



State of Ohio Environmental Protection Agency

Southeast District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korteski, Director

August 27, 2009

Re: Jefferson County
Village of Smithfield
Compliance Inspection
NPDES Permit #0PA00053*ED
Correspondence (PWW)

Mayor and Council
Village of Smithfield
P.O. Box 454
Smithfield, Ohio 43948

Mayor and Council:

On August 4, 2009, I conducted an inspection of the Village of Smithfield's wastewater treatment plant. The inspection was conducted in order to evaluate Smithfield's compliance with NPDES permit 0PA00053*ED and the Ohio Water Pollution Control Act, ORC Chapter 6111. Mr. John Sadar accompanied me through the plant. Following the inspection, Mr. Sadar and I visited the Mr. Doug Phillip's house in order to address alleged ongoing maintenance issues.

Below is a list of violations noted during the inspection and subsequent record review. These comments concerning plant operation and maintenance must be addressed within 30 days of the date of this letter:

1. The Village of Smithfield continues to violate effluent limitations for ammonia. Smithfield's NPDES permit 0PA00053*DD issued August 1, 2001 required ultimate compliance with the ammonia effluent limitation of 13 mg/l by no later than August 1, 2004. Smithfield's current permit, 0PA00053*ED continues to require compliance with the ammonia effluent limits. Effluent ammonia violations are temperature related, with exceedances occurring during colder winter months.

Please provide information documenting Smithfield's efforts to-date to bring the plant into full compliance. Also, please provide an updated schedule for bringing the plant into compliance with the ammonia limit. Failure to make necessary repairs to the facility could result in escalated enforcement including penalties of up to \$10,000 per violation per day.

2. A review of Smithfield's self-monitoring data revealed the following permit limit violations over the past year:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00530	Total Suspended Solids	30D Qty	12.5	78.2611	8/1/2008
001	00530	Total Suspended Solids	7D Qty	18.8	86.2412	8/1/2008
001	31616	Fecal Coliform	30D Conc	1000	1206.20	8/1/2008
001	80082	CBOD 5 day	30D Qty	10.4	29.9212	8/1/2008
001	80082	CBOD 5 day	7D Qty	16.7	25.4068	8/1/2008
001	00530	Total Suspended Solids	30D Conc	30	33.	8/1/2008
001	00530	Total Suspended Solids	7D Qty	18.8	92.354	8/8/2008
001	31616	Fecal Coliform	7D Conc	2000	2400.	8/8/2008
001	80082	CBOD 5 day	7D Qty	16.7	29.9923	8/8/2008
001	00530	Total Suspended Solids	7D Qty	18.8	58.5539	8/15/2008
001	31616	Fecal Coliform	7D Conc	2000	4900.	8/15/2008
001	80082	CBOD 5 day	7D Qty	16.7	30.5676	8/15/2008
001	00530	Total Suspended Solids	7D Qty	18.8	76.8733	8/22/2008
001	31616	Fecal Coliform	7D Conc	2000	3600.	8/22/2008
001	80082	CBOD 5 day	7D Qty	16.7	30.4200	8/22/2008
001	00530	Total Suspended Solids	30D Conc	30	31.875	9/1/2008
001	00530	Total Suspended Solids	30D Qty	12.5	57.6824	9/1/2008
001	00530	Total Suspended Solids	7D Qty	18.8	93.111	9/1/2008
001	31616	Fecal Coliform	30D Conc	1000	2906.96	9/1/2008
001	31616	Fecal Coliform	7D Conc	2000	3800.	9/1/2008
001	80082	CBOD 5 day	30D Qty	10.4	26.3992	9/1/2008
001	80082	CBOD 5 day	7D Qty	16.7	31.3398	9/1/2008
001	31616	Fecal Coliform	7D Conc	2000	2900.	9/8/2008
001	00530	Total Suspended Solids	7D Qty	18.8	84.9354	9/15/2008
001	31616	Fecal Coliform	7D Conc	2000	2400.	9/15/2008
001	80082	CBOD 5 day	7D Qty	16.7	36.7145	9/15/2008
001	00610	Nitrogen, Ammonia (NH3	1D Qty	5.4	8.4784	9/16/2008
001	00530	Total Suspended Solids	7D Qty	18.8	43.1111	9/22/2008
001	31616	Fecal Coliform	7D Conc	2000	2700.	9/22/2008
001	80082	CBOD 5 day	7D Qty	16.7	34.2353	9/22/2008
001	00610	Nitrogen, Ammonia (NH3	1D Conc	13	20.2	10/14/2008
001	00610	Nitrogen, Ammonia (NH3	1D Conc	13	21.3	10/20/2008
001	00530	Total Suspended Solids	30D Qty	12.5	38.3042	12/1/2008
001	00530	Total Suspended Solids	7D Qty	18.8	38.0014	12/1/2008
001	80082	CBOD 5 day	30D Qty	10.4	30.8535	12/1/2008
001	80082	CBOD 5 day	7D Qty	16.7	39.7879	12/1/2008
001	00530	Total Suspended Solids	7D Qty	18.8	49.0914	12/8/2008
001	80082	CBOD 5 day	7D Qty	16.7	40.8628	12/8/2008
001	00530	Total Suspended Solids	7D Qty	18.8	30.5071	12/15/2008
001	80082	CBOD 5 day	7D Qty	16.7	19.9999	12/15/2008
001	00530	Total Suspended Solids	7D Qty	18.8	33.1982	12/22/2008
001	80082	CBOD 5 day	7D Qty	16.7	28.0184	12/22/2008
001	00530	Total Suspended Solids	30D Conc	30	34.375	1/1/2009
001	00530	Total Suspended Solids	30D Conc	30	40.75	2/1/2009
001	00530	Total Suspended Solids	7D Conc	45	52.	2/1/2009

