

**IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA  
CHARLESTON DIVISION**

UNITED STATES OF AMERICA; the STATE OF WEST )  
VIRGINIA by and through the WEST VIRGINIA )  
DEPARTMENT OF ENVIRONMENTAL PROTECTION; the )  
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL )  
PROTECTION; and the COMMONWEALTH OF )  
KENTUCKY by and through the KENTUCKY ENERGY )  
AND ENVIRONMENT CABINET )

Plaintiffs,

v.

ALPHA NATURAL RESOURCES, INC.; ALPHA )  
APPALACHIA HOLDINGS, INC.; ALEX ENERGY, INC.; )  
ALPHA PA COAL TERMINAL, LLC; AMFIRE MINING )  
COMPANY, LLC; ARACOMA COAL CO., INC.; )  
BANDMILL COAL CORP.; BELFRY COAL CORP.; BIG )  
BEAR MINING CO.; BROOKS RUN MINING COMPANY, )  
LLC; BROOKS RUN SOUTH MINING LLC; CLEAR FORK )  
COAL CO.; CUMBERLAND COAL RESOURCES, LP; )  
DELBARTON MINING CO.; DICKENSON-RUSSELL )  
COAL COMPANY, LLC; DUCHESS COAL CO.; EAGLE )  
ENERGY, INC.; ELK RUN COAL CO., INC.; EMERALD )  
COAL RESOURCES, LP; ENTERPRISE MINING )  
COMPANY, LLC; GOALS COAL CO.; GREYEAGLE )  
COAL CO.; HARLAN RECLAMATION SERVICES LLC; )  
HERNDON PROCESSING CO., LLC; HIGHLAND MINING )  
CO.; INDEPENDENCE COAL COMPANY, INC.; JACKS )  
BRANCH COAL CO.; KANAWHA ENERGY CO.; KEPLER )  
PROCESSING CO., LLC; KINGSTON MINING, INC.; )  
KINGWOOD MINING CO., LLC; KNOX CREEK COAL )  
CORP.; LITWAR PROCESSING CO., LLC; MARFORK )  
COAL CO.; MARTIN COUNTY COAL CORP.; NEW )  
RIDGE MINING CO.; OMAR MINING CO.; PARAMONT )  
COAL COMPANY VIRGINIA, LLC; PAYNTER BRANCH )  
MINING, INC.; PEERLESS EAGLE COAL CO.; )  
PERFORMANCE COAL CO.; PETER CAVE MINING; )  
PIGEON CREEK PROCESSING CORP.; PIONEER FUEL )  
CORP.; POWER MOUNTAIN COAL CO.; PREMIUM )  
ENERGY, LLC; RAWL SALES & PROCESSING CO.; )  
RESOURCE DEVELOPMENT, LLC; )

Civil Action No. \_\_\_\_\_

CONSENT DECREE

RESOURCE LAND CO.; RIVERSIDE ENERGY CO., LLC; )  
ROAD FORK DEVELOPMENT CO.; ROCKSPRING )  
DEVELOPMENT, INC.; RUM CREEK COAL SALES, INC.; )  
SIDNEY COAL CO.; SPARTAN MINING CO.; STIRRAT )  
COAL CO.; SYCAMORE FUELS INC.; TENNESSEE )  
CONSOLIDATED COAL COMPANY; TRACE CREEK )  
COAL CO.; and TWIN STAR MINING, INC. )  
)  
Defendants. )

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## **I. BACKGROUND**

A. On May 10, 2007, the United States filed a complaint against Massey Energy Company and 27 subsidiaries for violations of the Clean Water Act. (S.D.W.Va., 2:07-cv-0299). On January 17, 2008, the United States lodged a Consent Decree with the Southern District of West Virginia to resolve the violations alleged in the complaint through the date of lodging. On April 9, 2008, the Court approved and entered the Consent Decree (“Massey CD”). The United States alleges that, since entry of the Massey CD, Massey Energy Company and its subsidiaries have continued to discharge pollutants in violation of the conditions and limitations in their National Pollutant Discharge Elimination System (“NPDES”) permits.

B. On June 1, 2011, Alpha Natural Resources, Inc. acquired Massey Energy Company in its entirety. Massey Energy Company is now known as Alpha Appalachia Holdings, Inc. The United States alleges that, prior to the acquisition of Massey Energy Company, Alpha Natural Resources, Inc. and its subsidiaries discharged pollutants in violation of the conditions and limitations in their NPDES permits, and that these companies continue to discharge pollutants in violation of the conditions and limitations in their NPDES permits.

C. Prior to lodging of this Consent Decree, certain Defendants entered into settlements relating to violations of NPDES permit limits for selenium:

i. On December 5, 2011, the Circuit Court of McDowell County, West Virginia entered a Consent Decree between West Virginia Department of Environmental Protection and Defendant Riverside Energy Company, LLC in Civil Action No. 10-C-109-S (the “Riverside Consent Decree”). Among other violations, the Riverside Consent Decree resolves alleged violations of selenium limits for NPDES permit WV1018876, Outlets 001 and 007 (the “Riverside

Consent Decree Outlets”), and prescribes injunctive relief for bringing those Outlets into compliance with selenium limits.

ii. On January 24, 2012, the Southern District of West Virginia entered a Consent Decree between Ohio Valley Environmental Coalition, Inc., et al. and Defendants Independence Coal Company, Inc. and Jacks Branch Coal Company in Civil Action No. 3:10-cv-0836 (the “Independence Consent Decree”). The Independence Consent Decree resolves alleged violations of selenium limits for NPDES permits WV0093912, Outlets 004, 005, 007, 012, 022, 033, and 034; WV1016890, Outlets 008 and 015; and WV1017152, Outlets 029, 031, 037, 042, and 046 (the “Independence Consent Decree Outlets”) and prescribes injunctive relief for bringing those Outlets into compliance with selenium limits.

iii. On July 23, 2012, the Circuit Court of Raleigh County, West Virginia entered a Consent Decree between West Virginia Department of Environmental Protection and Defendant Pioneer Fuel Corporation in Civil Action No. 10-C-462-H (the “Pioneer Consent Decree”). Among other violations, the Pioneer Consent Decree resolves alleged violations of selenium limits for NPDES permit WV1021664, Outlets 004, 008, 009, 011, 012, and 013 (the “Pioneer Consent Decree Outlets”), and prescribes injunctive relief for bringing those Outlets into compliance with selenium limits.

iv. On December 5, 2012, the Circuit Court of Wyoming County, West Virginia entered a Consent Decree between West Virginia Department of Environmental Protection and Defendant Paynter Branch Mining, Inc. in Civil Action No. 10-C-97 (the “Paynter Consent Decree”). Among other violations, the Paynter Consent Decree resolves alleged violations of selenium limits for NPDES permits WV1016440, Outlets 019 and 020, and WV1018906, Outlets

001 and 002 (the “Paynter Consent Decree Outlets”), and prescribes injunctive relief for bringing those Outlets into compliance with selenium limits.

D. Concurrent with the lodging of this Consent Decree, Plaintiffs, the United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), the State of West Virginia by and through the West Virginia Department of Environmental Protection, the Pennsylvania Department of Environmental Protection, and the Commonwealth of Kentucky, by and through the Kentucky Energy and Environment Cabinet, have filed a Complaint in this action against Alpha Natural Resources, Inc., Alpha Appalachia Holdings, Inc., and certain subsidiaries with operations in Kentucky, Pennsylvania, Tennessee, Virginia, and West Virginia<sup>1</sup> (the “Complaint Defendants”).

E. The Complaint alleges that the Complaint Defendants violated Sections 301 and 402 of the Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 and the Water Quality Act of 1987 (“CWA” or the “Act”), 33 U.S.C. §§ 1311 and 1342; the West Virginia Water Pollution Control Act (“WPCA”), W. Va. Code § 22-11-8; Sections 301, 307, 315 and 601 of the Pennsylvania Clean Streams Law, 35 P.S. §§ 691.301, 691.307, 691.315 and 691.601; and Kentucky Revised Statutes § 224.70-100, *et seq.* Specifically, the Complaint alleges that the

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<sup>1</sup> Alex Energy, Inc.; Alpha PA Coal Terminal, LLC; Amfire Mining Company, LLC; Aracoma Coal Co., Inc.; Bandmill Coal Corp.; Belfry Coal Corp.; Big Bear Mining Co.; Brooks Run Mining Company, LLC; Brooks Run South Mining LLC; Clear Fork Coal Co.; Cumberland Coal Resources, LP; Delbarton Mining Co.; Dickenson-Russell Coal Company, LLC; Duchess Coal Co.; Eagle Energy, Inc.; Elk Run Coal Co., Inc.; Emerald Coal Resources, LP; Enterprise Mining Company, LLC; Goals Coal Co.; Greyeagle Coal Co.; Harlan Reclamation Services LLC; Herndon Processing Co., LLC; Highland Mining Co.; Independence Coal Company, Inc.; Jacks Branch Coal Co.; Kanawha Energy Co.; Kepler Processing Co., LLC; Kingston Mining, Inc.; Kingwood Mining Co., LLC; Knox Creek Coal Corp.; Litwar Processing Co., LLC; Marfork Coal Co.; Martin County Coal Corp.; New Ridge Mining Co.; Omar Mining Co.; Paramount Coal Company Virginia, LLC; Paynter Branch Mining, Inc.; Peerless Eagle Coal Co.; Performance Coal Co.; Peter Cave Mining; Pigeon Creek Processing Corp.; Pioneer Fuel Corp.; Power Mountain Coal Co.; Premium Energy, LLC; Rawl Sales & Processing Co.; Resource Development, LLC; Resource Land Co.; Riverside Energy Co., LLC; Road Fork Development Co.; Rockspring Development, Inc.; Rum Creek Coal Sales, Inc.; Sidney Coal Co.; Spartan Mining Co.; Stirrat Coal Co.; Sycamore Fuels Inc.; Tennessee

Complaint Defendants violated Section 301 of the Act by discharging pollutants in violation of the conditions and limitations of NPDES permits issued to those defendants pursuant to Section 402 of the Act, 33 U.S.C. § 1342; Section 8 of the WPCA, W. Va. Code § 22-11-8; Sections 301, 307 and 315 of the Pennsylvania Clean Streams Law, 35 P.S. §§ 691.301, 691.307, 691.315; and Kentucky Revised Statutes § 224.70-110, *et seq.* Altogether, the Complaint alleges violations at nearly 800 outfalls permitted in more than 330 NPDES permits held by 62 separate subsidiaries. The Complaint also alleges that Alpha Natural Resources, Inc. and Cumberland Coal Resources, LP violated Section 301 of the Act, 33 U.S.C. § 1311, and Section 301 of the Pennsylvania Clean Streams Law, 35 P.S. § 691.301, by discharging and continuing to discharge pollutants into state waters and waters of the United States without complying with the requirements for obtaining an NPDES permit.

