value changes, i.e. TSS weekly average reported on July 23 was from a 2 to a 4, TSS weekly average pounds on July 16 was 227 to a 218, and July 23 was 70 to a 152, and a TSS dissolved pounds for the 13th of 262 that should have no value.

All measured parameters were within permit limitations during the month.

Please call me at 823-2466 if you have any questions.

Sincerely,

Tuong Nguyen
Operations Manager,
Tryon Creek WTP

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

52,078
101614
70735
9/30/2009

DATE		FLOW		PLANT INFLUENT										PLANT EFFLUENT											
	INF	INF	EFF		BOD	TSS		BOD	BOD	BOD	BOD	BOD	BOD	BOD	TSS	TSS	TSS	TSS	EFF	EFF	E.COLI	Total	TKN	NH3	NO3+
	mgd	PEAK	mgd	pH	mg/l	mg/l		mg/l	Wkly Avg	Rem	Dis	Wkly Avg	Dis	Wkly Avg	mg/l	mg/l	Rem	Dis	TEMP	Res	mg/l	mg/l	mg/l	mg/l	mg/l
1	4.17	6.60	4.14	7.5	300	278		6	8	98	207	300	9	8	97	310	302	20	0.37						
2	4.25	7.00	4.24																20	0.39					
3	4.15	7.90	4.13																20	0.40					
4	4.43	6.50	4.41	7.5	303	328		7		98	257		4		99	147		19	0.34						
5	4.33	6.80	4.30	7.4	281	340		7		98	251		4		99	143		19	0.37						
6	4.41	6.70	4.38	7.6														19	0.26						
7	4.40	6.80	4.37	7.6	260	337		4		98	146		10		97	365		19	0.28						
8	4.31	7.00	4.28	7.6					6			215		7			241	19	0.61						
9	4.19	7.70	4.17															19	0.56						
10	4.91	7.40	4.90					5		98	204		11		97	449	241	19	0.47						
11	4.40	8.25	4.38	7.4	263	302		17		94	620		6		98	219		20	0.40						
12	4.08	7.10	4.05	7.7	275	300		6		98	203		4		99	135		20	0.48						
13	4.52	6.50	4.51	7.6														20	0.53						
14	4.25	6.10	4.22	7.8	324	414		7		98	247		<2		100	70		20	0.47						
15	3.96	6.70	3.94	7.8								319		6			218	20	0.39						
16	4.13	7.50	4.11						9									20	0.30						
17	4.46	6.90	4.44					4		99	148		5		98	185		20	0.32						
18	4.33	6.10	4.31	7.3	262	302		7		97	252		3		99	108		20	0.44						
19	4.20	6.00	4.17	* 248	282			* 4					7		98	244		20	0.32						
20	4.24	6.50	4.21	7.6														20	0.23						
21	4.18	5.50	4.17	7.7	280	528		10		96	348		2		100	70		20	0.19						
22	4.11	6.20	4.08	7.6								249		4			152	20	0.31						
23	4.13	6.10	4.11						7									20	0.39						
24	4.51	6.50	4.51								188		6		98	226		20	0.35						
25	4.30	7.50	4.27	7.8	271	437		6		98	214		7		98	249		21	0.46						
26	4.17	6.50	4.14	7.7	284	372		4		99	138		<2		99	69		21	0.32						
27	4.15	6.75	4.12	7.5														21	0.35						
28	4.17	6.20	4.15	7.6	* 338	365		* 6					3		99	104		21	0.44						
29	3.95	6.20	3.92	7.6					5			180		5			162	21	0.42						
30	4.10	6.20	4.09															21	0.37						
31	4.42	7.25	4.42		311	412		7		98	258		4		99	148		21	0.41						
Max	4.91	8.25	4.90	7.8	332	528		17	9	99	620		11	8	100	449	302	21	0.61						
Min	3.95		3.92	7.3	260	278		4		94	138		<2		97	69		19	0.19						
Avg	4.27		4.25		287	353		7		98	245		5		99	191		20	0.39						
Sum	132.28		131.66																						
PLANT EFFLUENT PERMIT				May 1 -> October 31		November 1 -> April 30		January 1 -> December 31		Nutrients are sampled May 1 -> October 31															
MONTHLY STANDARDS				BOD 20 mg/l / 1400 lbs		BOD 30 mg/l / 3100 lbs		CL2 Average 0.7 mg/l																	
				TSS 20 mg/l / 1400 lbs		TSS 30 mg/l / 3100 lbs		daily pH range 6.0 -> 9.0																	
E. COLI				126 cfs/100 ml		E. COLI		126 cfs/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				NAME		CLASS		TITLE		SIGNATURE															
persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the				Oregon TIV #10833		Wastewater Treatment Manager																			
basis 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.																									

