

Appendix 4-2

Hyannis WPCF Typical Monthly Report

DIVISION OF WATER POLLUTION CONTROL
SOUTHEAST REGIONAL OFFICE
20 RIVERSIDE DRIVE
LAKEVILLE, MA 02347

Chief Operator

Supervisor

Date	WEATHER			SEWAGE		SEPTAGE	GRIT	POST CHLORINATION	SETTLEABLE SOLIDS	Date
	Rainfall	Temp.		Flow Max.	Flow Total	Haulers	Removed	Residual Final	Final Effluent	
	Inches	High	Low	MGD	MG	Gallons X 1000	TONS	mg/l	ml/l	
1	T	76	59/63	5.89	1.7615	51.9	16.12	0.57	< 0.1	1
2	1.02	71	62/63	5.54	1.8731	44.7		0.52	< 0.1	2
3	0.76	67	60/67	5.59	1.9335	16.9		0.61	< 0.1	3
4	0	72	60/65	5.31	1.9172	6.0		0.79	< 0.1	4
5	0	78	58/67	5.83	1.7837			0.58	< 0.1	5
6	0	78	59/72	5.34	1.7795	33.4		0.74	< 0.1	6
7	0.00	78	62/68	5.79	1.7821	60.9		0.64	< 0.1	7
8	1.10	72	59/62	5.11	1.8551	35.7		0.59	< 0.1	8
9	T	68	58/59	5.22	1.7799	59.5		0.50	< 0.1	9
10	0.00	68	50/68	5.38	1.7830	73.2		0.37	< 0.1	10
11	0.00	73	50/61	5.36	1.8043	18.3		0.27	< 0.1	11
12	1.12	69	61/65	5.30	1.8631	3.0		0.35	< 0.1	12
13	0.00	73	58/67	4.95	1.7698	66.9		0.57	< 0.1	13
14	0.00	76	57/68	5.31	1.7324	67.1		0.54	< 0.1	14
15	0.00	77	59/61	5.02	1.7217	71.4		0.42	< 0.1	15
16	0.00	78	61/71	5.06	1.4005	74.3	6.08	0.15	< 0.1	16
17	0.00	76	66/69	5.13	1.8392	62.3		0.39	< 0.1	17
18	1.07	83	70/71	5.56	2.0185	28.2		0.23	< 0.1	18
19	0.00	78	65/75	5.55	1.7862	8.1		0.38	< 0.1	19
20	0.00	78	63/78	5.82	1.8667	33.6		0.35	< 0.1	20
21	T	81	65/66	5.89	1.9426	37.5		0.39	< 0.1	21
22	0.67	71	66/70	4.92	1.9014	54.2		0.50	< 0.1	22
23	0.00	78	64/73	5.03	1.9043	54.0		0.43	< 0.1	23
24	1.07	73	63/68	5.46	2.0634	42.6		0.32	< 0.1	24
25	T	69	62/69	5.57	1.9714			0.22	< 0.1	25
26	0.00	78	67/70	4.96	1.8648	7.7		0.20	< 0.1	26
27	T	80	72/77	5.49	1.8886	66.5		0.49	< 0.1	27
28	0.00	80	69/78	5.58	1.8682	61.0		0.39	< 0.1	28
29	0.00	80	71/73	5.17	1.8772	34.5		0.41	< 0.1	29
30	0.04	77	71/74	5.45	1.9285	56.9		0.38	< 0.1	30
31	0.00	81	67/75	5.54	1.9834	38.3		0.29	< 0.1	31
TOTAL	6.85				57.2448	1268.6	22.20			
MEDIAN		77		5.38	1.8648	44.7		0.40	< 0.1	

BARNSTABLE WATER POLLUTION CONTROL

Date	RECIRCULATION		AERATION TANKS			SOLIDS				COLIFORM	Date
	RAS	TSS	MLSS	MLVSS	SVI ₃₀	PRIMARY Suspended	FINAL Suspended	FINAL Dissolved	FINAL Total	FINAL Effluent	
	MGD	mg/l	mg/l	mg/l	ml/l	mg/l	mg/l	mg/l	mg/l	MF/100 ml	
1	1.4815	7460	4420	3495	198	92	4	334	338	< 1	1
2	1.3797										2
3	1.4250										3
4	1.4292										4
5	1.4285										5
6	1.4346	7150	4057		201					< 1	6
7	1.3263					85	6	342	348		7
8	1.3621	7610	3775	3295	193	100	7	312	319	< 1	8
9	1.3746										9
10	1.3760										10
11	1.4425										11
12	1.4310										12
13	1.4466	7720	3977	3150	175	92	5	388	393		13
14	1.3570									3	14
15	1.4470	7320	4008	3330	149	90	6	290	296		15
16	1.3826										16
17	1.4669									1	17
18	1.4661										18
19	1.4278										19
20	1.4730	8000	4330	3635	158					2	20
21	1.3981					125	13	327	340		21
22	1.4201										22
23	1.4638	8000	4183	3495	152	115	11	345	356	4	23
24	1.4172										24
25	1.4515										25
26	1.4347										26
27	1.3304	8410	3620	2990		72	4	532	536	5	27
28	1.3524										28
29	1.4109	7710	3708	3230	152	86	14	354	368	10	29
30	0.9609										30
31	1.0616										31
MEDIAN	1.4250	7710	4008	3313	167	92	6	342	348	4	

