



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

State Form 10829 (R/1-2005)

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Name of Facility Clay Township Regional Waste District			Permit Number IN0055760	
Month October	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	Ammonia - mg/l
1	Wed		60					70		2.344	7.4	244	4769.9	216	4222.6	7.18	32.8
2	Thu		64					55		2.281	7.4	220	4185.2	198	3766.7	6.45	30.7
3	Fri		62					90		2.272	7.4	293	5551.9	238	4509.7	7.7	28.8
4	Sat							50		2.3							
5	Sun							95		2.208							
6	Mon		79					80		2.216	7.4	182	3363.6	210	3881.1	8.22	32.6
7	Tue		79	0.31				70		2.031	7.5	211	3574	154	2608.5	7.18	32.7
8	Wed		68	0.06				40		1.754	7.5	223	3262.1	224	3276.8	7.21	34.6
9	Thu		74					80		1.75	7.2	193	2816.8	242	3532	7.03	32.5
10	Fri		76					100		7.88	7.5	247	16233	264	17350	7.38	33.3
11	Sat							70		1.812							
12	Sun							60		1.695							
13	Mon		82					100		1.707	7.4	245	3487.9	264	3758.4	7.25	32.4
14	Tue		74					90		1.694	7.4	182	2571.3	280	3955.8	8.7	35.6
15	Wed		72	0.55				90		1.805	7.5	212	3191.4	252	3793.5	7.43	32.1
16	Thu		64	0.09				80		1.784	7.5	258	3838.7	212	3154.3	6.75	32.7
17	Fri		62					100		1.788	7.5	221	3295.5	222	3310.4	6.91	34
18	Sat							70		1.761							
19	Sun							90		1.731							
20	Mon		65					110		1.728	7.4	257	3703.8	234	3372.3	8.11	33.4
21	Tue		57					110		1.729	7.5	275	3965.5	260	3749.2	8.66	34.3
22	Wed		57					130		1.743	7.5	239	3474.3	222	3227.1	8.4	34.4
23	Thu		64					160		1.718	7.5	270	3868.6	236	3381.4	8.01	34.2
24	Fri		62	0.68				140		1.872	7.5	201	3138.1	188	2935.1	7.69	28.6
25	Sat			0.14				160		1.819							
26	Sun							130		1.628							
27	Mon		44					130		1.763	7.5	240	3528.8	226	3323	7.36	31.7
28	Tue		45					150		1.77	7.5	250	3690.5	230	3395.2	7.69	32.8
29	Wed		54					120		1.768	7.5	265	3907.5	266	3922.2	8.26	36.2
30	Thu		58					200		1.777	7.5	253	3749.5	220	3260.4	7.72	35.5
31	Fri		68					150		1.75	7.5	297	4334.7	220	3210.9	7.83	34.2
Average								102.26		2.06058		238	4239.2	229	4125.9	7.614	33.05
Maximum				0.68				200		7.88	7.5	297	16233	280	17350	8.7	36.2
Minimum								40		1.628	7.2	182	2571.3	154	2608.5	6.45	28.6
No. of Data				6	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: October
Year: 2008

(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

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

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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	#2 Reactor OUR mg/l/min	Volume - MG	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coll - colony/100 ml	pH		
1	20.8	60	3980	151	0.5	53	4060	131	1.7	48		0	0.811	11660			2	7.5		
2	20.5	65	4080	159	0.4	55	3580	154	1.8	36	0.83	433735	0.3	0.788	12140			1	7.5	
3	20.3	72	3680	196	0.4	67	3420	196	1.6	-19				0.783	12100			2	7.5	
4														0.871						
5														0.831						
6	20.5	56	4200	133	0.4	54	3820	141	1.3	-96				0.785	11300			1	7.5	
7	20.6	60	3820	157	0.5	56	3720	151	1.5	-24				0.73	11120			3	7.5	
8	20.7	60	4020	149	0.4	58	3820	152	1.6	36				0.61	12000			1	7.5	
9	20.5	57	4000	143	0.4	53	3800	139	2.8	-15	0.94	-159574	0.3	0.62	14280			1	7.5	
10	20.4	70	3960	177	0.4	65	3660	178	1.8	-15				0.65	12000			3	7.6	
11														0.69						
12														0.65						
13	21	58	3920	148	0.4	55	3760	146	1.1	-4				0.6	11980			1	7.6	
14	21	56	3900	144	0.4	44	3800	116	1.1	46				0.58	11660			1	7.5	
15	21.3	55	3940	140	0.4	50	3560	140	1.4	56				0.63	11280			2	7.5	
16	21.2	53	3680	144	0.4	48	3400	141	1.4	60	0.8	750000	0.3	0.62	11600			1	7.5	
17	20.6	58	3420	170	0.4	53	3280	162	1.0	62				0.61	10520			1	7.5	
18														0.67						
19														0.66						
20	19.5	50	3620	138	0.4	46	3640	126	1.2	-62				0.59	11220			1	7.6	
21	19.6	48	3780	127	0.4	41	3580	115	1.4	-39				0.6	10540			1	7.5	
22	19.3	41	3660	112	0.4	39	3120	125	1.1	-30				0.61	10280			2	7.6	
23	19.1	46	3380	136	0.4	40	3160	127	2.1	-11	0.62	-177419	0.2	0.6	9020			1	7.5	
24	19.3	50	3400	147	0.4	45	3200	141	1.6	-38				0.66	9080			7	7.5	
25														0.69						
26														0.62						
27	18.4	48	3760	128	0.4	41	3440	119	1.1	-86				0.6	9000			1	7.5	
28	18.2	42	3300	127	0.4	38	3020	126	1.2	-69				0.63	9340			1	7.5	
29	18.1	40	3380	118	0.4	40	3280	122	1.0	-86				0.62	9220			1	7.5	
30	18.5	35	2920	120	0.4	32	3060	105	1.6	-75	0.57	-1315789	0.3	0.62	8260			2	7.5	
31	18.8	30	2620	115	0.4	31	2500	124	1.3	-44				0.61	5880			3	7.5	
Avg.	19.9	53	3670	142	0.396	48	3464	138	1.469		1		0.264	1	10673			1		
Max.	21.3	72	4200	196	0.46	67	4060	196	2.82		0.94		0.29	0.871	14280			7	7.6	
Min.	18.1	30	2620	112	0.38	31	2500	105	1.01		0.57		0.24	0.58	5880			1	7.5	
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.):

