

**Yellow Creek 2C Passive Treatment System**  
**SRI O&M TAG Project #53 Request #3**  
**OSM PTS ID: PA-122**

Requesting Organization: Blacklick Creek Watershed Association

Requesting Organization Representative: Dennis Remy

Municipality/County: Center Township, Indiana County

Dates of O&M work performed: 7/16/2021 to 7/20/2021

Initial Request: On 9/29/2020, the Blacklick Creek Watershed Association (BCWA) requested assistance related to the Yellow Creek 2C (YC2C) passive system. The BCWA had reported that the collection channel & ponds around the base of the Tide Pile which sits just above the system is full of refuse. The channel and ponds were constructed for the purpose of collecting coal refuse that erodes from the pile. The BCWA was concerned about the refuse overflowing these channels and ponds and spilling into parts the YC2C system.

Initial Site Visit, Observations, and Identified Needs: On 6/18/21, Stream Restoration Incorporated (SRI) and BioMost, Inc. (BMI) conducted a site investigation of the system as well as the channel and ponds associated with the Tide coal refuse pile. The effort to clean the coal refuse from the ditch and ponds would be significant and costly. In addition, every time there is a large precipitation event, more refuse would be washed into the channel and ponds negating the effort. A decision was made that this request was beyond the scope of the O&M TAG program and that an effort should be made to obtain funding to reclaim the pile.

While on site, an inspection of the treatment system was conducted. The inlet area of the raw water inlet and conveyance pipe that had been installed in March of 2020 was clogged with algae and iron precipitates. Water was exiting the forebay emergency spillway and bypassing treatment. It was determined that raising the emergency spillway for the forebay would provide enough head pressure for all flow to enter the treatment system under normal conditions.

Work Completed: Iron debris and algae was removed from the forebay outlet pipe. The emergency spillway elevation was increased and geotextile and stone was placed for erosion control. Water was once again flowing into the treatment system.

Recommendations & Future Considerations: The Tide coal refuse pile will continue to erode and threaten the YC2C passive system. The Tide pile needs to be reclaimed. Once the pile is reclaimed, the YC2C system should be evaluated and likely redesigned and rebuilt. Until then, water monitoring including flow measurements should be conducted on a regular basis to determine the effectiveness of the treatment system. This data will also be important for when it is time to redesign and rebuild the system. In addition, the inlet and outlet of the AMD conveyance pipe should regularly be inspected for the accumulation of iron, leaf and other debris to ensure the pipe remains clear and the AMD able to flow to the VFR.

### Photo Log



The Tide Coal Refuse pile sits above the Yellow Creek 2C passive treatment system. Channels and ponds had been previously constructed to contain the coal refuse that is eroded during storm events. The BCWA is concerned about the material overtopping and filling in part of the treatment system, which had happened in the past (upper pictures 2/28/19 lower pictures 6/18/21).



**Left:** The forebay emergency spillway elevation was raised (7/16/21).

**Bottom Right:** Geotextile and stone was placed on the new emergency spillway grade (7/16/21).