F. Complaint Defendants do not admit any liability to the United States or the States arising out of the transactions or occurrences alleged in the Complaint nor do Complaint Defendants admit any fact or legal conclusion alleged in the Complaint.

G. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:



## **II. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the Parties and over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367; 28 U.S.C. § 1651; Fed. R. Civ. Proc. 19(a); and Section 309(b) of the Clean Water Act, 33 U.S.C. § 1319(b).

2. Venue is proper in the Southern District of West Virginia pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1395(a), as well as Section 309(b) of the Clean Water Act, 33 U.S.C. § 1319(b), because it is the judicial district in which Defendants are located, reside, and/or are doing business, and/or in which a substantial part of the violations alleged in the Complaint occurred.

3. For purposes of this Decree, or any action to enforce this Decree, Defendants consent to the Court's jurisdiction over this Decree and consent to venue in this judicial district.

4. For purposes of this Decree, Defendants agree that the Complaint states claims upon which relief may be granted pursuant to Sections 301 and 402 of the Act, 33 U.S.C. §§ 1311 and 1342, West Virginia Code § 22-11-1, *et seq.*; Sections 301, 307, 315 and 601 of the Pennsylvania Clean Streams Law, 35 P.S. §§ 691.301, 691.307, 691.315 and 691.601; and Kentucky Revised Statutes § 224.70-100, *et seq.*

## **III. APPLICABILITY**

5. The obligations of this Consent Decree apply to and are binding upon the United States and the States, and upon Defendants and any successors, assigns, or other entities, or persons otherwise bound by law.

6. The provisions of this Consent Decree shall apply to Facilities and Future Facilities located in Kentucky, Pennsylvania, Tennessee, Virginia, and West Virginia.

7. To avoid inconsistent injunctive relief for addressing selenium violations at certain Alpha Facilities, the provisions of this Consent Decree do not apply to violations of selenium limits for the Riverside, Independence, Pioneer, or Paynter Consent Decree Outlets referenced in Paragraph C of Section I (Background). Notwithstanding, the United States and West Virginia reserve all rights and claims with respect to those selenium violations in accordance with Paragraphs 147 and 148.

8. Defendants hereby agree that they shall be bound to perform duties scheduled to occur by this Consent Decree prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter this Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

9. No transfer of ownership or operation of any Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant(s) of their obligation to ensure that the terms of Sections VIII (Selenium Injunctive Relief) and IX (Osmotic Pressure Injunctive Relief) and related obligations of the Decree are implemented. At least 30 Days prior to the transfer of any Facility with obligations under Sections VIII or IX, the applicable Defendant(s) shall provide a copy of this Consent Decree to the proposed transferee and simultaneously provide written notice of the prospective transfer, together with a copy of the provisions of the proposed written agreement pertaining to the successor entity's assumption of responsibilities relating to Sections VIII and IX under this Consent Decree, to EPA Regions 3 and 4, the States, and the United States Department of Justice ("DOJ"), in accordance with Section XVII of this Decree (Notices). Any attempt to transfer

ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Decree.

10. Defendants shall not transfer ownership or operation of any Facility in order to alleviate responsibility under any terms of this Decree. The terms, conditions, and obligations of this Consent Decree shall survive any reorganization of Defendants' corporate structure and shall be fully binding on any entity or organization which is affiliated with Defendants. This Consent Decree, however, is not intended to restrict the lawful and legitimate sale of a Facility to a bona fide purchaser, and any such purchaser would not be subject to the terms of this Decree except as provided under law or otherwise provided under Paragraph 9.

11. In any action to enforce this Consent Decree, Defendants shall not raise as a defense the failure by any of their officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

#### **IV. DEFINITIONS**

12. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Active Biological Treatment" shall mean a wastewater treatment technology with demonstrated success in full-scale applications that uses an attached growth media bioreactor to achieve compliance with the Selenium Limits, such as ABMet or similar process demonstrated to achieve compliance with the Selenium Limits.

b. “Alternative Cumberland and Emerald Compliance Plan” or “Alternative C&E Plan” shall mean the Osmotic Pressure Defendants’ alternative method or methods for ensuring that the Cumberland and Emerald Discharges comply with the Osmotic Pressure Limits by the Cumberland and Emerald Compliance Deadline, which meets the requirements of Paragraph 96 and has been reviewed and approved by EPA, after consultation with Pennsylvania.

c. “Alternative Selenium Compliance Plan” or “Alternative SCP” shall mean the Selenium Defendants’ alternative plan for achieving compliance at each Selenium Outlet using Active Biological Treatment, Reverse Osmosis, a Biochemical Reactor, or another technology or process approved pursuant to Paragraph 87, which meets the requirements of Paragraphs 85 and 86 and has been reviewed and approved by EPA, after consultation with West Virginia.

d. “Alternative Selenium Treatment System” or “Alternative STS” shall mean the particular alternative selenium treatment system identified for each Selenium Outlet in the approved Alternative Selenium Compliance Plan.

e. “Audit Database” shall mean the electronic database created and maintained pursuant to Paragraph 55 of this Consent Decree to track the results of each of the audits and inspections conducted pursuant to Paragraphs 43-53.

f. “Audit Database Evaluations” shall mean evaluations of the Audit Database to assess whether the Audit Database is capable of collecting, maintaining, and disseminating information from audits and inspections as required by this Consent Decree, and has performed such functions accurately and completely. Audit Database Evaluations shall be conducted pursuant to Paragraphs 56-60 of this Consent Decree.

g. “Biochemical Reactor” or “BCR” shall mean an active or passive wastewater treatment technology with demonstrated success in full-scale applications that uses biological and/or chemical processes such as oxidation-reduction reactions, precipitation, or sorption to remove selenium and achieve compliance with the Selenium Limits.

h. “Category 1 Daily Violation” shall mean any non-consecutive Daily Violation, and any Daily Violation at the same Outlet for the same pollutant parameter occurring within 48 hours of notification of a non-consecutive Daily Violation.

i. “Category 1 Monthly Violation” shall mean any non-consecutive Monthly Violation.

j. “Category 2 Daily Violation” shall mean all consecutive Daily Violations for a particular parameter at an Outlet subsequent to a Category 1 Daily Violation.

k. “Category 2 Monthly Violation” shall mean all consecutive Monthly Violations for a particular parameter at an Outlet subsequent to a Category 1 Monthly Violation.

l. “Complaint” shall mean the complaint filed by the United States and the States in this action concurrent with the lodging of this Decree.

m. “Consent Decree” or “Decree” shall mean this Decree and all appendices attached hereto (listed in Section XXV).

n. “Cumberland and Emerald Compliance Deadline” shall mean the deadline for achieving compliance with the Osmotic Pressure Limits and any other NPDES permit limits applicable to any discharge from the Cumberland and Emerald Treatment System, which shall be September 30, 2016, or sooner if possible based on an approved Alternative C&E Plan.

o. “Cumberland and Emerald Discharges” shall mean the wastewater streams which are permitted for discharge as of the date of lodging by any NPDES Permit associated with discharges from or connected to the Cumberland Mine or Emerald Mine, including, without limitation, NPDES Permit Nos. PA 0213438, PA 0215724, PA 0215201, PA 0013511, PA 0235440, and PA 0033511.

p. “Cumberland and Emerald Treatment System” or “C&E Treatment System” shall mean the wastewater collection and treatment system installed pursuant to Paragraphs 90-95 of this Consent Decree for treatment of the Cumberland and Emerald Discharges.

q. “Cumberland and Emerald Treatment System Evaluation Report” or “C&E Treatment System Evaluation Report” shall mean the report evaluating the effectiveness of the C&E Treatment System, meeting the requirements of Paragraph 95 of this Consent Decree.

r. “Daily Violation” shall mean (i) any exceedance of a maximum daily discharge limitation for any parameters set forth in Defendants’ NPDES permits, as determined by a Discharge Monitoring Report (“DMR”) Sample, or (ii) any failure to attain a minimum daily discharge limitation for pH set forth in Defendants’ NPDES permits, as determined by a DMR Sample. Exceedances of any daily maximum Selenium Limit and exceedances of any daily maximum discharge limitation for osmotic pressure by the Cumberland and Emerald Discharges are excluded from this definition.

s. “Day” shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.

