



Department of Natural Resources and Parks Wastewater Treatment Division

June 9, 2017

West Point Treatment Plant Restoration Routine Effluent Quality Monitoring Data Update (as of 6/6/17 data)

This file contains a compilation of King County's influent and effluent water quality monitoring data that is being collected at the West Point wastewater treatment plant. This file contains data for parameters that are routinely collected on a frequent basis (i.e., daily, weekly, monthly) in the West Point influent and effluent, as required by the National Pollutant Discharge Elimination System (NPDES) permit for West Point. These frequently measured parameters include flows, rainfall, total suspended solids, biochemical oxygen demand, pH, residual chlorine, fecal coliform bacteria, and nutrients. The attached files contains updated final data collected under the NPDES permit for the April 2017 monthly reporting period and partial data through May 24, 2017.

While repairs have been underway to repair the treatment facilities that were damaged in the flooding on February 9, 2017, the reduced level of treatment resulted in changes in the concentrations of certain parameters that were not being removed at the same level of performance that occurs under normal West Point operations. The following notes provide information on the current status of treatment-affected parameters:

- Steady progress on plant repairs resulted in the secondary treatment process being restored to full production by April 27, 2017. Removal of suspended solids and biochemical oxygen demand improved substantially in the latter part of April and early May, as well as control of the chlorine disinfection process.
- Ongoing repairs resulted in the restoration of treatment capacity on May 10, 2017 to fully meet all effluent limitations contained in the NPDES permit. Data collected to date in May indicates the plant effluent is meeting all permit effluent limitations.

The "Preliminary Draft Data" watermark refers to analyses completed and validated by King County; however, submittal of the final data to Ecology is pending completion of all sampling and analysis within these monthly reporting periods.

If you have questions about this document contact Jeff Lafer at 206-477-6315 or email him at jeff.lafer@kingcounty.gov.

Alternative Formats Available
206-477-5371, TTY Relay: 711

Day of the Month	Influent						Effluent						
	Weekly	Weekly	Daily	Daily	Daily	Daily	CONT MEASURE	Daily COMP	Daily CALC	Monthly CALC	Daily COMP	Daily CALC	Monthly CALC
	COMP	CALC	COMP	CALC	COMP	CALC	MGD	MG/L	LBS/DAY	% REMOVAL	MG/L	LBS/DAY	% REMOVAL
	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY							
	BOD 5-DAY	BOD 5-DAY	CBOD5	CBOD5	TSS	TSS	FLOW	CBOD 5-DAY	CBOD 5-DAY	CBOD 5-DAY	TSS	TSS	TSS
06/01/17	359	242938	230	155643	350	236848	81.14	6	4,060	97.4	9	6,090	97.4
06/02/17	388	246189	213	135150	280	177662	76.08	7	4,442	96.7	10	6,345	96.4
06/03/17					348	217674	75.00				9	5,630	97.4
06/04/17					276	169761	73.75				12	7,381	95.7
06/05/17					230	146685	76.47				10	6,378	95.7
06/06/17					204	128742	75.67				11	6,942	94.6
06/07/17													
06/08/17													
06/09/17													
06/10/17													
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Permit No. WA-002918-1
 Facility Name West Point WWTP
 Receiving Water Puget Sound
 Plant Type Secondary