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00530	Total Suspended Solids	30D Qty	12.5	81.9092	2/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	106.964	2/1/2009
001	80082	CBOD 5 day	30D Qty	10.4	33.2408	2/1/2009
001	80082	CBOD 5 day	7D Qty	16.7	32.5093	2/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	45.0112	2/8/2009
001	80082	CBOD 5 day	7D Qty	16.7	32.9635	2/8/2009
001	00530	Total Suspended Solids	7D Qty	18.8	69.644	2/15/2009
001	80082	CBOD 5 day	7D Qty	16.7	34.3867	2/15/2009
001	00530	Total Suspended Solids	7D Conc	45	51.	2/22/2009
001	00530	Total Suspended Solids	7D Qty	18.8	106.017	2/22/2009
001	80082	CBOD 5 day	7D Qty	16.7	33.1036	2/22/2009
001	00530	Total Suspended Solids	30D Conc	30	75.75	3/1/2009
001	00530	Total Suspended Solids	7D Conc	45	66.	3/1/2009
001	00530	Total Suspended Solids	30D Qty	12.5	15.0860	3/1/2009
001	00530	Total Suspended Solids	7D Conc	45	78.	3/8/2009
001	00530	Total Suspended Solids	7D Conc	45	80.	3/15/2009
001	00530	Total Suspended Solids	7D Conc	45	79.	3/22/2009
001	00530	Total Suspended Solids	7D Qty	18.8	20.5941	3/22/2009
001	00530	Total Suspended Solids	7D Conc	45	59.	4/1/2009
001	00530	Total Suspended Solids	30D Qty	12.5	62.4062	4/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	137.849	4/1/2009
001	80082	CBOD 5 day	30D Qty	10.4	36.5269	4/1/2009
001	80082	CBOD 5 day	7D Qty	16.7	34.5381	4/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	56.4722	4/8/2009
001	80082	CBOD 5 day	7D Qty	16.7	30.9158	4/8/2009
001	00530	Total Suspended Solids	7D Qty	18.8	27.6683	4/15/2009
001	80082	CBOD 5 day	7D Qty	16.7	45.6584	4/15/2009
001	00530	Total Suspended Solids	7D Qty	18.8	27.3087	4/22/2009
001	80082	CBOD 5 day	7D Qty	16.7	41.3889	4/22/2009
001	00530	Total Suspended Solids	30D Conc	30	33.3333	5/1/2009
001	00530	Total Suspended Solids	30D Qty	12.5	79.2124	5/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	29.7917	5/1/2009
001	31616	Fecal Coliform	30D Conc	1000	2606.68	5/1/2009
001	80082	CBOD 5 day	30D Qty	10.4	34.1693	5/1/2009
001	80082	CBOD 5 day	7D Qty	16.7	21.9416	5/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	76.1731	5/8/2009
001	80082	CBOD 5 day	7D Qty	16.7	44.9847	5/8/2009
001	00530	Total Suspended Solids	7D Qty	18.8	90.4615	5/15/2009
001	31616	Fecal Coliform	7D Conc	2000	2078.46	5/15/2009
001	80082	CBOD 5 day	7D Qty	16.7	28.4632	5/15/2009
001	00610	Nitrogen, Ammonia (NH3	1D Conc	13	22.2	5/21/2009
001	00610	Nitrogen, Ammonia (NH3	1D Qty	5.4	50.4162	5/21/2009
001	00530	Total Suspended Solids	7D Qty	18.8	105.071	5/22/2009
001	31616	Fecal Coliform	7D Conc	2000	4100.	5/22/2009
001	80082	CBOD 5 day	7D Qty	16.7	39.1369	5/22/2009

