



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

December 7, 2012

RE: LAKE COUNTY
MADISON TWP.
BROADFIELD CARE CENTER
WASTEWATER TREATMENT PLANT
7927 MIDDLE RIDGE ROAD
NPDES PERMIT NO. 3PR00131
APPLICATION NO. OH0098124

Mr. Jim Homa, Administrator
Broadfield Care Center
7927 Middle Ridge Road
Madison, Ohio 44057

Dear Mr. Homa:

On November 27, 2012, this writer conducted a compliance and evaluation inspection of the Broadfield Care Center wastewater treatment plant (WWTP). Mr. Robert Smith and Mr. Ty Bouasy, from the Maintenance Department, accompanied this writer during the inspection. The purpose of the inspection was to evaluate the WWTP's operation and maintenance condition, and to evaluate the facility's compliance with National Pollutant Discharge Elimination System (NPDES) permit effluent limits.

At the time of inspection, the 25,000 gpd extended aeration plant was producing an effluent of satisfactory visual quality in that there was no evidence of solids or oil and grease. The following observations were noted:

- The flow equalization tank was in operation.
- The extended aeration plant was in operation. The mixed liquor was brown in color, as was the return sludge discharge line. Some sludge was blocking the teeth of effluent weir and should be removed.
- The east bed was not in operation at the time of inspection. The west filter bed was in operation, providing tertiary treatment of the effluent. Some sludge covered the west bed. The sludge and top layer of sludge laden sand must be removed from the west bed and replaced with clean sand. Assurances must be made that 18 inches of Ohio EPA approved filter sand exists on the beds. Ohio EPA approved filter sand has a uniformity coefficient that does not exceed 3.0 and an effective sized of 0.4 mm - 1.0 mm. The sand must be raked and evenly distributed across the surface of the filter bed.
- The elbow of the distribution arm on the west surface sand filter was turned up. This is not the proper orientation for the distribution arm elbow. The elbow should be turned down and extended 1 inch above the splash slab. Please see the attached diagram for a surface sand filter. The design guidelines for an extended aeration plant can be found in the Ohio EPA guidance document, "Sewage: Collection, Treatment & Disposal." This document is available on the Ohio EPA website at <http://epa.ohio.gov/portals/35/documents/greenbook.pdf>.

- Disinfection season ceased October 31st. When disinfection season resumes on May 1st, ultraviolet light disinfection must be provided.
- AKE Lab is the Operator of Record, as of July 13, 2011.

A review of the Discharge Monitoring Reports (DMRs) covering the period of April 2011 through October 2012 revealed the following effluent limitation:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	00530	Total Suspended Solids	7D Conc	18	24.	10/22/2011
001	00530	Total Suspended Solids	7D Qty	1.71	2.08932	10/22/2011
001	00530	Total Suspended Solids	30D Qty	1.14	1.32759	9/1/2012
001	00530	Total Suspended Solids	7D Qty	1.71	3.2059	9/8/2012

A review of the DMRs also shows that flow has not been monitored daily. The data substitution code "AH" is reported instead of a numeric value. This is an invalid use of the data substitution code. The NPDES permit requires daily monitoring and reporting of flow. Failure to do so is a violation of your NPDES permit.

Please be advised that failure to comply with the effluent limitations or to satisfy the monitoring or reporting requirements of your NPDES permit may be cause for enforcement pursuant to the Ohio Revised Code, Chapter 6111.

Within 10 days of the date of this letter, you are required to notify this office, in writing, outlining the corrective action, either actual or proposed, that will be taken to eliminate the above highlighted deficiencies.

Should you have any questions regarding this letter, please contact the undersigned at (330) 963-1183.