t. “Defendants” shall mean Alpha Natural Resources, Inc.; Alpha Appalachia Holdings, Inc.; Alex Energy, Inc.; Alpha PA Coal Terminal, LLC; Amfire Mining Company, LLC; Aracoma Coal Co., Inc.; Bandmill Coal Corp.; Belfry Coal Corp.; Big Bear Mining Co.; Black Castle Mining Company, Inc.; Black Mountain Resources LLC; Brooks Run Mining Company, LLC; Brooks Run South Mining LLC; Clear Fork Coal Co.; Cumberland Coal Resources, LP; Delbarton Mining Co.; Dickenson-Russell Coal Company, LLC; Duchess Coal Co.; Eagle Energy, Inc.; Elk Run Coal Co., Inc.; Emerald Coal Resources, LP; Enterprise Mining Company, LLC; Goals Coal Co.; Greyeagle Coal Co.; Harlan Reclamation Services LLC; Herndon Processing Co., LLC; Highland Mining Co.; Independence Coal Company, Inc.; Jacks Branch Coal Co.; Kanawha Energy Co.; Kepler Processing Co., LLC; Kingston Mining, Inc.; Kingwood Mining Co., LLC; Knox Creek Coal Corp.; Litwar Processing Co., LLC; Long Fork Coal Company, Inc.; Lynn Branch Coal Company, Inc.; Mammoth Coal Co.; Marfork Coal Co.; Martin County Coal Corp.; Mill Branch Coal Corp.; New Ridge Mining Co.; Omar Mining Co.; Paramount Coal Company Virginia, LLC; Paynter Branch Mining, Inc.; Peerless Eagle Coal Co.; Performance Coal Co.; Peter Cave Mining; Pigeon Creek Processing Corp.; Pioneer Fuel Corp.; Power Mountain Coal Co.; Premium Energy, LLC; Rawl Sales & Processing Co.; Republic Energy, Inc.; Resource Development, LLC; Resource Land Co.; Riverside Energy Co., LLC; Road Fork Development Co.; Rockspring Development, Inc.; Rum Creek Coal Sales, Inc.; Sidney Coal Co.; Solomons Mining Company; Spartan Mining Co.; Stirrat Coal Co.; Sycamore Fuels Inc.; Tennessee Consolidated Coal Company; Trace Creek Coal Co.; and Twin Star Mining, Inc.

u. “Diagnostic Sampling” shall mean sampling to determine necessary treatment measures and/or to evaluate the effectiveness of response actions taken. Such sampling of

discharges need not occur at the location designated for required sampling pursuant to the respective permit or be taken in accordance with approved test procedures under 40 C.F.R. Part 136.

v. “Discharge Monitoring Report Sample” or “DMR Sample” shall mean any sample taken in accordance with approved test procedures under 40 C.F.R. Part 136.

w. “Effective Date” shall be the date upon which this Consent Decree is entered by the Court or a motion to enter this Consent Decree is granted, whichever occurs first, as recorded on the Court’s docket.

x. “Effluent Limit Violation” shall mean a Daily Violation or a Monthly Violation.

y. “Environmental Management System” or “EMS” shall mean a management system providing the structure by which specific activities related to environmental protection and compliance can be effectively and efficiently carried out by the Defendants, which shall be developed by Defendants with assistance from the EMS Consultant pursuant to Paragraph 36 of this Consent Decree and shall address, at a minimum, the requirements of this Consent Decree and the 12 key elements in Appendix A.

z. “EMS Audit” shall mean the audit conducted by the EMS Auditor pursuant to Paragraph 41 of this Consent Decree.

aa. “EMS Auditor” shall mean the independent third party meeting the requirements of Paragraph 40 who is approved by EPA, in consultation with the States, and contracted by the Defendants to perform the duties set forth in Paragraph 41, including an evaluation of the adequacy of EMS implementation relative to the EMS Manual.



bb. “EMS Audit Findings” shall mean a written summary of all instances of noncompliance with the EMS Manual noted during the EMS Audit, and all areas of concern identified during the course of that audit which, in the EMS Auditor’s judgment, merit further review or evaluation for potential EMS, environmental, or regulatory impacts.

cc. “EMS Audit Report” shall mean a report setting forth the EMS Audit Findings resulting from the EMS Audit, which meets all of the requirements of Paragraph 41(b).

dd. “EMS Audit Response and Action Plan” shall mean a comprehensive plan for bringing the Facilities into full compliance with the EMS Manual and fully addressing all EMS Audit Findings identified in the EMS Audit Report.

ee. “EMS Consultant” shall mean the independent third party meeting the requirements of Paragraph 35 who is approved by EPA, in consultation with the States, and contracted by the Defendants to perform the duties set forth in Paragraph 36, including assisting Defendants in the development of an EMS and EMS Manual.

ff. “EMS Manual” shall mean the document created by the Defendants and the EMS Consultant pursuant to Paragraph 36 that is approved by EPA, in consultation with the States, which describes and documents the integrated EMS developed by the Defendants and contains an EMS implementation schedule.

gg. “EPA” shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

hh. “Facility” or “Facilities” shall mean mining operations (including but not limited to, surface and underground mines, coal processing and preparation plants, coal refuse facilities, coal transportation facilities, Reclaimed Sites, and all associated operations subject to the

Surface Mining Control and Reclamation Act (“SMCRA”) and the Clean Water Act) that are owned, permitted, or otherwise operated by Defendants or their direct or indirect subsidiaries during the term of this Decree. Facilities that are operated by Defendants or their direct or indirect subsidiaries under contract to an unaffiliated third party are excluded from this definition, provided that the facility is not owned by or permitted to any entity subject to this Decree.

ii. “Future Facilities” shall mean any Facilities that are not acquired, permitted, or otherwise operated by Defendants or their direct or indirect subsidiaries until after the date of lodging of the Consent Decree.

jj. “Initial Review and Evaluation” shall mean an evaluation of Defendants’ existing environmental management practices and documents to identify where existing systems or subsystems have not been adequately developed or implemented, or need to be enhanced, or new management systems or subsystems need to be developed, to adequately address all requirements under this Consent Decree and the EMS elements set forth in Appendix A.

kk. “Internal Environmental Audit” shall mean an audit of each Facility conducted pursuant to the requirements of Paragraph 51 of this Consent Decree.

ll. “Kentucky” shall mean the Commonwealth of Kentucky, by and through the Kentucky Energy and Environment Cabinet.

mm. “Massey CD” shall mean the consent decree between the United States and Massey Energy Company, et al., entered by the Southern District of West Virginia on April 9, 2008 in case number 2:07-cv-0299.

nn. “Monthly Violation” shall mean any exceedance of a monthly average discharge limitation for any parameters set forth in Defendants’ NPDES permits, as determined by a

DMR Sample. Exceedances of any monthly average Selenium Limit and exceedances of any monthly average discharge limitation for osmotic pressure by the Cumberland and Emerald Discharges are excluded from this definition.

oo. “NOVs” shall mean notices of violation under the West Virginia Surface Coal Mining and Reclamation Act, W.Va. Code § 22-3-17 (2004); notices of noncompliance under the Kentucky Surface Mining Act, Ky. Rev. Stat. Ann. § 350.130 (Michie 2004); notices of violation under the Pennsylvania Surface Mining Control and Reclamation Act, 52 P.S. §§ 1396.1-1396.31; and/or notices of violation under the Virginia Coal Surface Mining Control and Reclamation Act, Va. Code Ann. § 45.1-245. “NOVs” shall also include any notice of violation or noncompliance under applicable state water quality laws and associated regulations, including Kentucky Revised Statute Chapter 224, Ky. Rev. Stat. Ann. § 224.10, and Tennessee Water Quality Control Act, Tenn. Code Ann. § 69-3-101.

pp. “NPDES Permit” shall mean a state-issued or federal-issued permit pursuant to the National Pollutant Discharge Elimination System as defined in 40 C.F.R. § 122.2.

qq. “Osmotic Pressure Defendants” shall mean Alpha Natural Resources, Inc., Cumberland Coal Resources, LP, and Emerald Coal Resources, LP.

rr. “Osmotic Pressure Limits” shall mean any instantaneous maximum, maximum daily, and/or monthly average discharge limitation for osmotic pressure set forth in NPDES Permit Nos. PA 0213438, PA 0215724, PA 0215201, PA 0013511, PA 0235440, and PA 0033511 and in any other NPDES permit applicable to any discharge from the C&E Treatment System.

ss. “Outlet” shall mean an NPDES permitted discharge point, excluding newly permitted discharge points that have not begun to discharge.

tt. “Outlet Inspection” shall mean the field evaluation of conditions at an Outlet conducted pursuant to the requirements of Paragraph 50 of this Consent Decree.

uu. “Outlet Inspection Checklist” shall mean the checklist created by Defendants to be completed during Outlet Inspections pursuant to Paragraph 50 of this Consent Decree.

vv. “Paragraph” shall mean a portion of this Decree identified by an Arabic numeral.

ww. “Parties” shall mean the United States, West Virginia, Pennsylvania, Kentucky, and Defendants.

xx. “Pennsylvania” shall mean the Pennsylvania Department of Environmental Protection or “PADEP.”

yy. “Persistent Noncompliance Issues” shall mean three or more Effluent Limit Violations of a particular parameter at an Outlet permitted to or operated by Defendants within any 12-month period.

zz. “Reclaimed Sites” shall mean Facilities that have been regraded to “Phase I” bond release standards under SMCRA, 30 U.S.C. § 1201, *et seq.*

aaa. “Reverse Osmosis” shall mean a technology with demonstrated success in full-scale applications that uses a semi-permeable membrane system under pressure to achieve compliance with the Selenium Limits.

bbb. “Section” shall mean a portion of this Decree identified by a Roman numeral.

ccc. “Selenium Compliance Deadlines” shall mean the deadlines for achieving compliance with the Selenium Limits set forth in Appendix B.

ddd. “Selenium Compliance Plans” shall mean the Plans for achieving compliance with the Selenium Limits by the Selenium Compliance Deadlines as set forth in Appendix B, which have been reviewed and approved by EPA, after consultation with West Virginia.

eee. “Selenium Compliance Plan Evaluation Report” or “SCP Report” shall mean the report evaluating implementation of the Selenium Compliance Plan or Alternative SCP meeting the requirements of Paragraphs 82 and 83.

fff. “Selenium Defendants” shall mean Alpha Natural Resources, Inc., Alpha Appalachia Holdings, Inc., Elk Run Coal Co., Independence Coal Co., Jacks Branch Coal Co., and Riverside Energy Company, LLC.

ggg. “Selenium Limit(s)” shall mean any maximum daily discharge limitation for selenium and/or maximum monthly average discharge limitation for selenium set forth in: (i) the applicable NPDES permits for the Selenium Outlets and/or (ii) any NPDES permit applicable to any discharge from a Selenium Treatment System or water management system identified in Appendix B.

hhh. “Selenium Outlets” are the following NPDES permitted discharge points identified in the following NPDES Permits:

- i. WV0066770, Outlet 031;
- ii. WV0093912, Outlets 013, 014, 018, 030, 031, 036;
- iii. WV0093929, Outlets 004, 005, 014, 015, 017, 040;
- iv. WV1003887, Outlets 004, 012;
- v. WV1004328, Outlet 001;
- vi. WV1012452, Outlets 002, 009, 011, 014;
- vii. WV1016890, Outlets 002, 004;
- viii. WV1017152, Outlets 013, 014, 019;

- ix. WV1019228, Outlet 019;
- x. WV1027668, Outlet 006; and
- xi. WV1029711, Outlet 001.

iii. “Selenium Treatment System” or “STS” shall mean the active or passive treatment systems identified in Appendix B2, B4, B5, or B11.

jjj. “States” shall mean West Virginia, Pennsylvania, and Kentucky.

kkk. “Third Party Environmental Audit” shall mean an annual audit conducted at each Facility by a third-party consultant, pursuant to the requirements of Paragraphs 52-53 of this Consent Decree.

lll. “Treatment System Audit” shall mean an audit of the treatment systems for each Outlet to determine whether the treatment systems in place are adequate to ensure and maintain environmental compliance, which shall be conducted by a Treatment System Auditor.

mmm. “Treatment System Auditor(s)” shall mean the person(s) meeting the requirements of Paragraph 44 who perform(s) the Treatment System Audits and associated duties required by Paragraphs 43, 46, 47, and 49.

nnn. “United States” shall mean the United States of America, acting on behalf of EPA.

ooo. “Violations Database” shall mean the electronic database created and maintained pursuant to Paragraphs 61-64 of this Consent Decree to track information regarding Effluent Limit Violations and other Clean Water Act violations for each Facility.

ppp. “Violations Database Evaluations” shall mean evaluations of the Violations Database to assess whether the Violations Database is capable of collecting, maintaining, and disseminating information on CWA violations as required by this Consent Decree and has performed

such functions accurately and completely, which shall be conducted pursuant to Paragraphs 66-70 of this Consent Decree.

qqq. “West Virginia” shall mean the State of West Virginia by and through the West Virginia Department of Environmental Protection.

## **V. CIVIL PENALTY**

13. Within 30 Days after the Effective Date of this Consent Decree, Defendants shall pay a total of \$27,500,000 as a civil penalty.

14. \$13,750,000 of the civil penalty under this Section shall be paid to the United States; \$8,937,500 shall be paid to West Virginia; \$4,125,000 shall be paid to Pennsylvania; and \$687,500 shall be paid to Kentucky.

15. Defendants shall make payment to the United States under this Section by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice in accordance with written instructions to be provided to Defendants, following entry of this Consent Decree, by the Financial Litigation Unit of the U.S. Attorney’s Office for the Southern District of West Virginia, U.S. Courthouse, 300 Virginia St. S.E., Charleston, WV 25301, 304-345-2200. At the time of payment, Defendants shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to this Consent Decree in *United States, et al. v. Alpha Natural Resources, Inc., et al.*, and shall reference the DOJ case number, 90-5-1-1-08470/1, to the United States in accordance with Section XVII of this Decree (Notices); by email to [acctsreceivable.CINWD@epa.gov](mailto:acctsreceivable.CINWD@epa.gov); and by mail to:

EPA Cincinnati Finance Office  
26 Martin Luther King Drive  
Cincinnati, Ohio 45268

16. Defendants shall make payment to West Virginia under this Section by certified or cashier's check to the WVDEP. Payment shall be mailed to:

Chief Inspector, Environmental Enforcement  
West Virginia Department of Environmental Protection  
601 57<sup>th</sup> Street, SE, Charleston, WV 25304.

All payments made to West Virginia under this Consent Decree shall be deposited by West Virginia as follows: 50.35% in the Mining and Reclamation Operating Fund, 44.05% in the Water Quality Management Fund, and 5.6% in the Operator Permit/Fees Fund.

17. Defendants shall make payment to Pennsylvania under this Section by certified or cashier's check to the Commonwealth of Pennsylvania, Clean Water Fund and mailed to:

Deputy Secretary  
Active and Abandoned Mining Operations  
Pa. Department of Environmental Protection  
Rachel Carson State Office Building  
400 Market Street, 16th Floor  
Harrisburg, PA 17101

18. Defendants shall make payment to Kentucky under this Section by certified or cashier's check made payable to the Kentucky State Treasurer. Payments shall reference the civil action number, and be mailed to:

Michael Haines, General Counsel  
Energy and Environment Cabinet  
500 Mero Street, 12th Floor  
Frankfort, KY 40601

19. Defendants shall not deduct any penalties paid under this Decree pursuant to this Section or Section XI (Stipulated Penalties) in calculating its federal or state or local income tax.



## **VI. GENERAL COMPLIANCE REQUIREMENTS**

20. This Consent Decree in no way affects or relieves Defendants of their responsibility to comply with applicable federal, state, and local laws, regulations, and permits.

21. At all times, Defendants shall operate the Facilities to achieve compliance with applicable NPDES permits.

22. Defendants shall perform the work required by this Consent Decree in compliance with the requirements of all applicable federal, state, and local laws, regulations, and permits. This Consent Decree should not be considered as a permit issued pursuant to any federal, state, or local statute or regulation.

23. Approval of Deliverables. After review of any plan, report, or other item that is required to be submitted pursuant to this Consent Decree, EPA, after consultation with the relevant States, shall in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder, with explanation; or (d) disapprove the submission, with explanation.

24. If the submission is approved pursuant to Paragraph 23(a), Defendants shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 23(b) or 23(c), Defendants shall, upon written direction from EPA, after consultation with the States, take all actions required by the approved plan, report, or other item that EPA, after consultation with the States, determines are technically severable from any disapproved portions.

25. If the submission is disapproved in whole or in part pursuant to Paragraph 23(c) or 23(d), Defendants shall, within 45 Days of receipt of disapproval or such other time as the Parties agree to in writing, revise and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Defendants shall proceed in accordance with the preceding Paragraph.

26. Any stipulated penalties applicable to the original submission, as provided in Section XI of this Decree (Stipulated Penalties), shall accrue during the 45-Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Defendants' obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

27. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA, after consultation with the States, may again require Defendants to revise and resubmit the item, in accordance with the preceding Paragraphs, subject to Defendants' right to invoke Dispute Resolution under Section XIII and the right of EPA to seek stipulated penalties as provided in the preceding Paragraph.

28. Permits. Where any compliance obligation under this Section requires Defendants to obtain a federal, state, or local permit or approval, Defendants shall submit timely and substantially complete applications and take all other actions necessary to obtain all such permits or approvals. Defendants may seek relief under the provisions of Section XII of this Consent Decree (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendants have

submitted timely and complete applications and have taken all other actions necessary to obtain all such permits or approvals.

29. Consultants. Third-party consultants selected by Defendants to perform the duties set forth in Paragraphs 36 (EMS), 41 (EMS Audit), 43-49 (Treatment System Audits), 52-53 (Third Party Environmental Audits), 56-60 (Audit Database Evaluations), 66-70 (Violations Database Evaluations), 71(a)(ii) (Category 2 Daily Violation Response), and 71(b)(ii) (Category 2 Monthly Violation Response) of this Consent Decree shall have no direct financial stake in the outcome of the audit(s), inspection(s), or evaluation(s) conducted under the terms of this Decree.

30. Defendants shall provide a copy of this Consent Decree to all employees with environmental responsibilities. The copy may be provided at the semi-annual training required in Paragraph 74.

31. Contractors. Within 15 Days of the Effective Date, Defendants shall provide a copy of the Decree to each entity contracted by Defendants to fulfill responsibilities under this Decree. Defendants shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree. Within 15 Days of the Effective Date, Defendants shall develop protocols for all contractors with responsibilities relating to Outlet Inspections under Paragraph 50 of this Decree and Electronic Transmittal of Sample Results and Notification under Paragraph 61 of this Decree. Within 30 Days of the approval of the EMS Manual pursuant to Paragraph 36(c), Defendants shall refine such protocols and develop additional contractor protocols for the remaining responsibilities under the EMS Manual.

32. Implementation of Consent Decree Requirements at Future Facilities. For Future Facilities, Defendant(s)' obligation to comply with the requirements for Outlet Inspections, Audit

and Violations Databases, electronic notification of violations, and Effluent Limit Violation Response shall begin 60 Days from the initiation of operations by Defendant(s). Defendant(s) shall conduct an Initial Treatment System Audit at Future Facilities within 60 Days of the initiation of operations by Defendant(s) for Outlets with three or more effluent limit violations within the previous 12-month period, and within 90 Days of the initiation of operations by Defendant(s) for all other Outlets. Defendant(s)' obligation to comply with Reporting Requirements, Internal Environmental Audits, Third Party Audits, and training requirements pursuant to Section X and Paragraphs 51, 52-53, and 74-76 with respect to Future Facilities shall begin the second quarter after the initiation of operations by Defendant(s). Defendant(s) shall implement the Environmental Management System at Future Facilities within 9 months of the initiation of operations by Defendant(s).

## **VII. INJUNCTIVE RELIEF**

### **Environmental Management System**

33. Defendants shall, with the assistance of an EMS Consultant, develop an integrated Environmental Management System that addresses, at a minimum, the requirements of this Consent Decree and the 12 key elements in Appendix A.

34. Defendants have retained and EPA, after consultation with the States, has approved an EMS Consultant to complete an Initial Review and Evaluation and to assist Defendants in the development and implementation of the EMS in accordance with this Consent Decree. Defendants shall bear all costs associated with the EMS Consultant, cooperate fully with the EMS Consultant, and provide the EMS Consultant with access to all records, employees, contractors, and Facilities

that the EMS Consultant deems reasonably necessary to effectively perform the duties described in Paragraph 36.