**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: October
 Year: 2008

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

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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	2.148		8.06	0.41	2.42		43.379		2.7		48.398		2.6		46.605	
2	2.365		8.15	0.3	1.9		37.498		3.5		69.076		0.64		12.631	
3	2.456		8.1	0.34	2.75		56.362		2.6		53.288		1		20.495	
4	2.673	2.43043				2.978		59.869		3.22		64.435		1.728		34.275
5	3.734															
6	2.395		7.93	0.6	4.64		92.736		10.1		201.86		1.58		31.578	
7	2.233		8.24	0.47	2.42		45.095		3.6		67.084		1.02		19.007	
8	1.923		8.2	0.3	1.71		27.441		3.3		52.957		0.42		6.7399	
9	1.958		8.46	0.3	1.44		23.529		2.7		44.117		0.1		1.634	
10	2.089		8.01	0.3	1.44		25.103		3.5		61.014		0.1		1.7433	
11	2.125	2.351				2.33		42.781		4.64		85.407		0.644		12.141
12	1.958															
13	1.926		8.45	1.16	2.15		34.556		2.9		46.61		0.1		1.6072	
14	1.985		8.41	1.53	2.04		33.792		3.1		51.351		0.1		1.6565	
15	2.015		8.34	1.94	2.26		38.002		2.8		47.082		0.1		1.6815	
16	2.002		8.41	2.52	2.34		39.094		3.2		53.461		0.1		1.6707	
17	2.694		8.39	3.31	2.73		61.374		2.8		62.948		0.1		2.2481	
18	2.031	2.08729				2.304		41.364		2.96		52.291		0.1		1.7728
19	2.14															
20	2.208		7.92	1.9	3.54		65.227		4.3		79.231		0.1		1.8426	
21	1.936		8.61	1.67	2.19		35.381		3.5		56.546		0.1		1.6156	
22	2.299		8.6	1.5	2.61		50.073		4.3		82.496		0.1		1.9185	
23	1.959		8.13	1.51	2.59		42.341		3.9		63.757		0.17		2.7791	
24	2.162		8.39	1.14	2.48		44.744		3.1		55.93		0.53		9.5622	
25	2.163	2.12386				2.682		47.553		3.82		67.592		0.2		3.5436
26	1.971															
27	2.088		8.12	0.36	3.35		58.372		4.2		73.182		0.19		3.3106	
28	2.09		7.91	0.29	2.1		36.626		3.8		66.276		0.47		8.1973	
29	1.985		7.89	0.29	2.45		40.584		3.6		59.633		0.8		13.252	
30	2.031		7.85	0.37	2.74		46.439		4.1		69.49		0.91		15.423	
31	2.031	2.01543	8.31	0.44	3.44	2.816	58.304	48.065	4.3	4	72.879	68.292	1.02	0.678	17.288	11.494
Avg	2.18623		8.2122	0.9978	2.51		45.046		3.7348		66.899		0.537		9.7603	
Max	3.734	2.43043	8.61	3.31	4.64	2.978	92.736	59.869	10.1	4.64	201.86	85.407	2.6	1.728	46.605	34.275
Min	1.923	2.01543	7.85	0.29	1.44	2.304	23.529	41.364	2.6	2.96	44.117	52.291	0.1	0.1	1.6072	1.7728
Data	31	5	23	23	23	5	23	5	23	5	23	5	23	5	23	5

