Office of Active and Abandoned Mine Operations

HULING BRANCH (WISHBONE PLAYGROUND)
Abandoned Mine Reclamation Project
Contract No. OSM 18(6672)201.1

Bureau of Abandoned Mine Reclamation
286 Industrial Park Road
Ebensburg, PA 15931-4119
FACT SHEET

Location: The project site is located in Sproul State Forest, Leidy and Noyes Townships, Clinton County. The site can be accessed from the Interstate 80 (I-80) Kylertown/Phillipsburg Exit No. 133 (S.R. 53). From the end of the exit ramp, travel 11.5 miles northeast on the Kylertown-Drifting Highway (S.R. 53) to the intersection of S.R. 53 and S.R. 144. Turn left onto S.R. 144 and travel approximately 32 miles northeast to South Renovo, PA. After crossing the West Branch Susquehanna River, turn left onto Renovo Road (S.R. 120/S.R. 144) and travel 6.5 miles southwest. Turn right onto Kettle Creek Road in the Village of Westport. Travel 1.6 miles northwest on Kettle Creek Road. Turn right onto Two Mile Run Road and after traveling 2.0 miles the site is located on the left side of Two Mile Run Road.

Watershed: Kettle Creek (TSF)

Official Start Date: August 23, 2013

Contract Completion Date: December 8, 2015

Contractor: L.R. Costanzo Co., Inc.

Property Owners: PA Department of Conservation of Natural Resources Office of Parks and Forestry Bureau of Forestry - Forest District 10 15187 Renovo Road Renovo, PA 17764

Project Cost: $10,552,177.99 (Final Amount), $12,181,873.36 (Bid Amount)

Project Area: 125 Acres

Purpose: To eliminate eligible abandoned mine public health and safety hazards that are located within close proximity to places of intense visitation of humans.

Description: The Huling Branch (Wishbone Playground) project eliminated four dangerous highwalls that were in excess of over 70 feet high and at a combined length of over 6,000 linear feet. The acidic adjacent spoil pile area, in excess of approximately 800,000 cubic yards, was utilized to backfill and reclaim each of the dangerous...
These dangerous abandoned mine lands were situated amongst DCNR’s promoted 45 mile long Whiskey Springs all-terrain vehicle (ATV) recreational trail system located within the Sproul State Forest. The recreational use of the trail system has attracted intense public visitation to areas off of the promoted trail and within the dangerous abandoned highwall areas. The unwarranted visitation resulted in garbage dumping, fire rings, empty alcohol containers and ATV riding injuries. The reclamation plan removed the access and use of the unwarranted ATV riding areas and re-established two miles of the promoted Whiskey Springs ATV trail. The Forestry Reclamation Approach (FRA) method was utilized for the rough grading backfill and tree planting of over 48,150 mixed trees seedlings. The FRA grading method also promoted storm water infiltration as a best management practice (BMP) to prevent soil erosion. The end result of the FRA method provided a final irregular rough grade of hummocky mounds and deep tilled depressions that will provide for an excellent tree growth condition for years to come. In addition to the FRA tree seedling planting that dominated the backfill area, the American Chestnut Foundation of Asheville, North Carolina donated over 100 American Chestnut tree seeds that were planted by DCNR. Also, the highly acidic spoil area and acidic draining groundwater within the site have been negatively impacting the fish and other aquatic life within the Kettle Creek Watershed for decades. In an effort to improve acidic draining groundwater by neutralizing the highly acidic spoil, over 310,000 tons of alkaline addition materials were blended within the spoil backfill areas against the dangerous highwall. An additional 36,000 tons of coal was incidentally removed for the installation of rock underdrains to convey and treat acidic draining groundwater. These dangerous abandoned mine features were located within Problem Area 6672 (PA 6672), which is referenced within the Keating and Renovo West 7.5 Minute USGS Quadrangle Maps. This dangerous condition was a direct result of surface and deep mining performed prior to 1967 by Kettle Creek Coal, D.G. Wertz, and Richmont Coal Companies. These dangerous abandoned mine features qualified for the Office of Surface Mining’s (OSM’s) Priority 2 safety criteria.

**Funding:**
Pennsylvania’s Abandoned Mine Land Grant, 30% AMD Abatement and Treatment Set-Aside, and Pennsylvania’s Growing Greener 2 Bond Issue

**Project Management:**
Bureau of Abandoned Mine Reclamation
Cambria District Office
814.472.1800

In addition to the 100 American Chestnut trees seeds that were donated and planted by DCNR, the contractor planted a total of 48,150 mixed tree seedlings that consisted of the following:
5,950 of White Pine, 
5,925 each of American Red Pine, Pitch Pine, Norway Spruce and White Spruce, 
2,650 each of White Oak, Northern Red Oak, Pin Oak, Crabapple, and Shagbark Hickory, and 
2,625 each of Black Locust and Serviceberry

All tree seed and seedling planting were performed utilizing the FRA method.

**Accomishments:**

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<thead>
<tr>
<th>PRIORITY</th>
<th>AMLF #</th>
<th>AMLF KEYWORD</th>
<th>MEASUREMENTS</th>
<th>QUANTITY</th>
<th>UNIT</th>
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AMLF = Abandoned Mine Land Feature
L.F. = Linear Foot
DH = Dangerous Highwall
SA = Spoil Area
MO = Mine Opening
EF = Equipment Facility
Huling Branch (Wishbone Playground)
OSM 18(6672)201.1
Leidy and Noyes Townships
Clinton County
Pre-Construction

Highwall Feature 6672-04

Highwall Feature 6672-01

Eastern Aerial Oblique of Entire Project Site

Spoil Area 6672-05
### During Construction

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Notes</th>
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<tbody>
<tr>
<td>6/5/2014</td>
<td>Excavating overburden to locate the crop coal on the south end of Grading Area No. 6 using a Cat D 11 dozer.</td>
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<td>8/20/2014</td>
<td>Excavating and loading out a five foot seam of crop coal on the west side of Grading Area No. 3. Note: Highwall approximately 30 feet high.</td>
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<td>11/10/2014</td>
<td>Installing twelve-inch (12”) Schedule 80 pipe into Mine Seal No. 2 on Grading Area No. 6. Note: Five foot coal seam at mine opening and poor roof above the coal.</td>
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<td>11/20/2014</td>
<td>Removing spoil material from the pit to locate buried coal refuse on Grading Area No. 3 using two Cat D 11 dozers. Note: Pit 60 feet deep to pit floor.</td>
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<tr>
<td>Date</td>
<td>Description</td>
<td>Note</td>
</tr>
<tr>
<td>------------</td>
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<td>-------------------------------------------</td>
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<td>5/27/2015</td>
<td>View looking west from Area No. 4 to area No. 3.</td>
<td>Mixed hardwood trees planted in this FRA area.</td>
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<tr>
<td>5/27/2015</td>
<td>Pine trees planted in the FRA areas on the west side of Grading Area No. 5.</td>
<td>Vegetative grass filter strip at the toe of the slope.</td>
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<td>7/22/2015</td>
<td>View from the northern end of the project looking south.</td>
<td>Sediment pond and FRA tree planting method in the distance.</td>
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