35. Selection of Replacement EMS Consultant. If at any time Defendants seek to replace the EMS Consultant, Defendants shall submit to EPA and the States a list of two or more proposed consultants to serve as EMS Consultant, along with the name, affiliation, and address of the proposed consultants; information demonstrating how each proposed consultant satisfies the EMS auditor qualification requirements of Table 1 in ISO 19011 (First edition, 2002-10-01) and has experience in developing and implementing an EMS; information demonstrating that the team proposed to conduct the Initial Review and Evaluation, in composite, has a working process knowledge of the Facilities or similar operations, and has a working knowledge of federal and state environmental requirements which apply to the Facilities; and descriptions of any previous work, contracts, or financial relationships with Defendants.

a. EPA, in consultation with the States, shall notify Defendants of whether it approves any consultant(s) on the list. If EPA, after consultation with the States, does not approve any of the proposed consultants on Defendants' list, then Defendants shall submit another list of proposed consultants to EPA and the States within 30 Days of receipt of EPA's written notice. If after Defendants have submitted a third list of consultants, which must be submitted within 30 Days of receipt of written notice that EPA has not approved any of the consultants on Defendants' second list, the Parties are unable to agree on an EMS Consultant, the Parties agree to resolve the selection of the EMS Consultant through the Dispute Resolution process in Section XIII.

b. Within 10 Days after receipt of EPA's approval, Defendants shall select one consultant from those approved by EPA and shall enter into a contract with the consultant to perform

all duties described in Paragraph 36. In the event the consultant(s) approved by EPA are no longer available or willing to accept the work described in Paragraph 36 when notified of their selection by Defendants, then Defendants shall, within 30 Days after receipt of EPA's approval pursuant to Paragraph 35(a), select another consultant approved by EPA and enter into the contract to perform all duties described in Paragraph 36.

36. Duties of the EMS Consultant. Defendants' contract with the EMS Consultant shall require the EMS Consultant to perform the following duties:

a. Conduct and complete an Initial Review and Evaluation for all Defendants, prepare a report of the results, and provide such report to Defendants within 90 Days of the date of lodging. This report shall also be provided to EPA and the States, upon request;

b. Based on the Initial Review and Evaluation results and any other relevant information, assist Defendants in development of an integrated EMS that addresses, at a minimum, the requirements of this Consent Decree and the 12 key elements in Appendix A;

c. Within 6 months of the date of lodging, draft and submit to EPA and the States for review and approval an EMS Manual which describes and documents the integrated EMS developed by the Defendants with assistance from the EMS Consultant pursuant to Paragraph 36(b). The EMS Manual shall contain a schedule for each of the described systems and subsystems not already fully implemented and a final deadline to fully implement the EMS. The EMS Manual shall (i) describe or contain, as appropriate, overarching policies, procedures, and programs that comprise the EMS framework, and respective management systems, subsystems, and tasks for the elements listed in Appendix A, and (ii) describe specific procedures for implementing the requirements of this Consent Decree set forth in Paragraphs 43-105.

37. Upon Defendants' receipt of EPA's approval of the EMS Manual, Defendants, assisted by the EMS Consultant, shall commence implementation of the EMS in accordance with the schedule contained in the EMS Manual. Managers responsible for environmental compliance at each Facility shall thereafter include a certification of compliance with the approved EMS Manual in Quarterly Reports submitted pursuant to Section X, or, for any noncompliance, shall submit in the Quarterly Reports an explanation of the cause of the noncompliance, remedial steps to be taken, and a date for achieving compliance.

38. Revisions of the EMS Manual. Any revisions to the EMS Manual subsequent to its initial approval must be submitted to EPA as a separate written submission for review. Material revisions must be approved by EPA. EPA shall notify Defendants within 30 Days of its receipt of the proposed revisions whether approval of those revisions will be required.

### **Audit of EMS Implementation**

39. Defendants have retained and EPA, after consultation with the States, has approved an EMS Auditor to conduct an EMS Audit pursuant to Paragraph 41. Defendants shall bear all costs associated with the EMS Auditor, cooperate fully with the EMS Auditor, and provide the EMS Auditor with access to all records, employees, contractors, and Facilities that the EMS Auditor deems reasonably necessary to effectively perform the duties described in Paragraph 41.

40. Selection of Replacement EMS Auditor. If at any time Defendants seek to replace the EMS Auditor, Defendants shall propose to EPA and the States for approval the selection of two or more proposed auditors to serve as EMS Auditors, along with the name, affiliation, and address of the proposed auditor; certification that the individual was not involved in the Initial Review and

Evaluation to develop the integrated EMS; information demonstrating how each proposed auditor satisfies the EMS auditor qualification requirements of Table 1 in ISO 19011 (First edition, 2002-10-01); information demonstrating expertise and competence in the relevant regulatory programs under federal and state environmental laws; and a description of any previous work, contracts, or financial relationships with Defendants.

a. EPA, in consultation with the States, shall notify Defendants of whether it approves any auditor(s) on the list. If EPA, after consultation with the States, does not approve any of the proposed EMS Auditors on Defendants' list, then Defendants shall submit another list of proposed EMS Auditors to EPA and the States within 30 Days of receipt of EPA's written notice. If after Defendants have submitted a third list of proposed EMS Auditors, which must be submitted within 30 Days of receipt of written notice that EPA has not approved any of the auditors on Defendants' second list, the Parties are unable to agree on an EMS Auditor, the Parties agree to resolve the selection of the EMS Auditor through the Dispute Resolution process in Section XIII.

b. Within 10 Days after receipt of EPA's approval, Defendants shall select one auditor from those approved by EPA and shall enter into a contract with the auditor to perform all duties described in Paragraph 41. In the event the auditor(s) approved by EPA are no longer available or willing to accept the work described in Paragraph 41 when notified of their selection by Defendants, then Defendants shall, within 30 Days after receipt of EPA's approval pursuant to Paragraph 40(a), select another auditor approved by EPA and enter into the contract to perform all duties described in Paragraph 41.

41. Duties of the EMS Auditor. Defendants' contract with the EMS Auditor shall require the EMS Auditor to perform the following duties:



a. Within 11 months of approval of the EMS Manual, the EMS Auditor shall perform an audit of Defendants' EMS (the "EMS Audit"). The EMS Audit shall evaluate the adequacy of EMS implementation relative to the EMS Manual and identify areas of concern, from top management down, throughout each major organizational unit with responsibilities under the EMS Manual. The EMS Audit shall be conducted in accordance with ISO 19011 (First edition, 2002-10-01), and shall determine the following:

(i) Whether there is a defined system, subsystem, program, or planned task for the respective EMS element;

(ii) To what extent the system, subsystem, program, or task has been implemented, and is being maintained;

(iii) The adequacy of each Facility's internal self-assessment procedures for programs and tasks comprising the EMS;

(iv) Whether Defendants are effectively communicating environmental requirements to affected parts of the organization, or those working on behalf of the organization;

(v) Whether further improvements should be made to the EMS and EMS Manual; and

(vi) Whether there are deviations from Defendants' written requirements or procedures.

b. Within 30 Days following the completion of the EMS Audit, the EMS Auditor shall develop and concurrently submit an EMS Audit Report to Defendants, EPA, and the States. The EMS Audit Report shall contain: a summary of the audit process, including any obstacles encountered; detailed EMS Audit Findings, including the basis for each finding and each area of

concern identified; identification of any EMS Audit Findings corrected or areas of concern addressed during the audit; recommendations for resolving any area of concern or otherwise achieving full implementation of the EMS Manual; and certification that the EMS Audit was conducted in accordance with the provisions of this Decree.

42. Follow-Up Corrective Measures. Within 60 Days of receiving the EMS Audit Report, Defendants shall submit an EMS Audit Response and Action Plan to EPA and the States for review and approval in accordance with the procedures set forth in Paragraphs 23-27 of this Decree, except that Defendants shall submit any required revisions to the EMS Audit Response and Action Plan to EPA within 30 Days of receipt of EPA's comments. The EMS Audit Response and Action Plan shall respond to the EMS Audit Findings and areas of concern identified in the EMS Audit Report and provide an action plan for expeditiously coming into full compliance with the provisions in the EMS Manual. The EMS Audit Response and Action Plan shall include the result of any root cause analysis, specific deliverables, responsibility assignments, and an implementation schedule for the identified actions and measures, including those that may have already been completed. Immediately upon approval of a final EMS Audit Response and Action Plan, Defendants shall implement the final EMS Audit Response and Action Plan in accordance with the schedules set forth therein.

### **Audits and Inspections**

43. Treatment System Audits. Defendants shall conduct audits of the treatment systems for each Outlet at all Facilities to evaluate whether the treatment systems in place are adequate to

ensure and maintain environmental compliance. Treatment System Audits shall be conducted according to the schedule and requirements set forth in Paragraphs 44-49.

44. Treatment System Auditors. Initial and Subsequent Treatment System Audits shall be conducted by the following individuals:

a. For all Outlets with Persistent Noncompliance Issues, Treatment System Audits shall be conducted by third-party consultants with at least five years of experience with the requirements of NPDES permits and SMCRA permits and with treatment systems for and control of relevant effluent parameters in Defendants' NPDES permits.

(i) Defendants have retained an EPA, after consultation with the States, has approved Treatment System Auditors to conduct the Treatment System Audits pursuant to Paragraphs 46-49 for Outlets with Persistent Noncompliance Issues.

(ii) If at any time Defendants seek to replace such Treatment System Auditors, Defendants shall, at least 60 Days prior to any applicable deadline for conducting the Treatment System Audits, propose to EPA and the States for approval the selection of two or more proposed consultants to serve as the Treatment System Auditors, along with the name, affiliation, and address of the proposed consultant; information demonstrating how each proposed consultant has the requisite expertise and competence in the relevant regulatory programs under federal and state environmental laws; and a description of any previous work, contracts, or financial relationships with Defendants.

