

**Environmental  
Protection Agency**

**Governor  
Lt. Governor  
Director**

October 19, 2011

RE: SUBTROPOLIS MINE  
MAHONING COUNTY  
PETERSBURG  
NPDES PERMIT NO. 31J00063

Mr. Jeremy Mackall  
Subtropolis Mine Company  
5137 Garfield Road  
Petersburg, OH 44454

Dear Mr. Mackall:

On September 21, 2011, this writer conducted an inspection of the storm water management system for the Subtropolis deep mine. The intent of the inspection was to determine if any changes to the system had occurred since the previous inspection on June 22, 2001. The inspection also included a review of the compliance record for the facility.

Observations:

The site still maintains two outfalls for discharging storm water from the site. Neither outfall was discharging at the time of the inspection. No concerns regarding deposition of solids in either basin were apparent during the inspection. Following are observations made during this most recent inspection.

*Basin No. 1*

- Outfall 001 from Basin No. 1 includes surface drainage from the south east side of the property. Water from Basin No. 1 is pumped to Basin No. 2 for reuse in the wash plant. During the inspection it was recommended that the emergency outfall be relined with rip rap to prevent erosion of the channel during discharge events.
- Sludge from the wash plant is dewatered and stored in a strip cut. Sludge in the strip cut consumed approximately 20% of the surface area of the strip cut at the time of the inspection. The outfall from the strip cut discharges to a new sedimentation basin on the southeast side of the site. The new basin was constructed to settle solids prior to the wastewater entering Basin No. 1. Disposing of sludge in the strip cut is a new practice since the previous inspection.

*Basin No. 2*

- Storm water from the wash and screening plant areas drain to a settling basin prior to entering Basin No. 2. Water from Basin No. 2 is pumped to the wash plant for re-use. When necessary, Basin No. 2 discharges through outfall 002 along with pit water.

- The water entering Basin No. 2 from the settling basin appeared slightly turbid with limestone fines. The Inlet location from the sedimentation basin is approximately 50-feet from the Basin No. 2 outlet and enables Basin No.2 to be short circuited.

In the event the discharge from the settling basin causes violation at outfall 002, it is recommended that baffles be placed in Basin No. 2 between the point of entry from the settling basin and the outfall from Basin No. 2. The baffles should be placed such that the entire capacity of Basin No. 2 is utilized to settle solids.

- Silt Trap 01 was also included in this inspection. Silt Trap 01 accepts water from the pit area. No concerns regarding Silt Trap 01 were identified. The contents of the silt trap were clear.

Compliance Review:

The compliance record for the Subtropolis mine was reviewed as part of this inspection. The period of review covered September 2010 through August 2011. Following are violations reported during the review period.

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
Dec. 2010	002	Total Suspended Solids	1D Conc	45	59.	12/14/2010
Feb. 2011	002	Total Suspended Solids	30D Conc	30	34.	2/1/2011

Storm Water Pollution Prevention Plan (SWP3)

As previously discussed, a recently disturbed area of the site is intended for sludge disposal and settling basins. This area must be incorporated in the SWP3 per Section III, Item F.3 of the NPDES. In response to the permit requirement, an updated SWP3 should be submitted to this office no later than November 18, 2011.

In the event you have any questions regarding this inspection letter, you may contact this office at (330)963-1251 or at [john.kwolek@mahoning.com](mailto:john.kwolek@mahoning.com).

Respectfully,



John Kwolek  
District Engineer  
Division of Surface Water

JK/cs



**Environmental  
Protection Agency**

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

October 20, 2011

RE: COLUMBIANA COUNTY  
VILLAGE OF LEETONIA  
COMPLIANCE EVALUATION INSPECTION  
NPDES PERMIT NO. 3PB00017

Mr. Gary Phillips  
Village Administrator  
Village of Leetonia  
300 East Main Street  
Leetonia, OH 44431-1197

Dear Mr. Phillips:

On August 23, 2011, this writer met with Mr. Butch Donnalley and conducted an inspection of the operation and maintenance of the Leetonia Wastewater Treatment Plant located at 2 St. Peters Street. The wastewater treatment is currently well maintained and there are a few minor non-compliance issues with your National Pollutant Discharge Elimination System (NPDES) Permit No. 3PB00026.

The following is a summary of the inspection:

The treatment system includes bar screen by-pass, grit removal, grinder, influent pumping, flow equalization, aeration, clarification, rapid sand filters, UV disinfection and the final effluent discharges to the East Branch of the Middle Fork of Little Beaver Creek.

- 1) The plant was operating satisfactorily and appeared to be producing a good effluent. Most of the units were operational with the mechanical bar screen being off-line for roughly two years. The flow equalization basin aerators were not in the tank and in the process of being repaired. These had been out for approximately four months. The Village must keep equipment operational at all times. While a minimal time for repairs is to be expected, it should not take months. This office understands the Village is hesitant to put money into an outdated bar screen, however, an upgraded head works has not been initiated. The Village must move forward with updating any equipment that has exceeded its useful life expectancy, such as the mechanical bar screen.

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- 2) A review of the electronic data monitoring reports for the period of August 2009 through August of 2011 was completed. During that time only two pH violations had occurred. The plant staff does a good job operating the plant.
- 3) A review of the current NPDES permit compliance schedule indicated the Village has not completed items Part I,C,: a,b, and c. The Village was to have started all necessary improvements to comply with their phosphours limit by July 1, 2011. The improvements must be completed and operational by April 1, 2012, in accordance with the new permit. Please respond in writing as when the Village intends to complete these improvements.
- 4) The plant operational problems appear to result from Infiltration and Inflow due to storm events which result in high flows at the plant. During heavy storm events the overflow from the equalization basin is activated which blends with the final effluent. The combined effluent is sampled and no effluent violations have resulted because of this, however, the number of occurrences is problematic. The Village must continue to remove infiltration and inflow from the collection system. The Village is currently evaluating an upgrade of the plant's head works and additional equalization capacity.

By March 16, 2009, the Village must respond in writing the steps being taken to reduce infiltration and inflow in the collection system.

Should you have any comments or questions, feel free to contact me at (330)963-1193.

Respectfully,



Joseph E. Trocchio, P.E.  
Environmental Engineer  
Division of Surface Water

JET/cs

cc: Butch Donnalley, Superintendent, Village of Leetonia  
Artie Altomare, Mayor Village of Leetonia

File: Public/Permit Compliance/Village of Leetonia