July 2025 O&M TAG 5 (1118) Rock Tunnel

Rock Tunnel Passive Treatment System SRI O&M TAG Project #55 Request #2 OSM PTS ID: PA-175

Requesting Organization: Somerset County Conservation District (SCCD)

Requesting Organization Representative: Greg Shustrick

Dates of work performed: 10/4/2023-11/16/23

<u>Initial Request:</u> Greg Shustrick requested assistance with evaluating and maintaining trompe aeration components to improve the treatment system.

<u>Work Completed</u>: BioMost personnel evaluated the site on 10/4/2023 and found that all three trompes were receiving water. Approximately 15% of flow was bypassing the system through the Agri Drain box. Approximately 5% of flow was exiting the emergency spillway. Ropes were located to recover the air sleds and air was able to flow to each sled by shutting airflow off to the other sleds.

On 11/10/23 BioMost mobilized to site to perform further maintenance. All three air sleds were removed and cleaned as needed to remove iron accumulation. Some of the bubble diffusers needed maintenance so a second trip was scheduled for repairs.

To improve aeration and better distribute flow, a pallet of concrete blocks was purchased to place between the level spreader and the three concrete spillways. The blocks were left on site and placed on 11/16/23 upon return to repair and re-set the air sleds.

<u>Recommendations & Future Considerations:</u> On-going water monitoring and site inspections should continue. The concrete blocks should be observed during higher flows and moved as needed to better distribute flow.

Photo Log







Top Left: Air sled retrieved from pond was found to be plugged and some disc diffusers broken (11/16/23). **Top Right:** Bubble disc diffusers were cleaned and replaced as needed (11/16/23).

Bottom: Air sleds were redeployed (left) and concrete blocks were placed in spillway to achieve better flow distribution (11/16/23).