



**Monthly Report of Operation
Vertical Loop Reactor
Wastewater Treatment Plant**

State Form 10829 (R/1-2005)

Page 1 of 5

Name of Facility Clay Township Regional Waste District			Permit Number IN0055760	
Month July	Year 2008	Plant Design Flow 2.55 mgd	Telephone Number (317) 873-0564	
Facility's e-mail address (if available): scot@ctrwd.org				
Certified Operator: Name Scot S. Watkins		Class III	Certificate Number WW018132	Expiration Date 6/30/2010

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Precipitation - Inches	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE						
							Chlorine - Lbs	Liquid Alum - Gallons	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l
1	Tue		82					90	2.347	7.5	138	2701.2	168	3288.4	6.01	28.2
2	Wed		86	0.05				120	2.368	7.4	191	3772.1	196	3870.8	6.63	29.2
3	Thu		78	0.72				140	2.383	7.5	130	2583.6	142	2822.1	4.8	24.8
4	Fri		78	0.18				100	2.37	7.5	142	2806.7	152	3004.4	4.95	21.5
5	Sat							130	2.401							
6	Sun							100	2.342							
7	Mon		84					150	2.427	7.4	188	3805.3	206	4169.7	6.43	27
8	Tue		88	0.26				135	2.479	7.4	95	1964.1	188	3886.9	6.14	26.8
9	Wed		88					120	2.451	7.4	128	2616.5	164	3352.4	5.54	25.6
10	Thu		84					125	2.293	7.4	216	4130.7	176	3365.8	5.36	24.6
11	Fri		90	0.09				125	2.22	7.5	245	4536.1	166	3073.5	5.63	27.3
12	Sat			1.72				130	2.535							
13	Sun							85	2.5							
14	Mon		84					135	2.374	7.5	37	732.57	164	3247.1	5.29	20.8
15	Tue		88					120	2.279	7.5	105	1995.7	156	2965.1	5.23	22.1
16	Wed		90					65	2.242	7.4	113	2112.9	154	2879.5	6.28	22.3
17	Thu		90					125	2.177	7.4	102	1851.9	156	2832.4	5.63	26.2
18	Fri		90					130	2.194	7.4	177	3238.7	164	3000.9	5.36	21.3
19	Sat							120	2.199							
20	Sun							135	2.135							
21	Mon		90					145	2.547	7.4	155	3292.5	186	3951	6.78	28.4
22	Tue		86	1.19				140	2.466	7.4	126	2591.4	306	6293.3	5.61	22.9
23	Wed		82					165	2.41	7.5	124	2492.3	152	3055.1	5.89	22.7
24	Thu		83					130	2.48	7.5	110	2275.2	134	2771.5	6.52	27.05
25	Fri		84					130	2.335	7.5	102	1986.3	100	1947.4	5.19	23.9
26	Sat							60	2.385							
27	Sun							100	2.338							
28	Mon		88	0.59				105	2.453	7.4	101	2066.3	212	4337.1	7.45	25.5
29	Tue		90	0.59				145	2.355	7.5	124	2435.4	170	3338.9	6.24	25.7
30	Wed		86					145	2.301	7.5	120	2302.8	148	2840.2	5.36	26.35
31	Thu		88					170	2.358	7.4	212	4169.1	164	3225.2	5.91	28.1
Average								123.06	2.35948		138	2715.6	171	3370.4	5.836	25.14
Maximum				1.72				170	2.547	7.5	245	4536.1	306	6293.3	7.45	29.2
Minimum								60	2.135	7.4	37	732.57	100	1947.4	4.8	20.8
No. of Data				9	0	0	0	31	0	31	23	23	23	23	23	0

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.