BARNSTABLE WATER POLLUTION CONTROL

Date	Dissolved Oxygen	BOD ₅		Chloride	Sodium	Nitrogen						Alkalinity		Date
	Final Effluent	Primary	Final Effluent	Final Effluent	Final Effluent	Primary NH ₃ -N	Primary NO ₃ -N	Primary TKN	Final NH ₃ -N	Final NO ₃ -N	Final Total-N	Primary	Final Effluent	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
1	5.32	271	5	80	100	31.2	0.63	38.4	0.27	1.9	2.57	180	95	1
2	5.16													2
3	6.51													3
4	6.30													4
5	6.17													5
6	5.14													6
7	5.10	213	7	84	93	33.7	0.55	39.8	1.64	1.3	3.07	195	103	7
8	5.10	245	8	85	89	33.4	0.68	42.3	2.34	1.2	3.68	192	111	8
9	5.34													9
10	5.16													10
11	5.51													11
12	5.16													12
13	5.35	212	7	86	82	30.9	0.44	37.5	0.82	1.7	3.62	190	109	13
14	5.53													14
15	5.22	232	7	83	86	29.2	0.58	38.7	0.82	1.8	4.33	198	116	15
16	5.47													16
17	4.96													17
18	5.66													18
19	6.49													19
20	4.88													20
21	5.28	280	12	79	81	31.4	0.54	42.6	0.98	1.1	5.20	192	112	21
22	5.62													22
23	5.08	258	14	90	94	31.8	0.56	40.9	2.52	1.1	5.70	198	123	23
24	4.75													24
25	4.96													25
26	4.88													26
27	5.48	199	6	92		33.0	2.90	39.2	1.08	2.0	3.66	192	139	27
28	5.00													28
29	5.10	246	8	92		34.9	0.60	38.4	1.48	1.3	4.38	188	116	29
30	4.81													30
31	5.35													31
MEDIAN	5.22	245	7	85	89	31.8	0.6	39.2	1.08	1.3	3.68	192	112	

BARNSTABLE WATER POLLUTION CONTROL

Date	pH		Sludge	Sludge	Grease	Sand Filters		Date
	Primary	Final Effluent	WAS	Primary	Haulers	Bed Number	Total Dosage	
			Gallons x 1000	Gallons x 1000	Gallons x 1000		MGD	
1	7.43	7.12		24.3		12,15,17	1.7615	1
2		7.06	26.97	21.0	1.6		1.8731	2
3		7.10					1.9335	3
4		7.12	74.25				1.9172	4
5		7.11					1.7837	5
6		7.10		23.3			1.7795	6
7	7.31	7.08	79.65		4.8		1.7821	7
8	7.22	7.10	57.42	36.0	1.6	18,21,22	1.8551	8
9		7.07	54.60		3.3		1.7799	9
10		7.06	40.50	34.1	2.2		1.7830	10
11		7.04					1.8043	11
12		7.02					1.8631	12
13	7.06	6.69		36.0	1.1		1.7698	13
14		6.82	50.40		6.9		1.7324	14
15	7.28	6.77		36.0	7.3		1.7217	15
16		6.78	45.00		4.3		1.4005	16
17		6.78		28.5	4.3		1.8392	17
18		6.80					2.0185	18
19		7.04					1.7862	19
20		6.66		31.5	3.0		1.8667	20
21	7.41	6.77	75.60		5.8		1.9426	21
22		6.90	50.40	18.0	6.5		1.9014	22
23	7.39	6.86	43.40	11.3	6.0		1.9043	23
24		6.86	33.60	9.0	5.7		2.0634	24
25		6.82					1.9714	25
26		6.80					1.8648	26
27	7.25	6.85	56.00	18.0	7.6		1.8886	27
28		6.98	50.40		8.3		1.8682	28
29	7.22	6.86			3.1		1.8772	29
30		6.85	52.20	27.0	8.1	18,21,22	1.9285	30
31		6.67	43.50	32.0			1.9834	31
TOTAL			833.89	385.93	91.4		57.2448	
MEDIAN	7.28	6.86	50.40	27.0	4.8		1.8640	

<u>COMPOSITE SAMPLE INFORMATION</u>	
1. Composited from:	7:30 to 7:30
2. Number of samples in composite:	24
3. Interval between samples:	1 hour
4. Composite from:	Equal volumes

<u>GENERAL COMMENTS</u>	
Dry tons removed =	
12/17/08: North Train on line for trial 4/13/09: Tanks 1 & 2 all anoxic	

<u>PLANT DESIGN DATA</u>	
Type:	Activated sludge/diffused air
Design Capacity:	4.20 MGD
Present Average Flow:	1.8466 MGD
Population Served:	45,000

MLSS, DO, pH, CI Residual & F. Coliform are GRAB samples. All others are composite.