(iii) EPA, in consultation with the States, shall notify Defendants of whether it approves any auditor(s) on the list. If EPA, after consultation with the States, does not approve any of the proposed Treatment System Auditors on Defendants' list, then Defendants shall

submit another list of proposed Treatment System Auditors to EPA and the States within 30 Days of receipt of EPA's written notice. If after Defendants have submitted a third list of proposed Treatment System Auditors, which must be submitted within 30 Days of receipt of written notice that EPA has not approved any of the auditors on Defendants' second list, the Parties are unable to agree on a Treatment System Auditor, the Parties agree to resolve the selection of the Treatment System Auditor through the Dispute Resolution process in Section XIII.

b. For all remaining Outlets, i.e. any Outlets without Persistent Noncompliance Issues, all Treatment System Audits shall be conducted by individual(s) with experience with the requirements of NPDES permits and SMCRA permits and with treatment systems for and control of relevant effluent parameters in Defendants' NPDES permits, who do not have regular responsibilities at the Facility where the Treatment System Audit is to be conducted.

45. Defendants shall cooperate fully with the Treatment System Auditor(s) and provide access to all records, employees, contractors, and Facilities that the Treatment System Auditor(s) deem reasonably necessary to effectively perform the Treatment System Audits.

46. Initial Treatment System Audits. The first round of Treatment System Audits shall be conducted according to the following schedule:

a. Within 60 Days of the Effective Date, Defendants shall audit all Outlets with Persistent Noncompliance Issues. For the purposes of this Paragraph, Outlets with Persistent Noncompliance Issues shall be determined based on the 12-month period prior to the Effective Date.

b. Within 120 Days of the Effective Date, Defendants shall audit all remaining Outlets with one or more Effluent Limit Violations in the 24-month period prior to the first day of the month in which the Effective Date falls.

47. Within 30 Days of completion of the Initial Treatment System Audit for a particular Outlet, the Treatment System Auditor shall produce a report providing the results of the Initial Treatment System Audit for that Outlet and identifying any alterations, maintenance, or other measures to the associated treatment systems necessary to achieve and maintain environmental compliance. Defendants shall implement all such measures within the time period recommended by the Treatment System Auditor, and in no event longer than 90 Days from completion of the Initial Treatment System Audit report, unless a permit approval is necessary to implement the measures. If a permit approval is required, Defendants shall submit the permit application as soon as possible but no later than 45 Days after the Initial Treatment System Audit report, and shall implement the measures recommended by the Treatment System Auditor within the time period recommended by the Treatment System Auditor, and in no event longer than 90 Days from the receipt of permit approval. Deadlines for implementation of recommended measures pursuant to this Paragraph may be extended in writing by EPA.

48. Within 120 Days of completion of the Initial Treatment System Audits, Defendants shall submit a status report to EPA and the States. Such report shall include all findings from the Initial Treatment System Audits, including the Treatment System Auditor(s)' recommended measures for achieving and maintaining environmental compliance, and shall confirm implementation of all such measures pursuant to Paragraph 47.

49. Subsequent Treatment System Audits. Starting with the first full quarter after the completion of the Initial Treatment System Audits, Defendants shall conduct Treatment System Audits at Outlets with Persistent Noncompliance Issues on a quarterly basis. If an Outlet is audited pursuant to this Paragraph, Defendants shall continue to conduct Treatment System Audits at that

Outlet on a quarterly basis until twelve consecutive months of compliance with applicable effluent limits.

50. Outlet Inspections. Starting with the first full month after the Effective Date, Defendants shall conduct Outlet Inspections at the time of DMR Sampling, but not more than twice a month. Outlet Inspections shall be conducted pursuant to an Outlet Inspection Checklist created by Defendants, which shall include entries for whether: (a) the Outlet is accessible; (b) the Outlet is unobstructed; (c) discharge markers are visible at the Outlet; (d) there is any water flow at the Outlet; (e) there are any visual indications of overtopping of the pond or other drainage system; (f) there is a buildup of sediment at the Outlet or any other location in the pond or other drainage system; (g) there is any indication of erosion or other damage to the embankment of the pond or other drainage system; (h) baffles and retention curtains are in place; (i) chemical treatment systems are appropriately stocked with chemicals and fully operational; and (j) required lock boxes are in place on chemical treatment valves. The Outlet Inspection Checklist shall be completed at the time of each Outlet Inspection and signed by the individual completing the Outlet Inspection (electronic signatures are acceptable).

51. Internal Environmental Audits. Defendants shall conduct Internal Environmental Audits at each Facility, which shall be conducted by individual(s) with experience with the requirements of NPDES permits and SMCRA permits and with treatment systems for and control of relevant effluent limit parameters in Defendants' NPDES permits.

a. The Internal Environmental Audits shall include, but not be limited to: (i) visual inspections to assess the structural integrity of all slurry pipes; (ii) an evaluation of septic systems for proper operation and maintenance; and (iii) an assessment of sediment control structures

and haul roads, including any associated surface runoff pathways, drainage, or sediment ditches, to identify any maintenance or other measures required to address erosion and/or structural damage issues.

b. Internal Environmental Audits shall be conducted at each Reclaimed Site on an annual basis, and shall include all elements of Paragraph 51(a), as applicable. Internal Environmental Audits shall be conducted at all other Facilities on a quarterly basis, and shall include all elements of Paragraph 51(a).

c. Reports detailing the results of the Internal Environmental Audits shall be generated no later than 30 Days after completion of the Internal Environmental Audits.

52. Third Party Environmental Audits. Defendants shall hire a third-party consultant to conduct environmental audits at all Facilities, with the exception of Reclaimed Sites, pursuant to the schedule set forth in Paragraph 53. The third-party consultant must have expertise and competence in the relevant regulatory programs under federal and state environmental laws, and at least five years of experience with the requirements of NPDES permits and SMCRA permits. Third Party Environmental Audits under this Paragraph shall evaluate compliance with this Consent Decree and with the following federal statutes and equivalent state laws: Clean Air Act; Clean Water Act; Comprehensive Environmental Response, Compensation and Liability Act; Emergency Planning and Community Right to Know Act; Resource Conservation and Recovery Act; Safe Drinking Water Act; Toxic Substances Control Act; and SMCRA. The third-party consultant shall submit to Defendants a report detailing the results of the Third Party Environmental Audit no later than 30 Days after completion of the Third Party Environmental Audit.

53. Defendants shall conduct a Third Party Environmental Audit at all Facilities, with the exception of Reclaimed Sites, no later than December 31, 2014. Subsequent Third Party Environmental Audits shall be conducted on the following schedule:

a. Preparation plant and coal refuse Facilities shall be audited on an annual basis.

b. All other Facilities with the exception of Reclaimed Sites, including active surface and underground mines and associated operations, shall be audited every two years, with one-half of such mines and associated operations being audited each year.

54. Responses to any noncompliances or areas of concern identified by an audit or inspection conducted pursuant to Paragraphs 49-53 shall be completed as expeditiously as possible, and in no event shall take longer than 45 Days to complete after the applicable inspection or audit report, unless a permit approval is required. If a permit approval is required, Defendants shall submit the permit application as soon as possible but no later than 45 Days after the applicable inspection or audit report, and shall implement the appropriate response no later than 45 Days from the receipt of permit approval. Deadlines for implementation of response measures pursuant to this Paragraph may be extended in writing by EPA.

55. Audit Database. Defendants shall maintain an electronic Audit Database to track audit and inspection information relating to each Facility as required under this Consent Decree.

a. The results of the Outlet Inspections conducted pursuant to Paragraph 50 shall be entered into the Audit Database within 48 hours of completion. The results of the audits conducted pursuant to Paragraphs 43-49 and 51-53 shall be entered into the Audit Database within 48 hours of completion of the audit report.



b. The Audit Database shall include: the date and time of the audit/inspection; the names of the individuals conducting the audit/inspection; a description of any noncompliances or other areas of concern; any applicable NPDES permit number and Outlet; any applicable SMCRA permit number; and the planned response to any noncompliances or areas of concern in order to return to compliance, the individuals responsible for the response, the deadline for the response, and the date of completion of the response. Responses that are not completed by the deadline initially assigned in the Audit Database shall be reported as part of the Quarterly Report required by Section X, unless EPA has granted a written extension of time.

c. Defendants may combine this database with the Violations Database required by Paragraph 62.

d. Defendants shall provide access to the Audit Database to EPA and the States upon request. In addition, Defendants shall produce any requested information from the Audit Database to EPA and the States within 10 Days of the request.

56. Audit Database Evaluations. Defendants shall conduct evaluations of the Audit Database to assess whether the Audit Database is capable of collecting, maintaining, and disseminating information from audits and inspections as required by this Consent Decree and has performed such functions accurately and completely.

57. The Audit Database Evaluations shall be conducted by a third-party consultant with expertise in management of environmental data; database design development, implementation, and support; proficiency with Standard Query Language (“SQL”); database administrator experience with tasks such as quality control requirements, backup, recovery, security, monitoring space usage, managing transactions, performance tuning, and installing upgrades; and at least five years

experience working with relational databases such as SQL Server, Oracle, and Access. Defendants shall cooperate fully with the third-party consultant and provide access to all records, employees, contractors, and Facilities that the consultant deems reasonably necessary to effectively perform the duties in Paragraphs 58-60.

58. Initial Audit Database Evaluation. Within 30 Days of the Effective Date, Defendants shall conduct an evaluation of the Audit Database to assess the database structure and functionality, specifically the capability to accurately and timely track all audits and inspections required by this Consent Decree.

a. Within 30 Days of completing the Initial Audit Database Evaluation, the third-party consultant shall submit to Defendants, EPA, and the States a report of findings, including (i) any structural deficiencies in the operation system; (ii) any functional deficiencies in the capability of the database to track all audits and inspections required by this Consent Decree; and (iii) any recommended measures to address any deficiencies identified as a result of the Initial Audit Database Evaluation.

b. Within 30 Days of the third-party consultant's report, Defendants shall correct any deficiencies with the Audit Database by implementing any measures recommended by the third-party consultant.

