



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

July 15, 2015

State of Oregon
DEQ Northwest Region Office
700 NE Multnomah St.
Suite 600
Portland, OR 97232

JUNE 2015 DMR FOR TRYON CREEK WASTEWATER TREATMENT PLANT

Dear Mark,

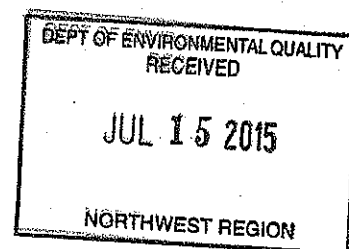
I am enclosing the June 2015 DMR for the City of Portland's Tryon Creek Wastewater Treatment Plant (TCWTP) for Tuong, who is on vacation this week.

All measured parameters were within permit limitations during the month.

Please call me at 823-2438 if you have any questions.

Sincerely,

Mike Ciolli
Wastewater Treatment Manager for Operations



POPULATION EQUIVALENT	49,380
PERMIT NUMBER	101614
FILE NUMBER	70735
EXPIRATION	9/30/2009

[illegible]

Page 1	Plant Effluent Nutrients										
	Date Jun-15	Plant Effluent Nutrients				Flow		Weather			
		Total P mg/l	NH3-N mg/l	NO3+ mg/l	NO2-N mg/l	TKN mg/l	Portland mgd	Lake Oswego mgd	Temperature		Precip "
									Max o F	Min o F	
06/01/15						1.26	2.79				0.10
06/02/15		1.51	9.44	13.30	11.80	1.44	2.99				0.23
06/03/15						1.28	2.85				0.01
06/04/15						1.25	2.83				0.00
06/05/15						1.12	2.67				0.00
06/06/15						1.19	2.79				0.00
06/07/15						1.33	3.01				0.00
06/08/15						1.37	3.07				0.00
06/09/15		3.19	4.20	16.66	7.72	1.46	2.56				0.00
06/10/15						1.32	2.76				0.00
06/11/15						1.19	2.73				0.00
06/12/15						1.10	2.64				0.00
06/13/15						1.13	2.56				0.00
06/14/15						1.25	2.78				0.00
06/15/15						1.16	3.47				0.00
06/16/15		2.10	5.89	12.08	8.56	1.03	3.41				0.00
06/17/15						1.23	2.04				0.00
06/18/15						1.11	2.60				0.00
06/19/15						1.09	2.57				0.00
06/20/15						1.06	2.47				0.00
06/21/15						1.27	2.84				0.00
06/22/15						1.16	2.62				0.00
06/23/15		3.63	8.30	13.00	12.10	1.11	2.62				0.00
06/24/15						1.11	2.63				0.00
06/25/15						1.09	2.59				0.00
06/26/15						1.07	2.58				0.00
06/27/15						1.12	2.60				0.00
06/28/15						1.20	2.72				0.00
06/29/15						1.15	2.73				0.00
06/30/15		1.59	13.20	10.34	15.10	1.46	2.92				0.00
Max		3.63	13.20	16.66	15.10	1.46	3.47	0	0		0.23
Min		1.51	4.20	10.34	7.72	1.03	2.04	0	0		0.00
Avg						1.20	2.75				0.01
Sum						36.1	82.4				0.34