Discharge No. 001

Month June Year 2017

Frequency	Effluent											Emerg. Bypass Hours	Emerg. Bypass MG	
	CONT MEASURE	CONT MEASURE	CONT MEASURE	Daily Grab	Monthly COMP	Monthly CALC	Monthly COMP	Monthly MEASURE	Monthly COMP	Monthly MEASURE	Monthly MEASURE			
	STANDARD UNITS	STANDARD UNITS	µg/L	#/100 ML	MG/L-N	LBS/DAY	MG/L-N	MG/L-N	MG/L-P	MG/L-P	MG/L-P			
Day of the Month	pH, Daily Minimum	pH, Daily Maximum	CHLORINE RESIDUAL (after dechlor.)	FECAL COLIFORM	TOTAL AMMONIA	TOTAL AMMONIA	NITRATE-NITRITE	TOTAL KJELDAHL NITROGEN	TOTAL PHOSPHOROUS	ORTHO-PHOSPHATE	Duration (Hours)	Total Volume (MG)	Rainfall (Inch)	
06/01/17	6.4	6.6	90	20										0.02
06/02/17	6.4	6.5	70	0										0.00
06/03/17	6.3	6.5	130	0										0.00
06/04/17	6.3	6.4	60	0						2.76				0.00
06/05/17	6.3	6.5	90	0	13.9	8,865								0.00
06/06/17	6.5	6.6	90	0										0.00
06/07/17														
06/08/17														
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Day of the Month	Influent						Effluent							
	Weekly	Weekly	Daily	Daily	Daily	Daily	CONT	Daily	Daily	Monthly	Daily	Daily	Monthly	
	COMP	CALC	COMP	CALC	COMP	CALC	MEASURE	COMP	CALC	CALC	COMP	CALC	CALC	
	MG/L	LBS/DAY	MG/L	LBS/DAY	MG/L	LBS/DAY	MGD	MG/L	LBS/DAY	%	MG/L	LBS/DAY	%	
Units							REMOVAL							
	BOD 5-DAY	BOD 5-DAY	CBOD5	CBOD5	TSS	TSS	FLOW	CBOD 5-DAY	CBOD 5-DAY	CBOD 5-DAY	TSS	TSS	TSS	
05/01/17	204	141383	184	127522	189	130987	83.10	23	15,940	87.5	48	33,267	74.6	
05/02/17	233	158372	200	135942	196	133223	81.50	21	14,274	89.5	43	29,228	78.1	
05/03/17	188	214225	166	189156	182	207388	136.63	24	27,348	85.5	42	47,859	76.9	
05/04/17	223	219980	187	184467	224	220966	118.28	22	21,702	88.2	41	40,445	81.7	
05/05/17	149	177626	130	154976	241	287301	142.94	11	13,113	91.5	21	25,035	91.3	
05/06/17	200	197741	164	162148	215	212572	118.55	10	9,887	93.9	21	20,763	90.2	
05/07/17	223	156969	180	126701	200	140779	84.40	10	7,039	94.4	18	12,670	91.0	
05/08/17	266	185639	202	140974	250	174473	83.68	10	6,979	95.0	19	13,260	92.4	
05/09/17	323	215506	257	171470	400	266880	80.00	11	7,339	95.7	23	15,346	94.3	
05/10/17	264	175436	233	154836	296	196701	79.68	8	5,316	96.6	15	9,968	94.9	
05/11/17	354	319357	303	273348	332	299510	108.17	12	10,826	96.0	14	12,630	95.8	
05/12/17	313	243578	217	168871	308	239687	93.31	8	6,226	96.3	11	8,560	96.4	
05/13/17	245	205944	204	171480	222	186611	100.79	7	5,884	96.6	10	8,406	95.5	
05/14/17	262	193030	226	166507	248	182715	88.34	8	5,894	96.5	11	8,104	95.6	
05/15/17	243	213646	196	172324	256	225076	105.42	9	7,913	95.4	14	12,309	94.5	
05/16/17	169	234703	133	184707	178	247202	166.52	8	11,110	94.0	12	16,665	93.3	
05/17/17	213	168831	205	162490	186	147430	95.04	7	5,548	96.6	9	7,134	95.2	
05/18/17	201	147769	164	120568	224	164678	88.15	4	2,941	97.6	8	5,881	96.4	
05/19/17	184	132371	143	102875	174	125177	86.26	5	3,597	96.5	8	5,755	95.4	
05/20/17	208	145682	184	128872	192	134475	83.98	7	4,903	96.2	9	6,304	95.3	
05/21/17	224	154198	177	121844	195	134235	82.54	6	4,130	96.6	9	6,195	95.4	
05/22/17	243	168230	206	142615	246	170307	83.01	7	4,846	96.6	11	7,615	95.5	
05/23/17	241	164855	215	147070	224	153226	82.02	9	6,156	95.8	12	8,209	94.6	
05/24/17	282	191467	223	151408	278	188751	81.41	8	5,432	96.4	11	7,469	96.0	
05/25/17	303	200443	246	162736	300	198459	79.32	6	3,969	97.6	9	5,954	97.0	
05/26/17	273	188202	185	127536	280	193028	82.66	6	4,136	96.8	7	4,826	97.5	
05/27/17	358	226974	245	155332	318	201614	76.02	5	3,170	98.0	7	4,438	97.8	
05/28/17	342	210612	194	119470	300	184748	73.84	6	3,695	96.9	8	4,927	97.3	
05/29/17	307	196253	225	143834	340	217349	76.65	5	3,196	97.8	9	5,753	97.4	
05/30/17	334	222399	225	149820	356	237048	79.84	7	4,661	96.9	11	7,325	96.9	
05/31/17	322	212153	235	154832	298	196340	79.00	8	5,271	96.6	10	6,589	96.6	

