Annual Report Certifying Work Performed at Alternative Bonding System (ABS) Legacy Sites

Pursuant to a settlement agreement in *Pennsylvania Federation of Sportsmen's Clubs, Inc. v. Quigley*, Civil No. 1:99-CV-1791, dated November 2, 2016, the Department submitted to the U.S. Office of Surface Mining Reclamation and Enforcement (OSM) a proposed amendment to the federally-approved Pennsylvania surface coal mining regulatory program. The amendment, subsequently approved by OSM on July 10, 2017 (82 FR 31715), requires the Department to, *inter alia*, complete land reclamation and/or install or perform certain work on water treatment systems at several sites (included in Lists #3 and #4, attached below) permitted under the Commonwealth's now-defunct Alternative Bonding System (ABS).

The settlement agreement stipulates that by January 31 of each year, the Department will provide to OSM and make publicly available through its web site, a report certifying the progress made during the preceding calendar year toward satisfying those obligations. This annual certification will cease when the Department certifies that all such work at these sites is complete. The settlement agreement further stipulates that the Department will take all actions within its authority and control to ensure that the land reclamation and/or water treatment work at the listed sites is completed by December 31, 2018. This report characterizes all sites on Lists #3 and #4 not already certified as complete in the Department's 2016 and 2017 reports, including sites for which work was not completed by December 31, 2018. Due to site-specific complications, the Department was not able to complete the work at all sites by the deadline set forth in the 2017 program amendment. For sites at which work was not completed, the Department submitted to OSM, and OSM approved, an action plan to complete the work, requiring DEP to:

- 1. Identify remaining sites from attachment 3 needing reclamation; obstacles to achieving goals and reclamation schedule by September 30, 2019. This was completed and sent to OSM on August 28, 2019.
- 2. Develop landowner access, design and contracting packages for reclamation of Sites to be completed by October 1, 2020.
- 3. Submit progress reports to OSM during PADEP/OSM periodic program management meetings as scheduled; and
- 4. Complete land reclamation and treatment system work by December 31, 2020.

In addition to certifying work the Department has performed at the ABS legacy sites identified for needing work, the Department includes in this report steps it has taken to add or remove sites from its list of ABS legacy sites. Under the settlement agreement and approved program amendment, in order to add sites to, or remove sites from, the list of ABS legacy sites on Lists #1 and #2, the Department must: (1) request concurrence from OSM consistent with OSM's oversight authority; and (2) publish in the Pennsylvania Bulletin a notice of the sites added or removed with a brief explanation of the basis for the change.

Removal from Lists #1 and #2 may occur if there is no longer a post-mining discharge requiring treatment, if the amount of bond posted becomes sufficient to guarantee adequate treatment of discharges, or if a fully funded trust fund is established that will guarantee discharge treatment in perpetuity. The Department includes a summary of those actions in this report only to provide a complete accounting of its progress under the settlement agreement and not to substitute those separate requirements.

The lists attached at the end of this report indicate the status of each of the sites identified in the settlement agreement, including sites that have been "removed" by prior reports due to certification of completed work or other reason.

I. ABS Legacy Sites (Program Amendment Attachment 1)

DEP has requested concurrence from the U.S. Office of Surface Mining Reclamation and Enforcement (OSM) to remove the following sites from the list of ABS Legacy Sites:

Sunbeam Coal Corp, Jacques (Permit No. 10830121). During 2018, the Department requested concurrence by OSM that the discharge is unreasonable, unnecessary or impossible to treat. The Department received notice that OSM did not concur dated October 11, 2018. The Department submitted a follow-up request dated September 30, 2019.