Page 1										
Date Jul-16	Plant Effluent Nutrients				Flow		Weather		Precip "	
	Total P mg/l	NH3-N mg/l	NO3-N mg/l	TKN mg/l	Portland mgd	Lake Oswego mgd	Temperature ° F			
							Max ° F	Min ° F		
07/01/16					1.10	3.07			0.00	
07/02/16					1.12	3.13			0.00	
07/03/16					1.08	3.06			0.00	
07/04/16					1.20	3.23			0.00	
07/05/16	0.79	7.53	12.24	11.00	1.15	3.18			0.00	
07/06/16					1.16	3.25			0.00	
07/07/16					1.19	3.21			0.13	
07/08/16					1.15	3.15			0.22	
07/09/16					0.99	3.20			0.08	
07/10/16					1.50	3.41			0.14	
07/11/16					1.16	3.24			0.00	
07/12/16	0.73	10.30	10.23	13.40	1.15	2.93			0.00	
07/13/16					1.12	3.40			0.00	
07/14/16					1.14	3.11			0.00	
07/15/16					1.03	2.93			0.00	
07/16/16					1.12	3.01			0.00	
07/17/16					1.26	3.20			0.00	
07/18/16					1.16	3.17			0.00	
07/19/16	1.42	8.39	11.35	11.60	1.13	3.07			0.00	
07/20/16					1.13	3.11			0.00	
07/21/16					1.12	3.06			0.05	
07/22/16					1.11	3.00			0.00	
07/23/16					1.12	3.01			0.00	
07/24/16					1.26	3.26			0.00	
07/25/16					1.12	3.18			0.00	
07/26/16	0.55	4.88	12.91	6.45	1.10	3.08			0.00	
07/27/16					1.08	3.07			0.00	
07/28/16					1.08	3.09			0.00	
07/29/16					1.00	2.96			0.00	
07/30/16					1.06	3.03			0.00	
07/31/16					1.20	3.22			0.00	
Max	1.42	10.30	12.91	13.40	1.50	3.41	0	0	0.22	
Min	0.55	4.88	10.23	6.45	0.99	2.93	0	0	0.00	
Avg					1.14	3.13			0.02	
Sum					35.3	97.0			0.62	

Page 5	AERATORS												
	Date	FLOW		MASS		SVI	F/M	SRT	INVENTORY	DO	D. TIME	BASINS	
		Infl.	Return	mg/l	lbs								
													MGD
Jul-16							days				hrs	#On	
								lbs		mg/l			
07/01/16	3.90		1340	16241	102			17751			9.0	2	
07/02/16	3.88		1491	18071	100			19619			9.0	2	
07/03/16	3.78		1538	18641	98	0.23		20376			9.2	2	
07/04/16	4.02		1680	20362	94	0.25		21778			8.7	2	
07/05/16	3.93		1494	18107	87	0.25		20166			8.9	2	
07/06/16	4.03		1406	17041	91			19228			8.7	2	
07/07/16	4.03		1088	13187	91	0.30		14872			8.6	2	
07/08/16	4.46		1301	15788	84			18078-			7.8	2	
07/09/16	4.36		1137	13780	89			15770-			8.0	2	
07/10/16	4.56		1238	15005	96	0.36		16796			7.6	2	
07/11/16	4.30		1688	20459	84	0.18		22107			8.1	2	
07/12/16	4.21		1412	17113	89	0.30		18697			8.3	2	
07/13/16	4.21		1115	13514	95			15029			8.3	2	
07/14/16	4.16		1319	15886	94	0.31		18663			8.4	2	
07/15/16	3.92		1336	16192	85			19370-			8.9	2	
07/16/16	4.00		1287	15720	102			17156			8.7	2	
07/17/16	4.51		1634	19804	93	0.26		21959			7.7	2	
07/18/16	4.42		1458	17671	105	0.58		19916			7.9	2	
07/19/16	4.20		1520	18422	106	0.28		21710			8.3	2	
07/20/16	4.24		1381	16738	119			18027			8.2	2	
07/21/16	4.20		1477	17901	118	0.25		20620			8.3	2	
07/22/16	4.08		1110	13453	115			15561			8.5	2	
07/23/16	4.11		1366	16556	113			18872			8.5	2	
07/24/16	4.42		1578	19125	111	0.31		21825			7.9	2	
07/25/16	4.24		1793	21731	167	0.23		25980			8.2	2	
07/26/16	4.11		1752	21234	102	0.20		25707			8.5	2	
07/27/16	4.09		1094	13259	114			14964			8.5	2	
07/28/16	4.11		1378	16701	97	0.31		18910			8.5	2	
07/29/16	3.97		1101	13344	95			15404			8.8	2	
07/30/16	4.03		1483	17974	88			19965			8.7	2	
07/31/16	4.27		1773	21489	99	0.28		24040			8.2	2	
Max	4.56	0.00	1793	21731	167	0.58		25980			9.2	2	
Min	3.78	0.00	1088	13187	84	0.18		14872			7.6	2	
Avg	4.15	0.00	1412	17116	101	0.29		19352			8.4	2	
Sum	128.7												