59. Subsequent Audit Database Evaluations. Within 8 months of the Effective Date, Defendants shall conduct an evaluation of the Audit Database to determine the accuracy and completeness of audit and inspection information.

a. Within 30 Days of completing the Subsequent Audit Database Evaluation, the third-party consultant shall submit to Defendants, EPA, and the States a report of findings, including

(i) any failure to conduct a required audit or inspection; (ii) any failure to document an audit or inspection according to the requirements of Paragraph 55; (iii) any failure to properly document an audit or inspection based on a comparison of information from the respective audit or inspection to information in the Audit Database; and (iv) any recommended measures to address data tracking errors identified by the third-party consultant. The report shall also include an assessment, by percentage, of data tracking accuracy, based on the number of audits or inspections with any failure(s) identified under this Paragraph as compared to the number of total audits or inspections conducted.

b. Within 30 Days of the third-party consultant's report, Defendants shall fix any data errors in the Audit Database and implement any measures recommended by the third-party consultant to achieve and maintain accurate and complete data tracking.

60. Additional Audit Database Evaluations pursuant to the requirements of Paragraph 59 shall be conducted for any data errors previously identified and any new information entered into the Audit Database since the preceding Audit Database Evaluation, on the following schedule:

a. Where the preceding Audit Database Evaluation identifies a data tracking accuracy of 0-90%, the subsequent Audit Database Evaluation shall be conducted 6 months after completion of the preceding Audit Database Evaluation;

b. Where the preceding Audit Database Evaluation identifies a data tracking accuracy of above 90% to 99%, the subsequent Audit Database Evaluation shall be conducted 12 months after completion of the preceding Audit Database Evaluation; and

c. Where the preceding Audit Database Evaluation identifies a data tracking accuracy of above 99%, the subsequent Audit Database Evaluation shall be conducted on a bi-annual basis.

### **DMR Sample Notification and Violation Tracking**

61. Electronic Transmittal of Sample Results and Notification. Upon the Effective Date, Defendants shall require laboratories to provide electronic transmittal of all DMR Sample results to the Violations Database within 48 hours of completion of analysis. Upon receipt of DMR Sample results, Defendants shall provide immediate electronic notification of any violation of an applicable effluent limit to managers responsible for environmental compliance at the relevant Facilities. The electronic notification shall identify the Outlet, the relevant DMR Sample result(s), and date when the violation occurred. Defendants shall also submit DMR Sample results electronically to the relevant regulatory authority if that regulatory authority has the capability to receive DMRs electronically via a Cross Media Electronic Reporting Regulation (“CROMERR”) compliant electronic reporting system.

62. Violations Database. Defendants shall maintain an electronic Violations Database to track Clean Water Act violations data relating to each Facility. The Violations Database shall include the following information for each violation of an applicable effluent limit at each Outlet for one year immediately preceding the Effective Date:

- a. Identification of Outlet by NPDES and SMCRA permit numbers, permittee, and latitude and longitude;
- b. Dates of DMR Samples and DMR Sample results (including units);

- c. NPDES effluent limit that was exceeded;
- d. Percentage by which the limit was exceeded;
- e. Number of consecutive violations for the same pollutant parameter;
- f. Number of violations for that particular pollutant parameter over the preceding 12 months; and
- g. Total number of violations at that particular Outlet over the preceding 12 months.

63. Within two business days of receipt of DMR Sample results pursuant to Paragraph 61, Defendants shall update the Violations Database to include the information identified in Paragraph 62(a)-62(g) and any applicable stipulated penalties. In addition, Defendants shall update the Violations Database to include the following information for each violation of an applicable effluent limit for each Outlet as soon as the information becomes available:

- a. A description of the cause of the violation and the planned response, taking into account any applicable information in the Audit Database and any required actions under Paragraph 71 (Effluent Limit Violation Response);
- b. Date of receipt of the third-party consultant corrective action plan pursuant to Paragraph 71(a)(ii) or 71(b)(ii) (if applicable);
- c. Date of implementation of the third-party consultant corrective action plan pursuant to Paragraph 71(a)(ii) or 71(b)(ii) (if applicable); and
- d. Date that violation ended (if applicable).

64. The Violations Database shall also include entries for any additional CWA violations that occur subsequent to the Effective Date, including NOVs or unauthorized discharges, along with the following information:

- a. Permit number;
- b. Description of violation;
- c. Date of violation;
- d. Cause of violation and planned response, taking into account any applicable information in the Audit Database;
- e. Date that noncompliance ended (if applicable); and
- f. Any state-issued order and/or penalties associated with the violation.

65. Defendants shall provide access to the Violations Database to EPA and the States upon request. In addition, Defendants shall produce any requested information from the Violations Database to EPA and the States within 10 Days of the request.

66. Violations Database Evaluations. Defendants shall conduct evaluations of the Violations Database to assess whether the Violations Database is capable of collecting, maintaining, and disseminating information on CWA violations as required by this Consent Decree and has performed such functions accurately and completely.

67. The Violations Database Evaluations shall be conducted by a third-party consultant with expertise in management of environmental data; database design development, implementation, and support; proficiency with SQL; database administrator experience with tasks such as quality control requirements, backup, recovery, security, monitoring space usage, managing transactions, performance tuning, and installing upgrades; and at least five years experience working with

relational databases such as SQL Server, Oracle, and Access. Defendants shall cooperate fully with the third-party consultant and provide access to all records, employees, contractors, and Facilities that the third-party consultant deems reasonably necessary to effectively perform the duties described in Paragraphs 68-70.

68. Initial Violations Database Evaluation. Within 30 Days of lodging, Defendants shall conduct an evaluation of the Violations Database to assess the database structure and functionality, specifically the capability to accurately and timely track all CWA violations as required by this Consent Decree.

a. Within 30 Days of completing the Initial Violations Database Evaluation, the third-party consultant shall submit to Defendants, EPA, and the States a report of findings, including (i) any structural deficiencies in the operation system; (ii) any functional deficiencies in the capability of the database to track all CWA violations as required by this Consent Decree; and (iii) any recommended measures to address any deficiencies identified as a result of the Initial Violations Database Evaluation.

b. Within 30 Days of the third-party consultant's report, Defendants shall correct any deficiencies with the Violations Database by implementing any measures recommended by the third-party consultant.

69. Subsequent Violations Database Evaluations. Within 8 months of the Effective Date, Defendants shall conduct a complete review and evaluation of the Violations Database to determine the accuracy and completeness of reporting of Clean Water Act violations, including an investigation into the cause of any discrepancies between original data, data in the Violations Database, and data reported to the applicable state in Discharge Monitoring Reports.

a. Within 30 Days of the Subsequent Violations Database Evaluation, the third-party consultant shall submit to Defendants, EPA, and the States a report of its findings, including (i) verification that all Clean Water Act violations from all Facilities are entered into the Violations Database; (ii) verification of Clean Water Act violations reported in the Violations Database against original data from the laboratory and/or contractor, such as laboratory bench sheets and/or field data collections; (iii) verification of NPDES permit limits in the Violations Database against applicable NPDES permits; (iv) verification of Clean Water Act violations reported in the Violations Database as a result of DMR Sampling against the respective state DMR database(s); (v) verification of any other Clean Water Act violation results reported in the Violations Database against original data, such as the state-issued NOVs; (vi) any failure to document information according to the requirements under Paragraphs 61-64; and (vii) any recommended measures to address data tracking errors identified by the third-party consultant. The report shall also include an assessment, by percentage, of data tracking accuracy, based on the number of Clean Water Act violations with errors identified under this Paragraph as compared to the total number of Clean Water Act violations.

b. Within 30 Days of the third-party consultant's report, Defendants shall fix any data errors in the Violations Database and implement measures recommended by the third-party consultant to achieve and maintain accurate and complete data tracking.

70. Additional Violations Database Evaluations pursuant to the requirements of Paragraph 69 shall be conducted for any data errors previously identified and new information entered into the Violations Database since the preceding Violations Database Evaluation, on the following schedule:



a. Where the preceding Violations Database Evaluation identifies a data tracking accuracy of 0-90%, the subsequent Violations Database Evaluation shall be conducted 6 months after completion of the preceding Violations Database Evaluation;

b. Where the preceding Violations Database Evaluation identifies a data tracking accuracy of above 90% to 99%, the subsequent Violations Database Evaluation shall be conducted 12 months after completion of the preceding Violations Database Evaluation; and

c. Where the preceding Violations Database Evaluation identifies a data tracking accuracy of above 99%, the subsequent Violations Database Evaluation shall be conducted on a bi-annual basis.

### **Effluent Limit Violation Response**

71. Upon the Effective Date, Defendants shall implement a response plan for Effluent Limit Violations, which shall provide for investigation of Effluent Limit Violations and implementation of actions necessary to achieve compliance with the applicable NPDES permit limits. This response plan shall, at a minimum, provide for the following response actions at all Outlets in addition to the requirements of Paragraph 63:

a. Daily Violation Response

(i) Category 1 Daily Violation. Upon notification of a Category 1 Daily Violation, Defendants shall immediately begin daily monitoring of conditions, Diagnostic Sampling, and implementing corrective measures at the Outlet. Defendants shall continue daily monitoring, Diagnostic Sampling, and corrective measures until one compliant DMR Sample result for that parameter is achieved at the Outlet. If a compliant DMR Sample result for the same pollutant

parameter is not achieved at the Outlet within 48 hours of notification of the Daily Violation, Defendants shall also consult with an individual with substantial expertise in Clean Water Act compliance and in treatment systems for and control of relevant effluent parameters in Defendants' NPDES permits, and implement any additional measures recommended by that individual. Days with no flow conditions shall not be counted in determining whether expert consultation is required under this Subparagraph.