II. Potential ABS Legacy Sites (Program Amendment Attachment 2)

DEP will request concurrence from OSM to remove the following sites from the list of potential ABS Legacy Sites:

The MB Energy Inc. Grabiak Strip (Permit No. 11830102), Dietrich Mine (Permit No. 32810135), CBC Strip (Permit No. 32820134), Campbell Skovira Mine (Permit No. 65810113) and Ridge Road Mine (Permit No. 65860105) will be removed from the list because the Post-Mining Discharge Treatment Trust was executed on January 3, 2019 and fully funded as of January 4, 2019. MB Energy Inc. Brush Valley #1 (Permit No. 32880108) consisted of two small discharges following reclamation in the early 1990's that subsequently improved on their own by 2012 and the Department released the remaining bonds.

The Enercorp Inc. Forcey Mine (Permit No. 17970102) will be removed from the list because the Post-Mining Discharge Treatment Trust was fully funded as of May 6, 2015.

The Blairsville Associates Eagle Strip & Auger (Permit No. 32823005) will be removed from the list because the site was fully bonded in 2015 at \$198,200 to specifically cover treatment liability.

Additional update: Cooney Brothers Coal Co. Caroff Strip (Permit No. 11773037), Pot Ridge 2 Strip (Permit No. 11803038), Feller 2 Strip (Permit No. 11813039); Dunlo 1 Strip (Permit No. 11813040), Bethlehem Strip (Permit No. 11850104), and Pot Ridge Lasky Strip (Permit No. 56743138) are now under the administration of the estate the late Mr. Paul Cooney and the company continues to provide treatment at all the sites. The Department is coordinating with the estate to fully fund the previously executed Post-Mining Discharge Treatment Trust. As of the Department's 2018 annual trust meeting, the trust contained \$11,874,977.47 which was \$6,541,324.98 less than the \$18,416,302.45 required to fully fund the trust. The payment plan shows the trust being fully funded in 2023.

III. Land Reclamation (Program Amendment Attachment 3)

Under the program amendment, the Department provides a report certifying progress made during the previous year toward satisfying the obligation to complete the land reclamation for the ABS Land Reclamation sites. Brief descriptions follow for the sites where work has been completed, is nearing completion, or requires additional work:

Power Operating Co., Inc. (Vought), Permit Number 17820114

During 2018, mining operator Junior Coal Contracting, Inc. (Junior) revised and began the renewal process for SMP #17080107 (Vought), which encompasses the unreclaimed pit on the Vought ABS permit. Junior moved from carrying out primarily a reclamation project to more focused on coal removal. After delays in the start of this project, the Department extended the approved Growing Greener Remining Incentive Grant for \$500k in alkaline additions to the maximum possible term, to expire December 31, 2020. The 2010 Bond Credit Consent Order and Agreement (COA) detailing the use of the incentive grant and application of bond credits was updated and rewritten as COA 184019. All parties had agreed on the revised details of the COA which ties together the permit, bond credit, and grant, but signing was delayed as a MSHA Ground Control Plan was awaiting approval. In the meantime, the permit renewal process for SMP #17080107 continued and the Department issued the renewal in December 2019. Junior must put up adequate bond for the permit as renewed, and COA 184019 needs revisions. The Department anticipates that Junior will post adequate bond and that the COA will be revised by July 1, 2020. The COA specifies that the project must be underway within four months of signing.

Benjamin Coal Co. (3 Prep Plant), Permit Number 17841605

During 2018, the Department had 7,000 tons of coal refuse removed preparing for further reclamation. Seven contractors vying for a reclamation contract attended a pre-bid meeting; three bids were submitted. All bids were higher than anticipated, and greater than the approved funding allocation, varying by as much as \$600k. The Department secured additional funding

and worked with the low bidder to adjust the Scope of Work to reduce costs yet satisfy all parties. A contract was signed May 10, 2019 with Earth Shapers LLC, and project got underway in July. By December work was largely completed. A basin filled with coal fines was found to pose problems beyond the scope of this project and will be addressed under a new and separate phase to be undertaken in Spring 2020.

