



State of Ohio Environmental Protection Agency

**Southeast District Office**

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

October 18, 2007

**Re:** Muskingum County  
New Concord  
Compliance Review  
Correspondence (PWW)

Mr. John Huey, Village Administrator  
Village of New Concord  
P.O. Box 10  
New Concord, Ohio 43762

Dear Mr. Huey:

This letter is a follow up to our meeting of October 4, 2007. The following are comments and suggestions from the meeting:

- I/I removal efforts;
- Sludge storage and reduction of sludge age in plant;
- Raising the weirs in the sand filters;
- Stressing the clarifiers for maximum flow and minimum solids loss; and
- Piping modifications needed to operate plant in contact stabilization mode and to utilize additional tanks.

**I/I Removal Efforts**

Every effort should be made to abate I/I. From your email of October 5, 2007, you indicated that you had Zemba Brothers scheduled to camera your storm sewers on October 10 and 11. Please provide this office within 30 days a report from the camera operations that have been completed and a plan of action to eliminate I/I. You should attempt to repair the sewers or consider treatment options. Please provide an engineering analysis to support any design.

**Sludge Storage and Reduction of Sludge Age in Plant**

It was determined that the current sludge age for the oxidation ditches is 90 days. A normal sludge age for oxidation ditches is 10-30 days. Please provide an explanation for eliminating the long sludge age in the ditches. You should consider new sludge treatment methods or have an outside firm come in and dispose of your solids.

**Raising the Weirs in the Sand Filters**

As stated in your email from October 5, 2007, "We shot the elevations at the plant today and found that there is a 12 inch drop from the weirs in the clarifiers to the over-flow weirs in the filter influent channel. We plan to purchase 45' x 10" x 1/4" slotted aluminum weir plate

and fasten it to the existing plate. It will be adjustable to allow 4 to 8 of additional elevation in the channel. The line from the clarifiers to the filter channel is about 150 lineal feet. We felt that eight inches would be the maximum we could add and still have adequate drop." Please provide a time table for this installation and also include an estimated amount of additional flow that can be processed through the filters at high flow conditions.

### **Stressing the Clarifiers for Maximum Flow and Minimum Solids Loss**

By adding the additional weir height in the filter influent channel, have you thought about raising the weir height in the clarifiers to provide maximum capacity in wet weather conditions? We had discussed this at our meeting and by doing this, you could stress the clarifiers and estimate what the new maximum flow would be with the weir adjustments and at what point you lose solids through the clarifiers. This may also eliminate or greatly reduce the number of overflow and bypass events for your facility. The figure determined for the stress test would be used for the bypass activation and not the sand filter failure level. Please be reminded that bypassing wastewater from the treatment works is unauthorized and illegal unless the conditions in Part III, Item II of your NPDES permit are satisfied.

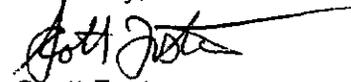
### **Piping Modifications Needed to Operate Plant in Contact Stabilization Mode and to Utilize Additional Tanks**

As discussed, evaluate your piping modifications needed to route flow into the old clarifier tank and return sludge discharges from the ditches to operate the plant in contact stabilization during high flow conditions. Estimate the benefits of operating the plant during wet weather in contact stabilization mode.

Please respond to this letter within 30 days of receipt.

If you have any additional comments or questions, please feel free to call at 740-380-5227.

Sincerely,



Scott Foster  
Environmental Specialist 2  
Division of Surface Water

SF/mlm