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00610	Nitrogen, Ammonia (NH3)	1D Conc	13	18.	5/28/2009
001	00610	Nitrogen, Ammonia (NH3)	1D Qty	5.4	44.2845	5/28/2009
001	00530	Total Suspended Solids	30D Conc	30	33.5	6/1/2009
001	00530	Total Suspended Solids	7D Conc	45	56.	6/1/2009
001	00530	Total Suspended Solids	30D Qty	12.5	73.8131	6/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	134.935	6/1/2009
001	31616	Fecal Coliform	30D Conc	1000	1415.30	6/1/2009
001	80082	CBOD 5 day	30D Qty	10.4	25.5661	6/1/2009
001	80082	CBOD 5 day	7D Qty	16.7	35.8061	6/1/2009
001	00530	Total Suspended Solids	7D Qty	18.8	96.6689	6/8/2009
001	31616	Fecal Coliform	7D Conc	2000	4200.	6/8/2009
001	80082	CBOD 5 day	7D Qty	16.7	42.8537	6/8/2009
001	50060	Chlorine, Total Residu	1D Conc	0.019	.07	6/11/2009
001	50060	Chlorine, Total Residu	1D Conc	0.019	.07	6/12/2009
001	31616	Fecal Coliform	7D Conc	2000	2700.	6/15/2009
001	50060	Chlorine, Total Residu	1D Conc	0.019	.05	6/15/2009
001	50060	Chlorine, Total Residu	1D Conc	0.019	.09	6/17/2009
001	00530	Total Suspended Solids	7D Qty	18.8	51.2489	6/22/2009
001	00610	Nitrogen, Ammonia (NH3)	1D Qty	5.4	12.0817	6/23/2009
001	50060	Chlorine, Total Residu	1D Conc	0.019	.05	6/23/2009
001	50060	Chlorine, Total Residu	1D Conc	0.019	.05	6/29/2009
001	50060	Chlorine, Total Residu	1D Conc	0.019	.06	6/30/2009

Please provide an explanation for the excessive violations reported (above) as well as actions that the Village of Smithfield is taking or will take to prevent such violations from occurring in the future.

- As mentioned following my July 2006 inspection, Smithfield's WWTP needs significant maintenance performed on the aeration system in the lagoon. Currently, the diffusers are severely clogged and are not providing adequate aeration. Mr. Sadar has placed several sprinklers in the lagoon in an attempt to provide some degree of aeration.

