ABS Legacy Sites (Program Amendment Attachment 1)

The following sites were added to the list of ABS Legacy Sites in 2016:

<table>
<thead>
<tr>
<th>Company</th>
<th>Permit No.</th>
<th>Site Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunbeam Coal Corp</td>
<td>10830121</td>
<td>Jacques</td>
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<td>Laurel Land Development</td>
<td>11950102</td>
<td>McDermott</td>
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<td>Al Hamilton Contracting</td>
<td>17723164</td>
<td>Little Beth</td>
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<td>Sandturn</td>
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<td>Thompson Bros</td>
<td>17810104</td>
<td>Morris 2</td>
</tr>
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<td>Al Hamilton Contracting</td>
<td>17820106</td>
<td>Pearce</td>
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<td>Al Hamilton Contracting</td>
<td>17820166</td>
<td>Carnwath</td>
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<tr>
<td>Al Hamilton Contracting</td>
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<td>Ralston</td>
</tr>
<tr>
<td>Al Hamilton Contracting</td>
<td>17890115</td>
<td>Kauffman</td>
</tr>
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<td>Al Hamilton Contracting</td>
<td>17970107</td>
<td>Kauffman North</td>
</tr>
<tr>
<td>Frank Kowalski</td>
<td>65703058</td>
<td>No. 1</td>
</tr>
</tbody>
</table>

Potential ABS Legacy Sites (Program Amendment Attachment 2)

DEP has requested concurrence from OSM to remove one site from the list of potential ABS Legacy Sites.

The Svonavec Ohler (56890102) site has been removed from the list because the final payment was submitted in 2015 with the values confirmed at the annual trust evaluation in April 2016.

Land Reclamation (Program Amendment Attachment 3)

Under the proposed program amendment, the Department will provide a report certifying progress made during the previous year toward satisfying the obligation to complete the land reclamation for the ABS Land Reclamation sites.
Bituminous Processing (Wyano), Permit number 65920108

During 2016, the Bituminous Processing, Wyano site (65920108) was removed from the land reclamation list since the reclamation was completed. The reclamation was completed in 2014 and the warranty period has expired. Reclamation activities were conducted from 2010 to 2012. A total of 59.0 acres were reclaimed. Reclamation was accomplished through an Act 181 Landowner Reclamation Project in partnership with the Westmoreland Conservation District. The Final Inspection of the site reclamation was conducted on July 9, 2013. Figure 1 shows the completed reclamation.

Figure 1. Wyano Final Reclamation
Twin Creek Coal Co (Swift Breaker), Permit number 49851605

During 2016, the Twin Creek Coal Co, Swift Breaker site (49851605) was removed from the land reclamation list since the reclamation was completed. The reclamation was completed in 2014 and the warranty period has expired. Figure 2 shows the final grade at this site.

Figure 2. Twin Creek Breaker Final Grade
ABS Legacy Sites That Need Treatment System Work (Program Amendment Attachment 4)

Under the proposed program amendment, the Department will provide a report certifying progress made during the previous year toward satisfying the obligation to complete the initial treatment system construction for the ABS Legacy Sites. Brief descriptions follow for the sites where work has been completed or is nearing completion.

**L & B (No 5), Permit number 05830101**

The initial treatment system construction has been completed. Broadtop Township completed the construction under a grant. The system consists of a limestone bed and a settling basin. Figure 3 is a photograph of the completed system.

![Figure 3. L & B Coal Co (No. 5) Treatment system](image-url)
L & L Mining Inc (Berkey), Permit number 56813054

The initial treatment system construction has been completed at this site. The treatment system is a passive system with a settling basin. Figure 4 is a photograph of the completed system.

Figure 4. L & L Mining Inc (Berkey) Treatment Pond
American Development Corp (Job 33), Permit number 56840112

The initial treatment system construction has been completed at this site. The system consists of three ponds and was completed by retrofitting the existing system with a caustic drip. Figure 5 is a photograph of the system.

Figure 5. American Development Corp (Job 33) Treatment System
Laurel Land Development (McDermott), Permit number 11950102

The initial treatment system construction has been completed. The system consists of three settling basins. Additional treatment is supplied by means of a buried limestone drain and by applying limestone sand to ditches and channels. Figure 6 is a photograph of the completed system.