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 67.773
Percent Removal	99	98	98	86.9	
					Percent Capacity
					(actual flow/design) 86%

Phosphorus limit would be 1 mg/l. (compliance achieved)

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

(SIGNATURE OF CERTIFIED OPERATOR)

(Date)

Name of Facility: Clay Township Regi
Permit Number: IN0055760
For Month Of: October
Year: 2008

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT)

(Date)

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Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Waste Act. Sludge Gal. x 1000	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			
		pH	Gas Production Cubic Ft. x 1000	Temperature - F										
1	41						1.5	17.4	75	72	40			
2	41						1.4		68					
3	41						1.4	16.7	75	74	39			
4					54									
5														
6	41						1.4	16.3	75	75	36			
7	41						1.4	16.3	75	76	39			
8	38						1.4	16.1	76	76	42			
9	41						1.6		76		10			
10	43						1.4		76		10			
11					86									
12					62			17.8		75	20			
13	40						1.4		74					
14	41						1.4	1.53	74	76	34			
15	40						1.3		74		31			
16	40						1.3	16.3	74	75	64			
17	41						1.3		74		38			
18					60									
19					24									
20	42						1.3	17.1	74	75	38			
21	41						1.2	16.4	73	74	42			
22	40						1.2	16.9	73	74	46			
23	41						1	15	72	74	43			
24	41						1	16.9	72	74	44			
25					78									
26					25									
27	45						1.1	15.6	72	74	42			
28	35						1.1	17.2	73	73	46			
29	41						1.1	16.2	72	73	41			
30	43						0.9	16.5	72	73	46			
31	43						0.7	17.1	69	71	44			
Avg.	40.913				55.571		1.2522	15.741	73.391	74.111	37.955			
Max.	45				86		1.6	17.8	76	76	64			
Min.	35				24		0.7	1.53	68	71	10			
Data	0	23	0	0	0	7	0	23	18	23	18	22	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	October	2008

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(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	20.3	-263	0.98		1.1	60	3340	180		1.807			0.802	2380	1.125				
2	19.9	-236	0.99		1.1	58	3580	162	0.7	1.748			0.768	2060	1.06				
3	19.6	-309	0.99		1.0	64	3460	185		1.818			0.775	2160	1.018				
4										1.892			0.795		1.141				
5										1.777			0.759		1.032				
6	20	-320	0.99		1.1	57	3660	156		1.787			0.776	4020	1.202				
7	20.2	-318	0.98		1.1	57	3140	182		1.695			0.713	5560	0.909				
8	20.3	-319	0.99		1.2	53	3320	160		1.508			0.607	3800	0.735				
9	19.9	-318	0.98		1.0	52	3220	161	0.8	1.418			0.658	1260	0.749				
10	20.2	-305	1.06		4.5	63	3540	178		1.643			0.731	2400	0.853				
11										1.662			0.69		0.941				
12										1.544			0.639		0.812				
13	21.3	-326	1.16		3.5	52	3440	151		1.43			0.631	3620	0.674				
14	21.5	-324	1.06		3.2	50	3540	141		1.521			0.638	4000	0.697				
15	21.8	-327	1.06		3.0	48	3360	143		1.456			0.662	3400	0.696				
16	21.6	-323	1.1		3.6	44	3200	138	0.2	1.436			0.647	1580	0.691				
17	20.6	-328	1.09		4.0	49	3060	160		1.424			0.63	4200	0.676				
18										1.463			0.644		0.656				
19										1.451			0.64		0.629				
20	18.6	-308	1		1.2	49	3620	135		1.319			0.625	1820	0.599				
21	18.6	-253	0.99		1.1	45	3260	138		1.366			0.639	4700	0.656				
22	18.1	-222	1		1.2	44	3060	144		1.081			0.632	1140	0.597				
23	17.1	-322	0.98		1.1	44	3580	123	0.4	1.151			0.626	6600	0.62				
24	17.8	-322	0.98		1.0	48	3040	158		1.252			0.678	5560	0.65				
25										1.26			0.663		0.657				
26										1.096			0.591		0.543				
27	16.2	-334	0.98		1.1	43	3080	140		1.056			0.608	3080	0.55				
28	15.6	-326	0.98		1.1	36	3580	101		1.081			0.626	4100	0.53				
29	15.5	-326	0.98		1.1	39	3020	129		0.899			0.619	3080	0.491				
30	16	-319	0.98		10.7	38	3000	127	0.4	0.868			0.646	5320	0.488				
31	16.8	-323	0.98		1.1	38	2720	140		1.126			0.676	580	0.532				
Avg.	19.022		1		2.1696	49	3297	149	0.504	1			1	3322.6	0.7487				
Max.	21.8		1.16		10.7	64	3660	185	0.81	1.892			0.802	6600	1.202				
Min.	15.5		0.98		1.01	36	2720	101	0.22	0.868			0.591	580	0.488				
Data	23	23	23	0	23	23	23	23	5	31	0	0	0	31	23	31	0	0	0