

Clinton Road Treatment System
SRI O&M TAG Project #6 Request #2
OSM PTS ID: PA-36

Requesting Organization: Montour Run Watershed Association (in-kind partner)
Receiving Stream: West Fork of Enlow Run (Montour Run Watershed)
Watershed: West Fork of Enlow Run→Enlow Run→Montour Run→Ohio River
Municipality/County: Clinton Township, Allegheny County
Latitude/ Longitude: 40°29'42"N / 80°16'21"W
Construction Year: 2004

On 4/4/12, SRI was contacted by Mark Fedosick concerning one of the VFPs at the Clinton Road Site. According to Kevin Gurchak of the Pittsburgh Airport Authority, the VFP was not able to handle the whole flow and so a portion of the flow was overtopping the berm.

Mark collected field data, and on 5/15/12, Cliff Denholm met with Mark Fedosick in the field to investigate the site. A portion of the water was bypassing the VFP by flowing over the berm, while most of the water was going through the system with limited treatment. All of the flow was going through the lower pond, however; the water level in the pond had been increasing, indicating reduction of treatment media permeability. It appeared that the water may have been bypassing most of the treatment via the cleanouts as the water level within the pond has risen to above some of the cleanouts which were not capped. This may have been part of the issue with a decrease in treatment from the VFP. During the site investigation valves were opened to flush and drain the ponds for future investigations and remedial action.

On 5/22/12 Mark Fedosick, Amy, and Ryan of the MRWA revisited the site to examine the treatment media and take photos. They found several inches of thick, clay like iron sludge on top of the compost layer and aluminum solids coating the limestone of the Upper VFP. The Lower VFP did not have an accumulation of iron solids on top of the mixed media but aluminum solids were found to be coating the limestone.

A proposed solution was provided on 6/18/12 by BioMost (BMI) which included separate suggestions for both the upper and lower ponds. For the upper pond, BMI suggested performing iron removal, examining and extending the pond cleanouts, and conducting multiple flushing cycles to try to improve permeability. Similarly for the lower pond, BMI suggested extending the cleanouts and examining them to make sure they are not perforated. It was decided that stirring the treatment media would be beneficial as long as the underdrain pipes are not compromised.

On 9/24/12 and 9/25/12, Kevin and an equipment operator from the Pittsburgh Airport Authority met with Buck Neely from BMI on site to perform system repairs. The excavator operator stirred the first foot or so of the treatment media, but was not able to go very deep into the ponds because of the piping system. Vegetation and sediment was also removed to allow raw water to freely enter the treatment system. Buck Neely assisted with assorted tasks on site. The longterm effectiveness of this maintenance is not certain and there may be a need to replace the treatment media in the near future.

The project team thanks the Montour Run Watershed Association and the Allegheny County Airport Authority for all of their efforts including support and assistance. Funding for technical assistance and maintenance was provided by the PA DEP's Growing Greener and the Foundation for Pennsylvania Watersheds grant programs and in-kind services by project partners.

Additional Recommendations & Considerations:

- Continue to monitor the system
- There may be a need to rebuild/rehabilitate the treatment system in the near future



The Pittsburgh Airport Authority provided an excavator and operator to stir the treatment media within the VFPs (Left). Unfortunately because of the piping system, only the top foot of material could be stirred. Aluminum solids coated the limestone of the Upper VFP (Right). There will likely be a need to reevaluate this system in the near future and potentially rehabilitate the VFPS.