Figure 6. Laurel Land Development-McDermott Treatment System
Avery (Pine Glen), Permit Number 14803008

The treatment system was constructed under a SMCRA grant. The system was overdesigned and has been modified to treat additional mine drainage from Title IV eligible discharges. The system modifications to incorporate this additional flow have been completed and a trust has been established to provide a portion (about 2/3) of the O & M cost. Figures 7 and 8 are photographs of the completed system.

Figure 7. Avery Pine Glen Lime Silo and Treatment Pond
Figure 8. Avery Pine Glen Treatment System
Thompson Bros (Alder Run), Permit Number 17803054

Treatment plant construction is nearly complete with system scheduled to be operational before spring 2017. Figure 9 is a photograph of the system.

Figure 9. Thompson Bros Alder Run Treatment Basins
December 21, 2016

Thompson Bros (Morris 2), Permit Number 17810104

Site has functioning active treatment system constructed by Al Hamilton Contracting prior to forfeiture. Facility is in need of rehabilitation to replace failing infrastructure, anticipated in 2017. O&M of treatment system has been under contract since 2004.
Morris #2 Treatment System, Morris Twp., Clearfield Co.

Figure 10. Aerial photo of Morris 2 (2013)
Al Hamilton (Carnwath), Permit number 17820166

Active treatment was abandoned by Al Hamilton, rebuilt by Trust as passive treatment in 2008. O&M of treatment system has been under contract since 2008. Figure 11 shows the treatment system.

Figure 11. Carnwath treatment system
Al Hamilton (Ralston), Permit Number 17820109

Active treatment was abandoned by Al Hamilton, rebuilt by Trust as passive treatment in 2006. O&M of treatment system has been under contract since 2006. Figure 12 is a photograph of the system.

Figure 12. Al Hamilton Ralston Passive Treatment System
Al Hamilton (Kauffman North), Permit Number 17970107

The site has two passive treatment systems constructed by Al Hamilton prior to forfeiture. JR system is in need of rehabilitation of VFP media within next 2 years. Additional limestone needed to allow GR system to treat under high flow conditions. O&M of treatment systems have been under contract since 2004. Figures 13 (GR) and 14 (JR) are photos of the existing facilities.

Figure 13. Al Hamilton Kauffman North GR treatment system limestone bed
Figure 14. Al Hamilton Kauffman North JR treatment system vertical flow pond.
Greene County Coal Co. (McNatt), Permit Number 30840102

Construction was completed August 1, 2016. System was designed and constructed by BioMost, Inc. The SMCRA Construction Grant was awarded to Stream Restoration, Inc.

Construction consisted of upgrades to the existing wetland cells, enlargement of the final settling pond, construction of a Jennings Collection Channel and construction of a Horizontal Flow Limestone Bed Pond. Figure 15 shows the Jennings Collection Channel. Figure 16 shows the settling pond.

Figure 15. Greene County Coal McNatt Jennings Collection Channel
Figure 16. Greene County Coal McNatt Settling Pond
Bulldog Excavation (Andrews) Permit Number 65940108

Construction was completed September 20, 2016. System was designed by Hedin Environmental, Inc. Phase I (ALD) was constructed by Santella Excavating. Phase II (Settling Pond 1, Manganese Removal Bed Pond and Settling Pond 2) was constructed by Adam Eidemiller, Inc. The SMCRA Grant was awarded to Sewickley Creek Watershed Association in partnership with the Westmoreland Conservation District. Figure 17 shows the completed facility.

Figure 17. Bulldog Excavation completed facility
Certifications

Land Reclamation

The Department hereby certifies the completion of the land reclamation for the Bituminous Processing, Wyano site (65920108) and the Twin Creek Coal Co, Swift Breaker site (49851605).

Treatment System Development

The program amendment requires that the Department certify progress on the “initial construction/installation or repair/replacement/upgrading of the relevant treatment system(s) occurring after the filing of this proposed program amendment at the mining operations listed in attachment #4”

More detailed analysis after the program amendment was filed has revealed that some of the work anticipated under the program amendment was completed at the time of filing. This is due primarily to the unexpected length of time that it took to finalize the settlement leading to the program amendment. A strict application of the program amendment would result in unnecessary repair/replacement/upgrading of the relevant treatment system(s).

The Department is certifying initial construction/installation or repair/replacement/upgrading of the relevant treatment system(s) is completed for the following locations, all of which was completed prior to filing the program amendment:

<table>
<thead>
<tr>
<th>Company</th>
<th>Site Name</th>
<th>Permit Number</th>
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<tbody>
<tr>
<td>L &amp; B</td>
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