

### DEPARTMENT OF ENVIRONMENT AND CONSERVATION

# KNOXVILLE ENVIRONMENTAL FIELD OFFICE DIVISION OF MINERAL & GEOLOGIC RESOURCES – MINING SECTION

# OF MINERAL & GEOLOGIC RESOURCES – MINING SECTION 3711 MIDDLEBROOK PIKE

KNOXVILLE, TENNESSEE 37921-6538

## **Mining Facility Inspection Report**

The information contained within this document is supplemental to the inspection record(s) for this facility located online. A link to the online record is provided at the end of this document.

**Inspector:** Bonnie Craighead

Secondary inspector: Daniel Lawrence

**Inspection start date and time:** May 8, 2023 9:30 AM **Inspection end date and time:** May 8, 2023 11:00 AM

NOTE: Provided times are local to the inspected facility. If inspection spanned multiple days,

inspection may not have been continuous between start and end dates.

Facility location: 36.48872,-84.02146

Does this facility currently have an NPDES permit? Yes

NPDES permit number: TN0070408 NPDES Permit type: Individual

**Inspection type:** Follow-up

Was this an EPA 106 inspection? Yes

#### **INSPECTION RESULTS: In Compliance**

#### **Site Observations**

Criteria Applicable to All Inspections	Yes/ No / N/A
Facility has Permit	Yes
Site Currently Active	No
DMRs Submitted as Required	Yes
DMRs in Compliance	Yes
All Activity within Permit Boundary	Yes
Facility as Described in Permit	Yes
Sediment Basins as Planned	Yes
All Discharge Points Permitted	Yes
All Discharge Points Located Accurately	Yes
Wastewater Discharge Occurring	No
Storm Water Discharge Occurring	Yes
All Drainage Controlled through Basins or BMPs	Yes
Diversion Ditches Adequate	Yes
Stream Buffers Maintained	Yes



#### **Inspection Narrative**

This site was inspected in response to notification that work had been completed to stabilize the landslide as per the CAP plan. Pond 103 has been removed and regraded. A rock-lined channel has been constructed down the landslide and tied into an existing wet weather conveyance. The channel and conveyance drain water off of the landslide. The areas were hydroseeded.

The hydroseeder did not reach the bottom of the landslide area. This area needs to be seeded by hand. Additionally, the sediment delta extending into Waters of the State needs to be seeded using a wetlands mix as agreed to on a previous pond removal inspection with Alden Resources on 4/12/2023. The small secondary slide west of the slide at pond 103 also needs to be seeded.

As alternative mitigation for the landslide at pond 103 the Division met with Mr. Erp on site to discuss possible opportunities on 4/25/2023. One opportunity was to stabilize the pre-mining landslide located west of the landslide at pond 103. The permittee chose to do the work on the slide and constructed a rock lined channel to convey water off the slide. The channel is performing as designed. During this inspection, inspectors noticed that some water draining at the top west area of the rock lined channel was not draining into the channel, instead draining over the face of the regraded soil area (Item 14). The channel should be extended to capture this drainage. This could be accomplished without the use of equipment – by using a shovel to extend the channel a few feet.

At the head of the hollow on the eastern portion of the site a sump was constructed to treat stormwater runoff before it was discharged down a rock-lined channel into the receiving stream, to prevent the drainage from draining down the landslide. On the left side of the head of hollow (looking upstream) a new stream channel was constructed in the backfill to convey water draining from the backfill to the receiving stream. A channel was not constructed on the right side of the head of hollow, although it was discussed in the on-site meeting with Mr. Erp on 4/25/2023.

TDEC will continue to work with the permittee to determine mitigation that has been achieved/is needed.

#### **Images and/or maps:**





36.48822, -84.02093 2023/05/08 09:54:40 101°

Item 1: Photo of the area where pond 103 was formerly located. The pond was filled in and area graded and hydroseeded to help stabalize the slide area, which begins below the former pond.





36.4857, -84.01817 2023/05/08 10:03:48 206°

Item 2: Photo of the wet weather conveyance descending down the right side of the head of hollow. This is one of the features that was disccussed as an area to improve during the 4/25/2023 inspection.





36.48568, -84.01818 2023/05/08 10:03:43 36°

Item 3: Photo of the sump constructed at the head of the hollow to capture and treat stormwater before it is discharged into a rock lined channel to the receiving stream.





36.48593, -84.0178 2023/05/08 10:05:20 327°

Item 4: Photo of a drainage channel constructed on the left side of the head of hollow to drain water from the hollow to the recieving stream.





36.48594, -84.0178 2023/05/08 10:05:23 62°

Item 5: Photo of the left side of the head of hollow where a rock lined channel was constructed to improve wet weather conveyance/stream flow.





36.48801, -84.02006 2023/05/08 10:15:13 326°

Item 6: Photo of the rock-lined channel constructed down the landslide at pond 103.





36.48817, -84.01993 2023/05/08 10:16:00 6°

Item 7: Additional photo of the rock lined channel descending down the landslide at pond 103. The channel is tied into an existing wet weather conveyance.





36.48886, -84.01992 2023/05/08 10:30:47 302°

Item 8: Photo of sediment delta entering waters of the state. This delta needs to be seeded with a wetland seed mix for stabalization.





36.48873, -84.01971 2023/05/08 10:21:51 230°

Item 9: Photo of landslide toe at the beaver pond area.





36.48891, -84.02041 2023/05/08 10:33:07 6°

Item 10: Photo of small secondary slide located west of the large slide. This slide needs to be seeded.





36.48894, -84.02131 2023/05/08 10:37:27 196°

Item 11: Photo of the pre-mining slide the permittee did work to as a mitigation alternative for the slide at pond 103. The slide was rocked to convey water off of the slide to the beaver ponds.





36.48907, -84.02132 2023/05/08 10:39:10 191°

Item 12: Additional photo of the work done on the pre-mining slide.





36.4887, -84.02142 2023/05/08 10:41:55 191°

Item 13: Photo of the upper portion of the pre-mining slide.





36.48869, -84.02159 2023/05/08 10:43:32 162°

Item 14: Photo of the upper right section of the rock lined channel in the pre-mining slide. Some water is flowing over the fill material instead of into the channel at the spot where the individual in the photo is standing. The area where water is flowing should be tied into the rock lined channel to convey the water down the channel. This could be done with a shovel.



**Signature of TDEC inspector** 

**Name of TDEC Inspector:** 

Bonnie Craighead

The complete permit record, including inspection data, may be found on the TDEC Public Dataviewer here:

 $https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34051:3506451321854:::34051:P34051\_PERMIT\_NUMBER:TN0070408$ 

Alternately, you may scan the following QR code with your smartphone:



If you have any questions, you may contact your inspector. You may also contact the Mining Section at 865-594-6035 or TDEC.Mining@tn.gov.

Thank you for helping to protect Tennessee's waters!