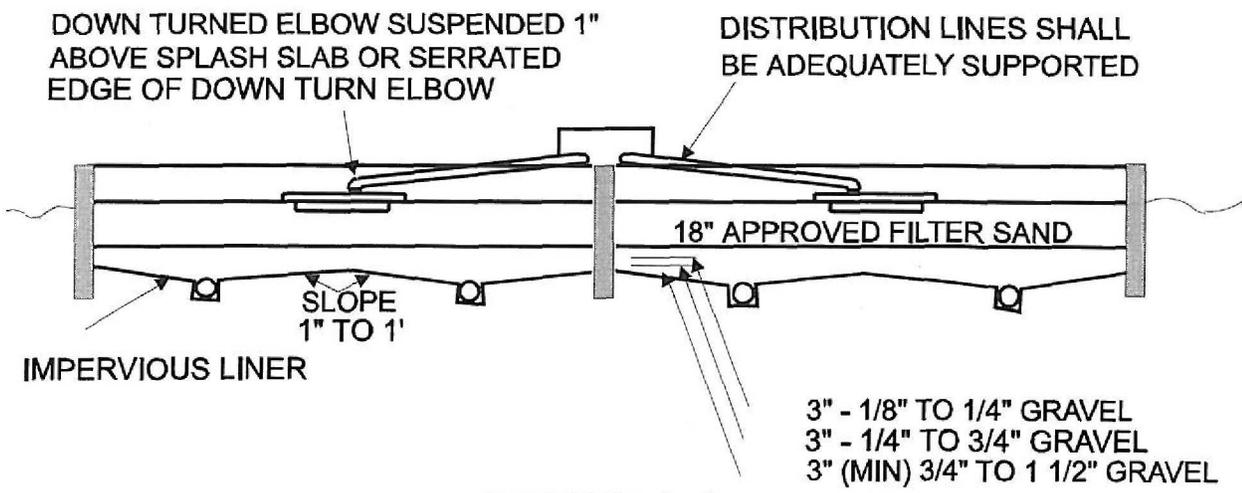
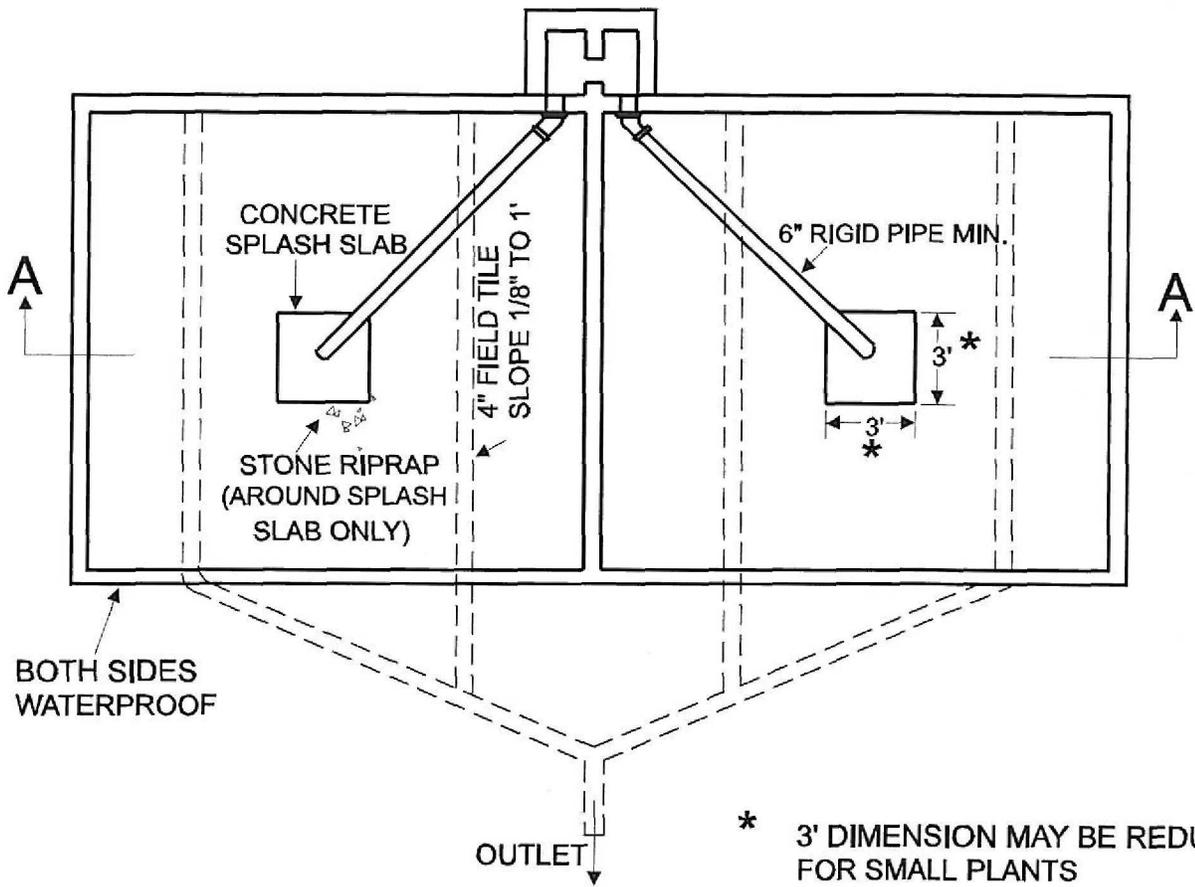
Sincerely,



Marie Underwood, P.E.
Environmental Engineer
Division of Surface Water

MU/cs

APPENDIX



SECTION A-A

SURFACE SAND FILTERS