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September 22, 2017

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Attn: Bailey Taylor – Enforcement Analyst

RE: City of Marion
NPDES Permit No.AR0021971
AFIN 18-00110

Dear Bailey,

Marion has again experienced violations of their permit during the month of August 2017. As we discussed in our previous letter of July 24, 2017 we again suspect pond turn over as causing an abrupt change in CBOD without having significant changes in Total Suspended Solids.

I have attached an information sheet with daily recordings of temperature and rainfall. Please note the significant change in CBOD from August 14, 15, 16, and 17. During this time period we had 4 ½" inches of rainfall; we had an abrupt increase in CBOD from 22 to 52 mg/L. If you will further note August 22, 23 and 24 we had a substantial drop in temperature and the CBOD went to 94 mg/L. During this same time period our Total Suspended Solids continued well below permit limits. Introducing cold rain water on top of the pond or an abrupt change in air temperature can trigger a pond turn over.

With stabilization ponds we have no control measures that would affect discharge quality. However our new permit which goes into effect October 1, 2017 will allow us some operational latitude.

Our corrective action can now include holding our pond effluent and not discharge during those time periods that we would anticipate having conditions that would cause pond turn over. An abrupt change in air temperature, or a period of rainfall during warm weather, or substantial wind that could create wind siches could be controlled by not discharging during this time period, and then being able to discharge up to 4.5 million gallons per day to reach optimum pond level. This will be allowable under our new permit.

Sincerely,


Jerome Alford, P.E.


Mayor Frank Fogleman

AUG 2017

TEMP

22/69
1/67
2/67
3/71
4/68
5/65
6/69
7/70
8/70
9/68
10/67
11/67
12/70
13/69
14/73
15/72
16/73
17/74
18/71
19/70
20/75
21/74
22/73
23/72
24/70
25/61
26/68
27/70
28/67
29/64
30/70
31/67

8.5

1/2

1/2

8.4

AVG

MIN

MAX

DAYS	EFF DO	EFF PH	EFF NH3	EFF NH3	EFF CBOD	EFF CBOD	EFF TSS	EFF TSS	EFF CL RES	EFF FECAL	GEO
MGD	MGL	SU	MGL	LBS	MGL	LBS	MGL	LBS	MGL		
1	1.50	4.53	6.96	0.00	17	212.67	36	450.36	0	68	
2	1.50			0.00	6	60.05	52	520.42	0	39	
3	1.20			0.00							
4	0.00			0.00							
5	0.00			0.00							
6	0.00			0.00							
7	0.90			0.00							
8	1.50	4.66	7.04	0.00	28	350.28	54	675.54	0	59	
9	1.50			0.00			46	575.46	0	152	
10	1.50			0.00	19	237.69	45	562.95	0	93	
11	2.50			0.00							
12	2.50			0.00							
13	2.50			0.00							
14	2.50			0.00							
15	1.50	4.27	6.2	0.00	22	275.22	37	462.87	0	91	
16	1.50			0.00			69	863.19	0	99	
17	1.50			0.00	52	650.52	58	725.58	0	14	
18	2.50			0.00							
19	2.50			0.00							
20	2.50			0.00							
21	2.50			0.00							
22	1.50	4.59	7.22	0.00	42	525.42	39	487.89	0	15	
23	1.50			0.00			60	750.60	0	7	
24	1.40			0.00	94	1097.54	68	793.97	0	10	
25	0.00			0.00							
26	0.00			0.00							
27	0.00			0.00							
28	1.80			0.00							
29	1.50	4.39	7.06	0.00	47	587.97	68	850.68	0	1	
30	1.50			0.00			53	663.03	0	5	
31	1.50			0.00	25	312.75	63	788.13	0	27	
AVG	1.45	4.49	6.90	0.00	35.20	431.01	53.33	654.75	0.00	49.00	
MIN	0.00	4.27	6.20	0.00	6.00	60.05	36.00	450.36	0.00	1.00	
MAX	2.50	4.66	7.22	0.00	94.00	1097.54	69.00	863.19	0.00	152.00	

MARION DMR INFORMATION