[illegible]

Page 8		NPDES Peak Mass Limits									
Date Jul-16	Total			Instantaneous		DML=9382 lbs			DML=4153 lbs		
	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
07/01/16	1.1	3.1	4.2	6.6					6.6		
07/02/16	1.1	3.1	4.3	7.0					7.0		
07/03/16	1.1	3.1	4.1	7.9					7.9	207	310
07/04/16	1.2	3.2	4.4	6.5					6.5	257	147
07/05/16	1.1	3.2	4.3	6.8					6.8	251	143
07/06/16	1.2	3.2	4.4	6.7					6.7		
07/07/16	1.2	3.2	4.4	6.8					6.8	146	365
07/08/16	1.2	3.2	4.3	7.0					7.0		
07/09/16	1.0	3.2	4.2	7.7					7.7		
07/10/16	1.5	3.4	4.9	7.4					7.4	204	449
07/11/16	1.2	3.2	4.4	8.3					8.3	620	219
07/12/16	1.1	2.9	4.1	7.1					7.1	203	135
07/13/16	1.1	3.4	4.5	6.5					6.5		
07/14/16	1.1	3.1	4.2	6.1					6.1	247	70
07/15/16	1.0	2.9	4.0	6.7					6.7		
07/16/16	1.1	3.0	4.1	7.5					7.5		
07/17/16	1.3	3.2	4.5	6.9					6.9	148	185
07/18/16	1.2	3.2	4.3	6.1					6.1	252	108
07/19/16	1.1	3.1	4.2	6.0					6.0		244
07/20/16	1.1	3.1	4.2	6.5					6.5		
07/21/16	1.1	3.1	4.2	5.5					5.5	348	70
07/22/16	1.1	3.0	4.1	6.2					6.2		
07/23/16	1.1	3.0	4.1	6.1					6.1		
07/24/16	1.3	3.3	4.5	6.5					6.5	188	226
07/25/16	1.1	3.2	4.3	7.5					7.5	214	249
07/26/16	1.1	3.1	4.2	6.5					6.5	138	69
07/27/16	1.1	3.1	4.1	6.8					6.8		
07/28/16	1.1	3.1	4.2	6.2					6.2		104
07/29/16	1.0	3.0	4.0	6.2					6.2		
07/30/16	1.1	3.0	4.1	6.2					6.2		
07/31/16	1.2	3.2	4.4	7.3					7.3	258	148
Max	1.5	3.4	4.9	8.3		N/A	N/A	N/A	8.3	620	449
Min	1.0	2.9	4.0								
Avg	1.1	3.1	4.3								
Sum	35	97	132			N/A	N/A	N/A			

PRIMARY TREATMENT				MONTHLY REPORT SUMMARY			
Influent		Effluent		Rem		Primary	
mg/l	lbs/day	mg/l	lbs/day	%	Flow gal/day	Total Solids %	Volatile Content %
SS 353	12751	SS 110	3917	69			
BOD5 287	10416	BOD5 144	5153	50	8306	6.55	92.5
Detent Time hrs		Population Equivalent		Flow mgd		Precip "	
2.7		52078		4.27		0.62	
SECONDARY TREATMENT				Detention Time days			
				43			
Influent		Effluent		Rem		Loading lbs VS / ft3 /day	
mg/l	lbs/day	mg/l	lbs/day	%			
SS 353	12751	SS 5	191	99			
BOD5 287	10416	BOD5 7	245	98			
F/M	SVI	SRT days	MLSS mg/l				
0.29	101	0.0	1412				
RAS Flow mgd		CL2 Res mg/l		CL2 Feed lbs/day		Total Solids (TWS) %	
0.00		0.4		222		4.43	
WAS Flow mgd		Aerator Detention Time hrs		Aerator DO mg/l		Capture %	
.000		8.4		0.0			
				Sludge Hauled			
				gal/day		lbs /day	
				Digst 9671		1565	
				TWS 10239		3780	
				Total 19910		5345	
				Filtrate Solids mg/l		Vol Sol Reduct %	