Page 4	PLANT EFFLUENT												E. COLI				
	Date Jun-15	FLOW		SUS SOL		BOD5		CL2		5 1	G Ave	Temp pH BYPASS					
		mgd	mg/l	lbs	% Rem	mg/l	lbs	% Rem	Contact hrs			Feed lbs/day	Res mg/l	°C	SU		
06/01/15	4.03																
06/02/15	4.41	6	221	98	4	147	99	4.2	241	0.42					18.0	6.7	0.00
06/03/15	4.10							3.8	253	0.34					17.7	6.9	0.00
06/04/15	4.05	2	68	99	6	203	98	4.1	188	0.56					17.8	6.6	0.00
06/05/15	3.78							4.2	209	0.42					18.2	6.7	0.00
06/06/15	3.98							4.5	214	0.49					18.6	6.5	0.00
06/07/15	4.33	11	398	97	12	434	97	4.2	230	0.56					19.0		0.00
06/08/15	4.42							3.9	269	0.57					19.1		0.00
06/09/15	4.00	4	133	99	8	267	98	3.8	196	0.38					19.4	6.6	0.00
06/10/15	4.06							4.2	189	0.25					20.1	6.5	0.00
06/11/15	3.90	4	130	99	8	260	97	4.1	247	0.53					19.2	6.5	0.00
06/12/15	3.72							4.3	233	0.53					19.0	6.7	0.00
06/13/15	3.69							4.5	243	0.40					19.0	6.9	0.00
06/14/15	4.03	11	369	97	15	504	95	4.6	255	0.59					19.0		0.00
06/15/15	4.60							4.2	257	0.55					19.2		0.00
06/16/15	4.41	6	221	98	6	221	98	3.7	240	0.30					19.0	6.8	0.00
06/17/15	3.25							3.8	230	0.31					19.0	6.6	0.00
06/18/15	3.69	8	246	97	10	308	97	5.2	225	0.51					19.4	6.6	0.00
06/19/15	3.64							4.6	236	0.46					19.6	6.8	0.00
06/20/15	3.53							4.6	213	0.17					19.6		0.00
06/21/15	4.10	12	411	96	14	479	96	4.8	220	0.57					20.2		0.00
06/22/15	3.76							4.1	284	0.37					19.7	6.8	0.00
06/23/15	3.71	6	186	98	14	433	95	4.5	260	0.33					20.0	6.7	0.00
06/24/15	3.73							4.5	221	0.49					20.1	6.8	0.00
06/25/15	3.66	9	275	97	7	214	98	4.5	265	0.47					20.5	7.0	0.00
06/26/15	3.63							4.6	219	0.40					21.0	7.0	0.00
06/27/15	3.70							4.6	300	0.44					20.8		0.00
06/28/15	3.91	3	98	99	6	196	98	4.6	255	0.59					21.0		0.00
06/29/15	3.86							4.3	191	0.44					20.7	7.0	0.00
06/30/15	4.36	5	182	98	6	218	98	4.4	274	0.51					20.7		0.00
								3.9	244	0.49					20.7	7.1	0.00
Max	4.60	12	411	99	15	504	99	5.2	300	0.59					21.0	7.1	0.00
Min	2.0	68	96	96	4	147	95	3.7	188	0.17					17.7	6.5	0.00
Avg	3.94	7	226	98	9	299	97	4.3	237	0.45					19.5		0.00
Sum	118.1																0.00

Page 6	Digester No. 1																	Digester No. 2					Digested
	Date				Vol				pH	Tmp oF	CO2 %	Heat Exch		Tot		Vol		Ctnt %	Tmp oF	Gal Haul			
	Jun-15	Alk mg/l	Acids mg/l					in oF				out oF	Sol %	Sol %	Sol %	Sol %							
06/01/15	2780	42		99.5			99.2	103.4											96.8	6100			
06/02/15				99.2			99.0	103.3											96.8	6100			
06/03/15				99.5			100.0	104.1									2.05	65	96.7	6100			
06/04/15				99.3			99.6	103.7											96.5	6100			
06/05/15				99.6			99.8	104.0											96.7	6100			
06/06/15				99.9			100.0	102.0											96.8	0			
06/07/15				99.1			103.2	99.1											96.7	0			
06/08/15	2880	48		99.0			99.2	99.0											96.9	12200			
06/09/15				99.4			99.3	99.5											96.8	6100			
06/10/15				99.2			99.2	103.5											96.9	6100			
06/11/15				99.1			99.3	99.1											97.0	6100			
06/12/15				99.1			99.0	99.2											97.1	12200			
06/13/15				99.4			99.4	99.7											97.1	0			
06/14/15				99.4			99.9	100.1											97.0	0			
06/15/15	3080	65		99.2			99.3	99.5											97.1	7100			
06/16/15				99.2			99.2	99.5											97.0	6100			
06/17/15				99.1			99.3	99.5											97.1	6100			
06/18/15				99.7			99.7	99.9											96.9	6100			
06/19/15				99.5			99.5	99.6											96.9	6100			
06/20/15				99.6			99.6	103.8											97.0	0			
06/21/15				99.3			99.4	103.6											97.0	0			
06/22/15	3400	55		99.7			99.6	103.7											97.1	7100			
06/23/15				99.8			99.8	100.0											97.1	6100			
06/24/15				99.3			99.3	99.5											97.1	6100			
06/25/15				99.4			99.4	103.5											97.1	6100			
06/26/15				98.7			98.7	100.4											97.1	6100			
06/27/15				99.1			99.1	99.2											97.2	6100			
06/28/15				99.6			99.6	99.8											97.0	1000			
06/29/15	3280	55		99.4			99.5	103.4											97.7	12200			
06/30/15				98.8			88.7	93.5											97.1	6100			
Max	3400	65		100	0		103	104									2.05	65	98	12200			
Min	2780	42		99	0		89	94									2.05	65	97	0			
Avg							99	101									2.05	65.1	97.0	5387			
Sum																				161600			