Global Coal Recovery Inc. (Isabella Mine), Permit Number 26931601

During 2019, the Department executed an emergency contract that involved installation of a syphon, to drawdown the freshwater impoundment. The lake was overtopping and causing severe erosion and was slowly eroding back towards the lake and the potential of catastrophic failure. The syphon was shut-off after dropping the water elevation 17ft. Tetra Tech plans on re-activating the syphon and also, through pumping, dropping the water elevation to the water elevation when the site was active. The Project will be completed in phases.

Phase IA – Fresh Water Impoundment (Drawdown, Pumping Plan, etc.)

Phase IB – Fresh Water Impoundment – (Construction of Spillway, etc.)

Phase II – Land Reclamation – Reclamation of the Pile I and Pile II Pre-Act Areas

Phase III – Treatment System Construction.

Due to the complexity of coordinating the draw-down of the freshwater impoundment (requiring at least 8-10 months of permitting caused by existing gas and water lines), Tetra Tech will be the design consultant working closely with OSMRE and utility companies. Notice to Proceed is anticipated in February 2020. Freshwater Impoundment Phase IA and IB anticipated to be completed by the first quarter 2021.

Isabella Emergency Syphon Work Photos:



Figure 1 – Syphon and Lake (Freshwater Impoundment)



Figure 2 – End of Syphon – Valve Install



Figure 3 – Syphon Online

Grandstone Coal Co. (Grandstone Site), Permit Number 26840202

During 2018, the Department pursued executing a landowner reclamation project authorized under Act 181 of 1984 (amending, *inter alia*, Section 18 of the Surface Mining Conservation and Reclamation Act, 52 P.S. § 1396.18). Historically, the Department has executed these projects in coordination with the Conservation Commission and the Conservation District of the county in which the site is located. Due to complications in this process that may cause additional undue delay, the Department is re-evaluating additional options if Act 181 landowner reclamation is no longer an option.

Aspenenergy Inc. (Wilpen Operation), Permit Number 65860201

During 2018, the Department explored options for funding this project under Title IV of the federal Surface Mining Control and Reclamation Act of 1977. The Department and OSM consider this project eligible for Title IV funds. The District Mining Office is coordinating with the Department's Bureau of Abandoned Mine Reclamation (BAMR) to evaluate whether BAMR is able to undertake the project, and well as coordinating access to perform the reclamation work. If Title IV coordination appears that it will cause undue delay, the Department will re-evaluate additional options.

Ebony Coal Co. (Claridge Sub F Refuse Pile), Permit Number 65920201

During 2019 through present, the Department has continued to try to coordinate access to perform the reclamation work.

IV. <u>ABS Legacy Sites That Need Treatment System Work (Program Amendment Attachment 4)</u>

Under the program amendment, the Department provides 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, is nearing completion, or requires additional work:

Pengrove Coal Co. (Ruth), Permit Number 10820121

During 2018, the Department contracted for the repair of the existing treatment system that has failed. The design was approved, and construction began in October 2018 with the construction of the access road and replacing the existing stream crossing. Construction of the treatment system was completed on June 13, 2019.

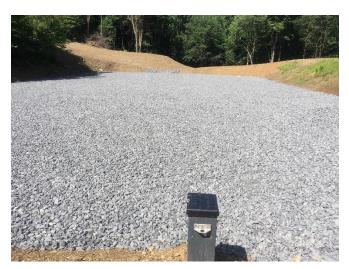


Figure 1. Completed Limestone Bed (Ruth)

Sunbeam Coal Corp. (Jacques), Permit Number 10830121

During 2018, the Department requested concurrence by OSM that the discharge is unreasonable, unnecessary or impossible to treat. The Department received notice that OSM did not concur dated October 11, 2018. The Department submitted a follow-up request dated September 30, 2019.