(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

**Monthly Report of Operation
Vertical Loop Reactor
Wastewater Treatment Plant**

Name of Facility: Clay Township Regional Waste D
 Permit Number: IN0055760
 For Month Of: July
 Year: 2008

Page 2 of 5
 State Form 10829 (R/1-2005)

(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Day Of Month	Temperature in Reactors	REACTOR # 1				REACTOR # 2				REACTOR DATA				RETURN SLUDGE		FINAL EFFLUENT			
		Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	#1 Reactor ORP mV	#1 Reactor OUR mg/l/min	0	#2 Reactor OUR mg/l/min	Volume - MG	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH
1	18.7	53	4160	127	0.1	46	4340	106	1.8	-217				0.817	10400			1	7.4
2	19	58	3960	146	0.1	54	3940	137	2.1	-214				0.83	10640			1	7.4
3	19.4	47	3980	118	0.1	48	3920	122	2.1	-204	0.7	#####	0.4	0.829	10340			1	7.4
4	19	52	3760	138	0.1	50	3820	131	1.6	-137				0.84	11340			1	7.6
5														0.92					
6														0.905					
7	19.3	43	3340	129	0.1	50	3680	136	2.4	-221				0.836	11060			1	7.5
8	19.5	54	3880	139	0.2	45	4020	112	2.2	-216				0.86	10080			3	7.4
9	19.8	51	3400	150	0.2	43	3960	109	2.6	-207				0.893	10300			1	7.4
10	19.6	60	3560	169	0.2	48	3940	122	2.5	-205				0.8	10020			4	7.4
11	19.8	63	3720	169	0.2	61	3700	165	3.0	-180	0.86	#####	0.4	0.77	10760			1	7.4
12														0.97					
13														0.96					
14	19.5	55	3740	147	0.2	47	3780	124	3.2	-172				0.83	8540			1	7.5
15	19.7	47	3880	121	0.2	38	3960	96	1.8	-169				0.8	10500			1	7.4
16	20.1	43	4200	102	0.2	47	3820	123	1.6	-158				0.78	11000			2	7.4
17	20.4	42	4180	100	0.4	43	4620	93	1.3	-287				0.76	7660			2	7.5
18	20.4	49	3380	145	0.2	42	3640	115	3.1	-157	0.74	#####	0.4	0.77	10560			12	7.4
19														0.84					
20														0.81					
21	20.6	66	2420	273	0.2	63	3620	174	1.6	-250				0.87	10920			1	7.4
22	20.5	47	3640	129	0.2	54	3360	161	1.2	-227				0.88	10720			6	7.4
23	20.3	58	3540	164	0.2	49	3520	139	2.2	-210				0.84	10380			3	7.4
24	20.2	61	3420	178	0.2	41	3780	108	2.9	-191				0.86	9820			8	7.4
25	20.3	52	3500	149	0.2	48	3540	136	2.7	-190	0.77	#####	0.4	0.82	10320			2	7.4
26														0.91					
27														0.91					
28	20.5	73	3940	185	0.2	55	3840	143	2.0	-246				0.86	9980			10	7.5
29	20.7	61	3980	153	0.2	55	3740	147	2.3	-193				0.82	10140			10	7.4
30	20.9	64	4040	158	0.2	55	3740	147	2.8	-202				0.81	12020			2	7.5
31	20.8	63	3940	160	0.2	56	3820	147	2.5	-214	0.92	#####	0.6	0.82	11600			5	7.4
Avg.	20	55	3720	150	0.213	49	3830	130	2.233		1		0.426	1	10396			2	
Max.	20.9	73	4200	273	0.38	63	4620	174	3.19		0.92		0.62	0.97	12020			12	7.6
Min.	18.7	42	2420	100	0.09	38	3360	93	1.24		0.7		0.35	0.76	7660			1	7.4
Data	23	23	23	23	23	23	23	23	23	23	5	5	5	31	23	0	0	23	23

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

7/14/08 Final Sample is a grab.

**Monthly Report of Operation
Vertical Loop Reactor
Wastewater Treatment Plant**

(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

Name of Facility: Clay Township Regional Waste District
 Permit Number: IN0055760
 For Month Of: July
 Year: 2008