Frequency Type Units Day of the Month	Effluent											Emerg. Bypass Hours	Emerg. Bypass MG	Duration (Hours)	Total Volume (MG)	Rainfall (Inch)
	CONT MEASURE STANDARDS UNITS	CONT MEASURE STANDARDS UNITS	CONT MEASURE µg/L	Daily Grab #/100 ML	Monthly COMP MG/L-N	Monthly CALC LBS/DAY	Monthly COMP MG/L-N	Monthly MEASURE MG/L-N	Monthly COMP MG/L-P	Monthly MEASURE MG/L-P	Monthly MEASURE MG/L-P					
	pH, Daily Minimum	pH, Daily Maximum	CHLORINE RESIDUAL (after dechlor.)	FECAL COLIFORM	TOTAL AMMONIA	TOTAL AMMONIA	NITRATE-NITRITE	TOTAL KJELDAHL NITROGEN	TOTAL PHOSPHOROUS	ORTHO-PHOSPHATE						
05/01/17	6.4	6.5	60	0	12.9	8,940				1.37						0.03
05/02/17	6.4	6.5	60	0	12.5	8,496										0.13
05/03/17	6.3	6.5	110	40												0.25
05/04/17	6.3	6.5	80	0												0.29
05/05/17	6.3	6.6	280	0												0.01
05/06/17	6.3	6.7	70	20												0.09
05/07/17	6.4	6.5	150	0	12.8	9,010		16.5	2.13	1.66						0.00
05/08/17	6.4	6.6	110	0												0.00
05/09/17	6.3	6.6	110	0												0.00
05/10/17	6.4	6.6	40	0												0.00
05/11/17	6.3	6.6	120	0												0.19
05/12/17	6.4	6.6	40	0												0.07
05/13/17	6.4	6.5	110	0												0.57
05/14/17	6.4	6.8	50	0	13.9	10,241		20.5	2.28	2.00						0.05
05/15/17	6.5	6.6	120	0												0.34
05/16/17	6.3	6.6	80	70												0.23
05/17/17	6.5	6.6	20	0												0.00
05/18/17	6.3	6.7	30	0												0.00
05/19/17	6.5	6.7	40	20												0.00
05/20/17	6.5	6.6	110	0												0.00
05/21/17	6.5	6.6	220	0				20.3	2.72	2.44						0.00
05/22/17	6.5	6.6	50	0	13.7	9,485										0.00
05/23/17	6.5	6.6	80	20												0.00
05/24/17	6.5	6.7	80	0												0.00
05/25/17	6.5	6.7	40	0												0.00
05/26/17	6.5	6.6	50	0												0.00
05/27/17	6.4	6.5	50	0												0.00
05/28/17	6.3	6.5	70	0												0.00
05/29/17	6.3	6.4	80	0	10.8	6,904		14.7	3.10	2.82						0.00
05/30/17	6.3	6.7	110	0												0.00
05/31/17	6.4	6.6	120	0												0.03