Doverspike Bros. Coal Co. (Emrick), Permit Number 10940105

In 2017, the Department undertook a hydrogeologic investigation through which it concluded that the discharges at the Emrick site are impossible to treat because there is not sufficient space available between the discharges and the receiving stream to construct the necessary treatment system. During 2018, the Department evaluated an alternative project that would make a substantive improvement in stream quality within the same watershed. Based on that evaluation, completed July 17, 2018, the Knox District Mining Office coordinated with the Office of Oil and Gas Management to plug an abandoned gas well (OSDIS) located approximately 300 feet downstream of the mine site that causes greater iron and manganese loading, and biological impact, in the receiving stream than the Emrick discharges.

The gas well was successfully plugged in August 2019. Water sample results of the stream post-plugging show the iron concentration has dropped below detectable limits, the manganese is less than 1.0 mg/l and the visual improvements were immediately noticeable.



Figure 1. Stream Prior to Well Plugging (Emrick)



Figure 2. Well Plugging (Emrick)



Figure 3. Plugged Well (Emrick)



Figure 4. Stream Next to Plugged Well (Emrick)

R.S. Carlin (Mine #26), Permit Number 14663010

During 2018, the Department conducted water monitoring of discharge TSNO and the next three levels of receiving stream for making mass balance calculations to assess what impact constructing a treatment system might have in these severely impacted waters. Additional sampling necessary to complete the calculations was completed by March 31, 2019. Problems were encountered using Geochemist Workbench software to run mass balance calculations, and the Department worked with OSMRE experts over several months trying to diagnose the issues. A revised report including the mass balance was submitted to OSMRE December 31, 2019 requesting reconsideration of treating this point until other pressing issues in this watershed are addressed. In the meantime, the Department contacted the property owners and discussed the possibility of treatment system construction. Most significantly, the District Mining Office has contacted the Department's Bureau of Abandoned Mine Reclamation about the existence of a large abandoned and unreclaimed mine, which unexplainably is absent from BAMR's abandoned mine inventory, the existence of which makes any treatment of the Mine 26 discharge TSNO unlikely to improve the watershed to any significant degree.

Benjamin Coal (Little Beaver #1), Permit Number 17820132

During 2018, the Department worked with the Clearfield County Conservation District (CCCD) to compile data, secure landowner approvals, and encourage applying for a Grant to provide treatment at the ABS discharge RLB2. The CCCD and consultant Hedin Environmental submitted application and were awarded a SMCRA Grant in November 2018 for the design and construction of a passive treatment system for the RLB2 discharge. Hedin carried out site work in 2019 to collect water quality information to aid in system design, which is nearly complete. Construction is set to get underway in Spring of 2020.

Benjamin Coal (Marshall), Permit Number 17860105

During 2018, the Department developed a report urging reconsideration of requiring treatment at this site due to the technical impossibilities of building here. The Department is supplementing that report with an analysis of treatment benefit, or lack thereof, of any proposed system. The Department has conducted water monitoring of discharge MP4 and the next three levels of receiving stream for making mass balance calculations. Problems were encountered using Geochemist Workbench software to run mass balance calculations, and the Department worked with OSMRE experts over several months trying to diagnose the issues. Calculations will be completed and a revised report asking OSMRE for a reconsideration of treating this point will be submitted by January 31, 2020.

Al Hamilton Contracting Co. (Kaufman North), Permit Number 17970107

As the Department identified in its 2016 Report, the site has two passive treatment systems constructed by Al Hamilton prior to forfeiture. The existing systems still function, and the Department is monitoring their status for mid-term maintenance. Because of their current functionality, the Department had postponed the work identified in the 2016 report, intending it to be addressed as part of the routine maintenance by the contract operator, including rehabilitation of VFP media in the JR system, and adding additional limestone to allow GR system to treat under high flow conditions. In August of 2019, contract operator G Force Engineering removed and replaced the passive treatment system compost media and replaced plumbing features at the JR system, which brought that facility back to full functionality. Additional stone will be added to GR system in an upcoming O&M cycle. O&M of the treatment systems have been under contract since 2004.