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Day Of Month	FINAL EFFLUENT																
	Flow		Dissolved Oxygen - mg/l	Phosphorus - mg/l	BOD				Total Suspended Solids				Ammonia				
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average			CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	
1	2.413		7.61	0.28	2.69		54.167		6.3		126.86		1.75		35.239		
2	2.517		7.82	0.3	2.24		47.05		6		126.03		2.21		46.42		
3	2.616		7.61	0.19	1.03		22.485		1.4		30.563		0.1		2.1831		
4	2.544		7.67	0.28	1.66		35.241		5.6		118.89		0.1		2.123		
5	2.579	2.55214				2.132	44.372		5.48		113.99		0.98		20.256		
6	2.568																
7	2.545		7.86	0.29	3.1		65.838		7.2		152.91		0.68		14.442		
8	2.7		8.25	0.25	1.23		27.714		5.4		121.67		0.81		18.251		
9	2.647		8.36	0.23	1.62		35.785		4.9		108.24		0.44		9.7193		
10	2.474		7.93	0.24	1.7		35.097		5.3		109.42		0.17		3.5097		
11	2.422		7.93	0.24	1.64		33.147		4.7		94.994		0.1		2.0212		
12	2.849	2.60071				1.858	39.516		5.5		117.45		0.44		9.5885		
13	2.869																
14	2.6		8.36	0.24	2.58		55.978		3.7		80.279		0.1		2.1697		
15	2.523		8.68	0.29	3.06		64.427		10.2		214.76		0.1		2.1054		
16	2.506		8.67	0.28	1.62		33.878		3.8		79.468		0.11		2.3004		
17	2.458		8.67	0.25	1.71		35.076		5.3		108.71		0.1		2.0512		
18	2.507		8.67	0.25	1.45		30.335		3.8		79.499		0.1		2.0921		
19	2.564	2.57529				2.084	43.939		5.36		112.54		0.102		2.1438		
20	2.508																
21	2.826		8.32	0.42	5.49		129.47		10.5		247.62		2.01		47.402		
22	2.831		8.38	0.28	2.33		55.046		4.9		115.76		0.39		9.2136		
23	2.666		7.97	0.33	2.61		58.067		7.6		169.08		0.81		18.021		
24	2.737		8.25	0.28	1.71		39.057		6		137.04		0.85		19.414		
25	2.678		8.25	0.19	1.07		23.912		2.8		62.574		0.1		2.2348		
26	2.778	2.71771				2.642	61.11		6.36		146.42		0.832		19.257		
27	2.588																
28	2.658		8.26	0.27	2.92		64.769		9		199.63		0.95		21.072		
29	2.353		8.27	0.2	1.33		26.116		4.8		94.252		0.41		8.0507		
30	2.463		8.21	0.19	1.17		24.048		4.3		88.381		0.14		2.8775		
31	2.501	2.49629	7.8	0.18	1.27	1.548	26.506	32.713	3.8	5.16	79.309	108.75	0.48	0.436	10.018	9.2465	
Avg	2.59639		8.1652	0.2587	2.0535		44.487		5.5348		119.39		0.5657		12.301		
Max	2.869	2.71771	8.68	0.42	5.49	2.642	129.47	61.11	10.5	6.36	247.62	146.42	2.21	0.98	47.402	20.256	
Min	2.353	2.49629	7.61	0.18	1.03	1.548	22.485	32.713	1.4	5.16	30.563	108.75	0.1	0.102	2.0212	2.1438	
Data	31	5	23	23	23	5	23	5	23	5	23	5	23	5	23	5	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 80.488
Percent Removal	99	97	98	95.6	
	Phosphorus limit would be 1 mg/l. (compliance achieved)				Percent Capacity (actual flow/design) 102%

**Monthly Report of Operation
Vertical Loop Reactor
Wastewater Treatment Plant**

Name of Facility: Clay Township Regio
Permit Number: IN0055760
For Month Of: July
Year: 2008

(SIGNATURE OF CERTIFIED OPERATOR) (Date)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Waste Act. Sludge Gal. x 1000	pH	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000		
			Gas Production Cubic Ft. x 1000	Temperature - F										
1	41						1.2	18	75	72	31			
2	41						1.2	18	74	71	33			
3	43						1.2		74					
4	47						1.2		74					
5					76									
6					48									
7	41						1.2	17.9	74	72	34			
8	42						1.2	17.6	73	73	21			
9	40						1.2	17.8	74	72	31			
10	44						1.1		73					
11	40						1.2		73					
12					64									
13					57									
14	43						1.2	16.3	73	73	46			
15	41						1.2	15.9	73	72	47			
16	42						1.2	16.7	73	72	36			
17	43						1.2		74					
18	40						1.1		73					
19					92									
20					25									
21	53						1.3	17	73	71	49			
22	33						1.2	16.4	73	71	46			
23	39						1.3	17.5	73	71	40			
24	43						1.3	17.9	73	70	47			
25	41						1.2		73					
26					92									
27					25									
28	40						1.2	17.8	72	72	45			
29	40						1.3	17.8	73	72	41			
30	41						1.4		74					
31	41						1.3	17.3	73	69	40			
Avg.	41.696				59.875		1.2217	17.327	73.348	71.533	39.133			
Max.	53				92		1.4	18	75	73	49			
Min.	33				25		1.1	15.9	72	69	21			
Data	0	23	0	0	0	8	0	23	15	23	15	15	0	0