MONTHLY REPORT SUMMARY									
PRIMARY TREATMENT					SECONDARY TREATMENT				
Influent		Effluent		Rem	Primary		Feed Sludge		
mg/l	lbs/day	mg/l	lbs/day	%	Flow gal/day	Total Solids %	Volatile Content %		
SS	336	11383	3611	68					
BOD5	300	10156	5291	48	15185	7.02	82.1		
Detent Time hrs		Population Equivalent		Precip "	Detention Time days		Loading lbs VS / ft3 /day		
3.3		50780		0.34	24				
					Flow mgd				
					3.95				
					Rem %				
					98				
					97				
					MLSS mg/l				
					1464				
					Effluent				
					mg/l				
					7				
					226				
					299				
					SRT days				
					0.0				
					CL2 Res mg/l				
					0.4				
					CL2 Feed lbs/day				
					237				
					Aerator DO mg/l				
					0.0				
					Detention Time hrs				
					8.9				
					RAS Flow mgd				
					0.00				
					WAS Flow mgd				
					.000				
					Influent				
					mg/l				
					336				
					11383				
					10156				
					SVI				
					138				
					Vol Sol Reduct %				
					65.1				
					Total Solids %				
					3.15				
					Volatile Content %				
					4.63				
					Total Solids (TWS) %				
					Capture %				
					Sludge Hauled				
					gal/day				
					lbs/day				
					lbs/mo				
					Digest				
					5387				
					1415				
					TWS				
					10110				
					3907				
					Total				
					15497				
					5322				

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: 7/14/2015
TO: Pat McDougal, City of Lake Oswego
FAX (503) 635-0269
FROM: City of Portland
SUBJECT: Rainfall and Flow Data

DATE	Portland Flow	Lake Oswego	Temperature Maximum Minimum	Rain
6/1/2015	1.26	2.79		0.10
6/2/2015	1.44	2.99		0.23
6/3/2015	1.28	2.85		0.01
6/4/2015	1.25	2.83		0.00
6/5/2015	1.12	2.67		0.00
6/6/2015	1.19	2.79		0.00
6/7/2015	1.33	3.01		0.00
6/8/2015	1.37	3.07		0.00
6/9/2015	1.46	2.56		0.00
6/10/2015	1.32	2.76		0.00
6/11/2015	1.19	2.73		0.00
6/12/2015	1.10	2.64		0.00
6/13/2015	1.13	2.56		0.00
6/14/2015	1.25	2.78		0.00
6/15/2015	1.16	3.47		0.00
6/16/2015	1.03	3.41		0.00
6/17/2015	1.23	2.04		0.00
6/18/2015	1.11	2.60		0.00
6/19/2015	1.09	2.57		0.00
6/20/2015	1.06	2.47		0.00
6/21/2015	1.27	2.84		0.00
6/22/2015	1.16	2.62		0.00
6/23/2015	1.11	2.62		0.00
6/24/2015	1.11	2.63		0.00
6/25/2015	1.09	2.59		0.00
6/26/2015	1.07	2.58		0.00
6/27/2015	1.12	2.60		0.00
6/28/2015	1.20	2.72		0.00
6/29/2015	1.15	2.73		0.00
6/30/2015	1.46	2.92		0.00
Max	1.46	3.47		0.23
Min	1.03	2.04		0.00
Avg	1.20	2.75		0.01
SUM	36.10	82.44		0.34