Purco Coal Inc. (Watkiss Mine), Permit Number 26753065

During 2018, Stream Restoration, Inc., the recipient of a Growing Greener grant to construct a water treatment system at this site, requested an extension through December 31, 2019 due to difficulties coordinating access to the site. During 2019, Stream Restoration, Inc., requested another extension. Because there had been no progress between extension requests, the Department made the decision to deny the recent extension request and cancel the Grant

Agreement. The Western PA Conservancy (WPC) has agreed to submit a new Growing Greener grant application for 2019 – 2020. With the WPC now involved, the construction of a new treatment system is anticipated to be completed by the end of 2021.

Arthur Brooks Coal Co. (Honsaker Site), Permit Number 26830108

During 2019, the Department requested a new preliminary design to construct a treatment system on Fayette County Property to capture both Title IV and Title V discharges. Since BAMR will not be funding this project, they do not have any issue with mixing Title IV and V treatment. The Department plans to discuss with county officials and the Honsaker's about the signing a ROE agreement sometime in the spring of 2020. Once ROEs are executed, sampling and flow measurements on both Title IV and V discharges will commence.

James Rumble and Wm. Bane (Luzerne Twp. Mine), Permit Number 26840110

During 2019, the Department has executed a Task Agreement with a design consultant. Data collection by the design consultant is continuing. Construction of Treatment is anticipated to begin sometime in the fall of 2020.

Global Coal Recovery Inc. (Isabella Mine), Permit Number 26931601

During 2019, the District Mining Office continued to collect data and meet with the Department's Division of Dam Safety and OSM. Dam Safety approved work regarding the Fresh Water Impoundment and the Department purchased Flumes to be installed at specified locations. This is a three Phase project. Phase III is the design and construction of a treatment system. Based on the current data, the Department and OSM theorize that the Fresh Water Impoundment is hydrologically tied to the AMD discharges and by reducing the size of the Fresh Water Impoundment, the flow of the AMD discharges will also reduce. The priority is the Fresh Water Impoundment and Frog Town Road. High pressure gas and water lines cross the proposed spillway location and the relevant parties are estimating 10 to 12 months of permitting time for possible relocation. The Department anticipates that the land reclamation will occur in 2020, and the treatment system constructed in 2021. This project is funded through a grant from OSMRE, SMCRA and Forfeited Bond.

Pengrove Coal Co. (Martin Mine), Permit Number 61820105

During 2018 through present, the Department has continued to try to coordinate access for construction of the facility and its long-term operation and maintenance.

Delta Penn Corp. (Hostetter Mine), Permit Number 65830202

During 2019, Stream Restoration, Inc., the recipient of a Growing Greener grant to construct a water treatment system at this site, completed the project and the new treatment system was placed online on November 30, 2019. Data collection/water sampling activities ongoing to confirm treatment system is adequately treating. Once confirmed, the Department will request removal from ABS list.



Stream Intake Flow Control System



Oxidation Precipitation Channel (OPC)



Settling Pond/Window Baffle Curtain/Horizontal Flow Limestone Bed



Merge Effluent Channel/Final Discharge Point

Sites listed in the Settlement Agreement

Attachment #1 ABS LEGACY SITES

DEDMIT	ADS LEGACT SITES			
PERMIT NUMBER	MINE OPERATOR	MINE SITE	CHANGES	
03840112	Darmac Coal Inc.	Darmac #14		
03890108	Darmac Coal Inc.	Silver Rock		
05830101	L&B Coal Co.	No.5	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1	
10820121	Pengrove Coal Co.	Ruth		
10830121	Sunbeam Coal Corp.	Jacques	Seeking concurrence from OSM to remove. Remains on ABS List #1	
10860118	C&K Coal Co.	Snyder Sertik		
10940105	Doverspike Bros. Coal Co.	Emerick		
11693000	K&J Coal Co.	Westover	Fully-funded Post-Mining Discharge Treatment Trust. See 48 Pa.B. 5655 (September 8, 2018); Removed from ABS List #1	
11783035	C&K Coal Co.	Bell Woodcock		
11813019	PA Energy Corp.	Horse Hill Strip		
11823002	C&K Coal Co.	Stroud		
11850106	C&K Coal Co.	Cambria 51		
11950102	Laurel Land Dev., Inc.	McDermott	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1	
14663003	Power Operating	Dugan 2		
14663004	Power Operating	Dugan 4		
14663010	R.S. Carlin	Mine #26		
14803008	Avery Coal	Pine Glen	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1	
16713004	C&K Coal Co.	Hill Estate		
16803011	Glacial Minerals Inc.	Vosburg		
16803030	C&K Coal Co.	Smith Heasley		