Send completed forms by the 28th of the month to:
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
P.O. BOX 6015
INDIANAPOLIS, INDIANA 46206-6015

**Monthly Report of Operation
Vertical Loop Reactor
Wastewater Treatment Plant**

Name of Facility	Permit Number	For Month Of:	Year
Clay Township Regional Waste District	IN0055760	July	2008

Page 5 of 5

State Form 10829 (R/1-2005)

(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Day Of Month	Temperature in Reactors	ORBAL #1			ORBAL #3				TOTAL RETURN SLUDGE			RETURN SLUDGE		Flow Volume					
		ORP mV	Dissolved Oxygen - mg/l	OUR mg/l/min	Dissolved Oxygen - mg/l	Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	OUR mg/l/min	Volume - MG			Volume - MG	Susp. Solids - mg/l	Orbal Influent Flow - MGD				
1	18.9	-301	0.14		0.1	42	4460	94		1.742			0.925	3940	1.217				
2	19.5	-306	0.18		0.2	46	3820	120		1.831			1.001	4120	1.242				
3	20.2		0.13		0.4	40	5980	67	0.6	1.817			0.988	3980	1.217				
4	19.6	-249	0.15		1.2	48	3600	133		1.849			1.011	3800	1.23				
5										1.895			0.979		1.257				
6										1.885			0.98		1.235				
7	20	-226	0.13		0.3	41	3980	103		1.789			0.953	4260	1.212				
8	20.3	-303	0.41		0.7	47	3660	128		1.84			0.981	5020	1.255				
9	20.7	-308	0.3		0.9	43	3960	109		1.834			0.941	4940	1.239				
10	20.4	-312	0.3		0.7	44	3420	129		1.805			1.004	5320	1.213				
11	20.5	-316	0.3		0.7	57	3440	166	0.3	1.788			1.018	4700	1.195				
12										1.94			0.972		1.281				
13										1.991			1.027		1.275				
14	20.2	-190	0.36		1.9	51	3480	147		1.837			1.006	3500	1.211				
15	20.4	-169	0.3		1.0	42	3720	113		1.792			0.997	4020	1.196				
16	21	-243	0.29		0.7	43	3500	123		1.781			1.001	3800	1.166				
17	21.3	-287	0.38		0.8	49	3400	144		1.783			1.025	2640	1.147				
18	21.3	-315	0.29		0.8	40	3640	110	0.3	1.818			1.046	3640	1.15				
19										1.852			1.007		1.169				
20										1.785			0.971		1.134				
21	21.3	-312	0.34		0.7	55	3100	177		1.89			1.017	4280	1.312				
22	21.3	-315	0.37		0.9	50	3140	159		1.922			1.045	5180	1.269				
23	20.9	-312	0.31		0.7	46	3300	139		1.819			0.976	2680	1.239				
24	20.7	-294	0.28		0.7	48	3000	160		1.849			0.987	4320	1.253				
25	20.8	-309	0.3		0.7	40	3640	110	0.3	1.791			0.973	3660	1.198				
26										1.863			0.953		1.244				
27										1.896			0.986		1.22				
28	21.1	-319	0.29		0.7	50	3420	146		1.869			1.013	4840	1.225				
29	21.4	-314	0.3		0.6	52	3440	151		1.797			0.978	4060	1.178				
30	21.7	-318	0.28		0.7	52	3560	146		1.797			0.985	4560	1.183				
31	21.5	-314	0.28		0.6	46	3860	119	0.3	1.8			0.977	6560	1.99				
Avg.	20.652		0		0.7291	47	3675	130	0.372	2			1	4253	1.2436				
Max.	21.7		0.41		1.89	57	5980	177	0.64	1.991			1.046	6560	1.99				
Min.	18.9		0.13		0.12	40	3000	67	0.29	1.742			0.925	2640	1.134				
Data	23	22	23	0	23	23	23	23	5	31	0	0	0	31	23	31	0	0	0