There are two mine discharges that join at this location.

One provides Iron precipitate (orange/red)

The other provides aluminium precipitate (white)
Water discharges from subsurface mines at this location.

The discharge area frequently floods during high rains, thus making the area impractical for passive treatment of the water.

This water discharges into the West Branch of the Schuylkill River.

Monitored by USGS
This is the convergence of the West Branch of the Schuylkill River and the Pine Knot Discharge.

The West Branch sometimes is dry, but the Pine Knot Discharge never dries up.
The West Branch of the Schuylkill River

Pine Knot Discharge
This stream channel used to have a flume which kept the water from entering the subsurface mine pool.

The Schuylkill Headwaters Association removed the flume and lined the stream channel with an impermeable barrier.

Due to the high flows that are experienced in this area, they also had to coat the rocks in the stream channel with cement to hold them in place. Over time the cement will weather away and be replaced with natural sediments.

Since the stream channel work, a crop fall has started to develop beside the stream.
The strip mine across the street has been open a total of four times as economic changes made coal extraction feasible. Crop fall on the south side of the street was a location of a DOT drainage project. Instead of allowing the water to sit in the crop fall and seep into the mine pool, discharge is rerouted to the stream channel.
This region has been extensively mined, as apparent from the overburden on either side of the valley.

Coal waste had been exiting this valley during times of intense rainfall and turning waters downstream black.

The Headwaters Association obtained funds to stop this pollution.
The Otto remediation site in Reilly Township has a depth of 12 feet for iron collection but needs more time for precipitation to occur.

Future renovations to this system may include injection of oxygen or a longer path through the wetlands.

This site channels 10,000 gpm of water at a pH near 6 through a settling/aeration pond (to remove the iron and the carbon dioxide).

The yellow barriers slow down water flow which then exits the system into a constructed wetland environment.