

**McCaslin Road Passive Treatment System**  
**SRI O&M TAG Project #17 Request #3**  
**OSM PTS ID: PA-150**

Requesting Organization: Montour Run Watershed Association (in-kind partner)

Requesting Organization Representative: Kevin Gurchak

Dates of work performed: 11/5/2021-11/10/2021, 5/3/22, 5/12/22

Initial Request: On 10/15/2021, the Montour Run Watershed Association (MRWA) reported that Findlay Township was concerned about the Auto Flushing Vertical Flow Pond (AFVFP) at the McCaslin Road passive treatment system. The system is located at the Findlay Township Public Works facility. In addition to providing treatment for abandoned coal mine drainage (AMD) the AFVFP is used as a storage area for materials and equipment. Maintenance personnel reported that limestone decreased to the point that there was a significant drop off and they could not utilize the storage area.

Initial Site Visit, Observations, and Identified Needs: As both BioMost and Stream Restoration Inc. were familiar with the system and the issue appeared to be straightforward, an initial assessment was conducted based on information provided by the Montour Run Watershed Association and Findlay Township.

Work Completed: In November 2021, BioMost mobilized equipment to the site. A decision was made to take the opportunity to do preventive maintenance while addressing the limestone elevation. Prior to starting the maintenance, a site inspection was performed and found that water was backed up and leaking out of some of the cleanouts of the AMD collection and conveyance pipe. The existing limestone was washed and pulled out of the AFVFP. Sludge was flushed/pumped to the settling pond/wetland. The influent pipe to the AFVFP was found to be plugged with debris and sludge which was removed. An HDPE perforated inlet pipe was added to the raw water pipe which previously dead-ended into the limestone. Underdrain pipes were removed, cleaned, and replaced. Five loads of new limestone were purchased and placed in the bottom of the AFVFP, washed limestone placed on top, and the stone leveled. Following this maintenance water was no longer backed up in the cleanouts. The system appeared to be working again.

A few months later, in April 2022, the maintenance department contacted SRI stating that the stone was still not level and that water was on top of the stone indicating a problem. On 5/3/22 a meeting was held on site to discuss and investigate the issues. The investigation revealed that the trigger mechanism of the siphon had broken which was likely damaged during the previous maintenance work. This explained the water on top of the stone. BMI returned later that month and repaired the trigger mechanism. During the meeting, SRI agreed to purchase additional 5 loads of limestone and the township donated their equipment to spread and level the stone as desired.

Recommendations & Future Considerations: On-going water monitoring and site inspections should continue. The AFVFP limestone should be washed as needed. The siphon vault should be inspected to ensure it is reasonably clear of sludge between and after each limestone washing event. If funding is available, washing the limestone every three to five years is recommended.

### Photo Log



**Top Left:** Limestone and pipes were removed and sludge pumped to the settling pond (11/10/21).  
**Top Right:** Underdrain piping cleaned and removed for later placement back into the pond (11/10/21).  
**Bottom Left:** Reinstalling underdrain after washing stone and improving the intake manifold (11/12/21).  
**Bottom Right:** Stone graded similarly to original design contours with 5 tri-axle loads of limestone added to the pond (11/16/21).