Mr. Sadar provided a verbal explanation of his plan to rehabilitate the aeration system at a minimal cost to the Village by utilizing locally obtainable common parts. His explanation of potential repairs sounds as if it would be successful. Ohio EPA would require the submittal of a permit to install application for this system in order to allow for a detailed review of the proposal. The Village will have to obtain assistance from a registered Professional Engineer. Ohio EPA recommends that this rehabilitation of the aeration system be completed this summer, but no later than the end of December 2009.

4. NPDES permit 0PA00053*ED requires that the Smithfield WWTP be staffed by an operator of at least Class I. Mr. Sadar does not hold the required operator classification.

Mr. Sadar, despite his lack of the required license to operate the WWTP, appears to be doing a good job operating and maintaining the plant. Mr. Sadar was encouraged to take steps to obtain his Class I operator's license in order to legally be the Village of Smithfield's WWTP operator.

The Village of Smithfield should also encourage Mr. Sadar to obtain his Class I operator's license, as Ohio EPA cannot allow an individual without the required credentials to operate your WWTP on a prolonged basis. As long as Mr. Sadar is making progress toward obtaining his license, Ohio EPA will not push the Village to immediately hire a licensed operator.

As mentioned above, Mr. Sadar and I visited the home of Doug Phillipi located on SR 151. Mr. Phillipi contacted Ohio EPA with complaints of sewage overflows, lack of maintenance, lack of response from the Village, and odors. Upon visiting Mr. Phillipi's residence, Mr. Sadar and I observed the on-site tank, pump, and control box. It appeared that all components were working properly, except for a visible alarm located on Mr. Phillipi's control box. Mr. Sadar was asked at that time to replace or repair the visible alarm so that Mr. Phillipi would be able to notify the Village should it turn on. At that time, Mr. Phillipi was told that only sewage from his home flows to the 1500-gallon septic tank located behind his house. He was also instructed to stop using water in his house if the alarm light turns on in order to avoid overflowing the tank. At this time, it appears that Mr. Phillipi is satisfied with the results of the visit.

If you have any questions, please contact me at (740) 380-5447.

Sincerely,



Michael Yandrich, P.E.
District Representative
Division of Surface Water

MY/dh

Enclosure

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
0PA00053*DD	OH0050148	August 4, 2009	R	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Smithfield Wastewater Treatment Plant 378 Sherwood Avenue Smithfield, Ohio 43948	11:00 a.m.	September 1, 2008
	Exit Time	Permit Expiration Date
	12:00 p.m.	August 31, 2013

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
John Sadar	(740) 733-7023
Name, Address and Title of Responsible Official	Phone Number
Village of Smithfield	(740) 733-7709

C. AREAS EVALUATED DURING INSPECTION

<u> </u> S Permit	<u> </u> S Flow Measurement	<u> </u> NA Pretreatment
<u> </u> S Records/Reports	<u> </u> S Laboratory	<u> </u> U Compliance Schedules
<u> </u> M Operations & Maintenance	<u> </u> S Effluent/Receiving Waters	<u> </u> S Self-Monitoring Program
<u> </u> S Facility Site Review	<u> </u> S Sludge Storage/Disposal	<u> </u> Other
<u> </u> N Collection System		

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

D. SUMMARY OF FINDINGS/COMMENTS (attach additional sheets if necessary)

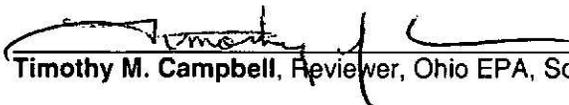
See attached inspection letter. Operations and maintenance "M" due to failing aeration system at the plant. Facility has not yet resolved ammonia issues/compliance schedule.



Michael Yandrich, Inspector, Ohio EPA, Southeast District Office

8-27-09

Date



Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office

8/28/09

Date