16820107	REM Coal Co. Inc.	Truittsburg	
16830114	C&K Coal Co.	Tremba Horner	Discharge meets effluent limits and does not violate water quality standards. <i>See</i> 48 Pa.B. 5655 (September 8, 2018); Removed from ABS List #1
16840103	C&K Coal Co.	Kriebel	
16850101	Glacial Minerals Inc.	Blair Mine	
17723164	Al Hamilton Contr. Co.	Little Beth	
17753159	Al Hamilton Contr. Co.	Miller Stein	
17803054	Thompson Bros.	Alder Run	
17803176	Al Hamilton Contr. Co.	Sandturn	
17810104	Thompson Bros.	Morris #2	
17810154	Thompson Bros.	001 Strip	
17813143	Chews Contracting	Little D	
17820106	Al Hamilton Contr. Co.	Pearce	
17820114	Power Operating	Vought	
17820132	Benjamin Coal	Little Beaver #1	
17820143	Avery Coal Co.	Victoria	
17820166	Al Hamilton Contr. Co.	Carnwath	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1
17850109	Al Hamilton Contr. Co.	Ralston	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1
17860105	Benjamin Coal	Marshall	
17870114	M&M Const. Co. Inc.	Latherow Mine	
17880129	K&J Coal Co.	Gaber/Brown	Fully-funded Post-Mining Discharge Treatment Trust. <i>See</i> 48 Pa.B. 5655 (September 8, 2018); Removed from ABS List #1
17890115	Al Hamilton Contr. Co.	Kaufman	
17921605	Thomas Coal Sales	Greenwood Tipple	
17970107	Al Hamilton Contr. Co.	Kaufman North	
18860101	Lobb Inc.	Narco	
26753065	Purco Coal Inc.	Watkiss Mine	
26830108	Arthur Brooks Coal Co.	Honsacker Site	

26840110	James Rumble & Wm.	Luzerne Twp. Mine	
26931601	Global Coal Recovery Inc.	Isabella Mine	
30840102	Greene County Coal	McNatt Strip	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1
32823035	Acme Drilling	Broom Strip	
33743044	REM Coal Co.	Smail	
33803040	REM Coal Co.	Orcutt	
33830117	Gurosik Coal co. Inc.	King	
33840111	Doverspike Bros. Coal Co.	Mowery Mine	
56763022	Delta Mining Inc.	Maust Mine	
56773084	D&E Const. Co.	Moore Strip	
56773136	Bituminous Coals Inc.	Addison Strip	
56783046	H&H Coal Co.	James E. Long	
56793053	Delta Mining Inc.	Hay 2	
56793078	Windber High Std. Coal	Brant Strip	
56803014	Delta Mining Inc.	Bashore Mine	
56813054	L&L Mining Inc.	Berkey	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1
56823108	C&O Coal Co.	Burkholder Strip	
56840103	Metco Mining & Minerals Inc.	Ankey Mine	
56840112	Amer. Dev. Co.	Job 33	Facility completed prior to program amendment; certified and removed from List #4 in 2016 Report; Remains on ABS List #1
56960111	Big J Mining Inc.	Sorber Mine	
57830101	Bernice Mining	Lewis Mine	
61783001	C&K Coal Co.	Racic	
61820102	H&D Coal	Merola	
61820105	Pengrove Coal Co.	Martin Mine	
65703058	Frank Kowalski	Kowalski No.1 Strip	No ABS-related post-mining discharge. See 48 Pa.B. 5655 (September 8, 2018); Removed from ABS List #1

65830202	Delta Penn Corp.	Hostetter Mine	
65940108	Bulldog Excav.	Andrews Strip	Facility completed prior to
			program amendment; certified
			and removed from List #4 in
			2016 Report;
			Remains on ABS List #1

ATTACHMENT #2 Potential ABS Legacy Sites

Permit Number	Mine Operator	Mine Site	Changes
11773037	Cooney Bros. Coal Co.	Caroff Strip	
11803038	Cooney Bros. Coal Co.	Pot Ridge 2 Strip	
11813039	Cooney Bros. Coal Co.	Feller 2 Strip	
11813040	Cooney Bros. Coal Co.	Dunlo 1 Strip	
11830102	MB Energy Inc.	Grabiak Strip	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in Pennsylvania Bulletin
11860104	Cooney Bros. Coal Co.	Bethlehem Strip	
17970102	Enercorp Inc.	Forcey Mine	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in Pennsylvania Bulletin
32810135	MB Energy Inc.	Dietrich Mine	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in Pennsylvania Bulletin
32820134	MB Energy Inc.	CBC Strip	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in Pennsylvania Bulletin
32823005	Blairsville Assoc.	Eagle Strip & Auger	Full cost bonded; To Be Removed from ABS List #2 upon request for concurrence by OSM and

			publication in Pennsylvania Bulletin
32841601	Robindale Energy Servs., Inc.	Dilltown Prep Plant	
32880108	MB Energy Inc.	Brush Valley 1 Mine	ABS discharges improved on their own by 2012 and DEP released remaining bonds; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in the Pennsylvania Bulletin
32950104	Big Mack Leasing Co., Inc.	Iselin 18 mine	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in the Pennsylvania Bulletin
54733020	BET Assoc. IV LLC	LCN Mine	
56663098	PBS Coals Inc.	Jolin Strip/Job 12	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in the Pennsylvania Bulletin
56663135	PBS Coals Inc.	Walker Mine	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in the Pennsylvania Bulletin
56743138	Cooney Bros. Coal Co.	Pot Ridge Lasky Strip	
56813050	Shade Mining Co.	Shade 3 Mine	Post-Mining Discharge Treatment Trust fully funded. See 48 Pa.B. 5655 (September 8, 2018); To Be Removed from ABS List #2

56813104	PBS Coals Inc.	Roberts Mine	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in the Pennsylvania Bulletin.
56841605	Croner, Inc.	Goodtown Prep Plant	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in the Pennsylvania Bulletin.
56860104	Rosebud Mining Co.	Schrock Strip	Post-Mining Discharge Treatment Trust fully funded. <i>See</i> 48 Pa.B. 5655 (September 8, 2018); To Be Removed from ABS List #2
56880103	Rosebud Mining Co.	Jopa 1	Full cost bonded. See 48 Pa.B. 5655 (September 8, 2018); Removed from ABS List #2
56890102	Svonavec Inc.	Ohler Strip	Post-Mining Discharge Treatment Trust fully funded. See 48 Pa.B. 5655 (September 8, 2018); To Be Removed from ABS List #2
56950101	Rosebud Mining Co.	Poorbaugh Strip	Post-Mining Discharge Treatment Trust fully funded. See 48 Pa.B. 5655 (September 8, 2018); To Be Removed from ABS List #2
56950105	Marquise Mining Corp.	MF Land Operation	Post-Mining Discharge Treatment Trust fully funded. <i>See</i> 48 Pa.B. 5655 (September 8, 2018); To Be Removed from ABS List #2

56960106	Rosebud Mining Co.	Horner	Full cost bonded. See 48 Pa.B. 5655 (September 8, 2018); Removed from ABS List #2
56960107	PBS Coals Inc.	Acosta	To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in the Pennsylvania Bulletin.
65810113	MB Energy Inc.	Campbell Skovira Mine	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in Pennsylvania Bulletin
65860105	MB Energy Inc.	Ridge Road Mine	Post-Mining Discharge Treatment Trust fully funded; To Be Removed from ABS List #2 upon request for concurrence by OSM and publication in Pennsylvania Bulletin

ATTACHMENT #3 ABS Bond Forfeiture Sites That Need Land Reclamation Work

Permit Number	Mine Operator	Mine Site	Changes
14663004	Power Operating Co. Inc.	Dugan 4	Certified complete (full- cost bonded) in 2018 Report
17820114	Power Operating Co. Inc.	Vought	
17841605	Benjamin Coal Co.	3 Prep Plant	
26931601	Global Coal Recovery Inc.	Isabella Mine	
26840202	Grandstone Coal Co.	Grandstone Site	
40920101	Laurel Run Corp.	Laurel Run Mine	Certified complete in 2017 Report
49851605	Twin Creek Coal Co.	Swift Breaker Mine	Certified complete in 2016 Report
54813225	Shamrock Coal Co. Inc.	Reber 4 Mine	Certified complete in 2017 Report
54830110	J&W Coal Co.	Lake Run 1 Mine	Certified complete in 2017 Report
65860201	Aspenenergy Inc.	Wilpen Operation	
65920108	Bituminous Proc. Co. Inc.	Wyano Mine	Certified complete in 2016 Report
65920201	Ebony Coal Co.	Claridge Sub F Refuse Pile	

ATTACHMENT #4 ABS Legacy Sites That Need Treatment System Work

Permit Number	Mine Operator	Mine Site	Changes
05830101	L&B Coal Co.	No. 5	Certified complete in 2016 Report
10820121	Pengrove Coal Co.	Ruth	Certified complete in 2019 Report
10830121	Sunbeam Coal Corp.	Jacques	•
10940105	Doverspike Bros. Coal Co.	Emrick	Certified complete (alternative project) in 2019 Report
11950102	Laurel Land Dev., Inc.	McDermott	Certified complete in 2016 Report
14663010	R.S. Carlin	Mine #26	•
14803008	Avery Coal	Pine Glen	Certified complete in 2016 Report
17723164	Al Hamilton Contr. Co.	Little Beth	Certified complete in 2018 Report
17803054	Thompson Bros.	Alder Run	Certified complete in 2018 Report
17810104	Thompson Bros.	Morris #2	Certified complete in 2018 Report
17820132	Benjamin Coal	Little Beaver #1	•
17830143	Avery Coal Co.	Victoria	Certified complete in 2017 Report
17820166	Al Hamilton Contr. Co.	Carnwath	Certified complete in 2017 Report
17850109	Al Hamilton Contr. Co.	Ralston	Certified complete in 2017 Report
17860105	Benjamin Coal	Marshall	
17890115	Al Hamilton Contr. Co.	Kaufman (camp hope)	Certified complete in 2018 Report
17970107	Al Hamilton Contr. Co.	Kaufman North	Certified complete in 2019 Report
26753065	Purco Coal Inc.	Watkiss Mine	
26830108	Arthur Brooks Coal Co.	Honsacker Site	
26840110	James Rumble & Wm. Bane	Luzerne Twp. Mine	
26931601	Global Coal Recovery Inc.	Isabella Mine	
56813054	L&L Mining Inc.	Berkey	Certified complete in 2016 Report
56840112	Amer. Dev. Co.	Job 33	Certified complete in 2016 Report

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61820105	Pengrove Coal Co.	Martin Mine	
65703058	Frank Kowalski	Kowalski No. 1 Strip	Certified complete
			(no ABS discharge)
			in 2018 Report
65830202	Delta Penn Corp.	Hostetter Mine	Certified complete
			in 2019 Report
65940108	Bulldog Excav.	Andrews Strip	Certified complete
			in 2016 Report