(ii) Category 2 Daily Violation. Upon notification of a Category 2 Violation, Defendants shall continue daily monitoring of conditions, Diagnostic Sampling, and implementing corrective measures at the Outlet until two consecutive compliant DMR Sample results for that parameter, which must include results from two separate days, are achieved at the Outlet. Defendants shall also hire a third-party consultant to conduct a complete review and evaluation of the problem. The consultant must have at least five years of experience with the requirements of NPDES permits for mining operations and with treatment systems for and control of relevant effluent parameters in Defendants' NPDES permits. The consultant shall prepare a report detailing the cause of the continuing violations and a corrective action plan to return the Outlet to compliance as soon as possible. The consultant's recommended corrective action plan shall be based on all available data, including all information in the Audit Database and/or Violations Database for the respective Outlet, and shall describe whether this approach has worked in other similar situations to resolve noncompliance. If the consultant recommends an approach previously implemented unsuccessfully by that consultant for the same parameter at any Outlet, the consultant must provide thorough justification for why the recommended approach will achieve compliance in this instance. Defendants shall implement the proposed corrective action plan according to the consultant's

recommendations within 30 Days of receipt of the consultant's report, unless a written extension of time is granted by EPA. The consultant's report and any documentation of actions taken shall be submitted in the Quarterly Report required by Section X.

b. Monthly Violation Response

(i) Category 1 Monthly Violation. Upon notification of a Category 1 Monthly Violation, Defendants shall immediately begin daily monitoring of conditions, Diagnostic Sampling, and implementing corrective measures at the Outlet. Defendants shall continue daily monitoring, Diagnostic Sampling, and corrective measures until the Outlet meets the monthly average effluent limit. Defendants shall also consult with an individual with substantial expertise in Clean Water Act compliance and in treatment systems for and control of relevant effluent parameters in Defendants' NPDES permits, and implement any additional measures recommended by that individual.

(ii) Category 2 Monthly Violation. Upon notification of the second and any subsequent consecutive Monthly Violation of the same parameter at the same Outlet, Defendants shall continue daily monitoring of conditions, Diagnostic Sampling, and implementing corrective measures at the Outlet until the Outlet meets the monthly average effluent limit for that parameter for two consecutive months. Defendants shall also hire a third-party consultant to conduct a complete review and evaluation of the problem. The consultant must have at least five years of experience with the requirements of NPDES permits for mining operations and with treatment systems for and control of relevant effluent parameters in Defendants' NPDES permits. The consultant shall prepare a report detailing the cause of the continuing violations and a corrective action plan to return the Outlet to compliance as soon as possible. The consultant's recommended corrective action plan shall

be based on all available data, including all information in the Audit Database and/or Violations Database for the respective Outlet, and shall describe whether this approach has worked in other similar situations to resolve noncompliance. If the consultant recommends an approach previously implemented unsuccessfully by that consultant for the same parameter at any Outlet, the consultant must provide thorough justification for why the recommended approach will achieve compliance in this instance. Defendants shall implement the proposed corrective action plan according to the consultant's recommendations within 30 Days of receipt of the consultant's report, unless a written extension of time is granted by EPA. The consultant's report and any documentation of actions taken shall be submitted in the Quarterly Report required by Section X.

72. If an Outlet has three or more Effluent Limit Violations for the same pollutant parameter within any 12-month period and is not otherwise subject to the requirements of Paragraph 71(a)(ii) or 71(b)(ii), then Defendants shall conduct the response actions identified in Paragraph 71(a)(ii) or 71(b)(ii).

73. During any violation response sequence pursuant to Paragraphs 71 or 72, if a Defendant is not able to collect a sample due to no flow conditions on four consecutive days, daily monitoring and sampling may be suspended. Corrective measures, expert consultation, and implementation of corrective action plans must continue as required under Paragraphs 71 or 72. If an Effluent Limit Violation occurs during the next sampling event for that Outlet, the violation response sequence resumes as if there were no suspension of daily monitoring and sampling.

## **Training**

74. Defendants shall provide and require semi-annual formal training for all employees with environmental responsibilities on relevant environmental subject matters including, but not limited to: (a) Clean Water Act compliance; (b) compliance with environmental provisions of SMCRA, including sediment control technologies; (c) mine wastewater treatment technologies and practices; (d) site-specific training as necessary to fulfill environmental responsibilities; (e) requirements in the EMS Manual; and (f) obligations in this Consent Decree.

75. Defendants shall provide formal training for all independent contractors and laboratory personnel with responsibilities under this Consent Decree and/or the EMS Manual. The training shall cover any applicable requirements under this Consent Decree and/or any applicable requirements in the EMS Manual. The training shall be conducted no later than 90 Days after the date of lodging of this Decree. For contractors hired subsequent to lodging, training shall be conducted no later than 30 Days after the date of execution of the contract, but in any event should be conducted sufficiently in advance of implementation of the contractor's duties. After the initial training by Defendants, Defendants shall require contractors to provide equivalent semi-annual formal training for the contractor's employees with responsibilities under this Consent Decree and/or the EMS Manual.

76. All training under Paragraphs 74 and 75 shall be documented with the date of training, signatures of attendees, a summary of training topics, and copies of training materials. Such documentation shall be included in Quarterly Reports following the training session(s).

## **VIII. SELENIUM INJUNCTIVE RELIEF**

### **Selenium Compliance Plans**

77. Selenium Defendants shall implement the approved Selenium Compliance Plans contained in Appendix B pursuant to the schedules set forth therein, and make all other efforts to ensure compliance with the Selenium Limits by the Selenium Compliance Deadlines.

78. Selenium Defendants shall achieve compliance with the Selenium Limits no later than the applicable Selenium Compliance Deadline set forth in Appendix B.

79. Starting with the first full month after lodging and continuing until the applicable Selenium Compliance Deadline, Selenium Defendants shall submit monthly reports to the United States and West Virginia at the end of each month on the status of implementation of the Selenium Compliance Plan for each Selenium Outlet. Reports under this Paragraph shall include: (a) a discussion of progress made in implementing the Selenium Compliance Plan for each Selenium Outlet since the previous report; and (b) whether Selenium Defendants are on schedule with the milestones set forth in each Selenium Compliance Plan, and, if behind schedule, an explanation of why they are behind.

80. Upon commencing operation of each Selenium Treatment System and continuing 365 Days after the Selenium Compliance Deadline, Selenium Defendants shall conduct:

a. sampling and analysis every other week for the first 180 Days and thereafter monthly sampling and analysis of STS influent and effluent for the following parameters: pH, Oxidation/Reduction Potential (Eh), Dissolved Oxygen, Total Dissolved Solids, Sulfate, Alkalinity, Temperature, and Total Selenium; and

b. quarterly sampling and analysis of STS influent and effluent for the following parameters: Selenate (+6), Selenite (+4), Elemental Selenium (0), Arsenic, Cadmium, Copper, Iron, Manganese, Nickel, Zinc, Calcium, Sodium, and Potassium.

Sampling under this Paragraph is in addition to and does not alter any requirements under the CWA, any applicable NPDES permit, or other state or federal legal requirement. Selenium Defendants shall not be required to continue sampling pursuant to this Paragraph at a particular Selenium Outlet if they have begun implementation of the Alternative Selenium Compliance Plan for that Outlet pursuant to Paragraph 89.

81. After the applicable Selenium Compliance Deadline, Selenium Defendants must conduct daily DMR Sampling at each Selenium Outlet (except WV1016890, Outlet 002; WV0066770, Outlet 031; WV1004328, Outlet 001; WV1027668, Outlet 006; and WV1017152, Outlets 013 and 014) during any discharge from that Outlet to determine compliance with applicable NPDES permit limits.

82. Starting with the first full quarter after the applicable Selenium Compliance Deadline, Selenium Defendants shall submit a Selenium Compliance Plan Evaluation Report for each applicable Selenium Compliance Plan or Alternative SCP with the Quarterly Reports required under Section X. The SCP Reports shall include:

a. an evaluation of the effectiveness of each Selenium Compliance Plan or Alternative SCP in meeting the Selenium Limits;

b. an analysis of the impact of the implementation of each Selenium Compliance Plan or Alternative SCP, if any, on discharges of other pollutants regulated by the NPDES permit;

c. notification of any discharge from a Selenium Outlet (except WV1016890, Outlet 002; WV0066770, Outlet 031; WV1004328, Outlet 001; WV1027668, Outlet 006; and WV1017152, Outlets 013 and 014), including the reason for discharge, whether the discharge exceeded applicable Selenium Limits, steps to be taken to prevent future discharges, and copies of sampling results pursuant to Paragraph 81; and

d. a description of any proposed alterations to improve the Selenium Compliance Plan or Alternative SCP in light of (a), (b), and (c).

83. If there are exceedances of the Selenium Limits after the applicable Selenium Compliance Deadline, the applicable SCP Report shall also include an analysis of whether the proposed alterations will ensure future compliance with the Selenium Limits, and by what date.

#### **Alternative Selenium Compliance Plan**

84. On or before April 7, 2014, Selenium Defendants shall submit a proposed Alternative Selenium Compliance Plan for all Selenium Outlets to the United States and West Virginia for review and approval by EPA, after consultation with West Virginia, pursuant to Paragraphs 23-27 of this Consent Decree. The proposed Alternative Selenium Compliance Plan shall set forth a proposal for achieving compliance with the Selenium Limits by installing a Reverse Osmosis, Active Biological Treatment, or Biochemical Reactor system.

85. The Alternative Selenium Compliance Plan shall include, with supporting documentation, the following for each proposed Alternative Selenium Treatment System:

- a. narrative description of the treatment system;
- b. water chemistry analysis;



- c. preliminary estimate of size and footprint of the treatment system;
- d. estimation of average and maximum flows;
- e. detailed schedule for design and implementation; and
- f. schedule for sampling that addresses all the parameters under Paragraph 80 as

appropriate for the proposed Alternative STS. The proposed schedule shall provide for sampling to commence with operation of the Alternative STS and continue 365 Days thereafter.

86. The schedule in the proposed Alternative Selenium Compliance Plan shall include the following deadlines:

- a. Selenium Defendants shall submit all necessary permit applications for implementation of the Alternative SCP for the applicable Selenium Outlet within 30 Days after receiving written notification from EPA that implementation of the Alternative SCP is required; and

- b. Selenium Defendants shall begin construction of the applicable Alternative STS within 30 Days of approval of the necessary permits.

87. If, after the Effective Date, a new or improved technology becomes available for treating selenium to achieve compliance with the Selenium Limits, Selenium Defendants may submit a request to the United States and West Virginia to revise the Alternative SCP to incorporate this new or improved technology. The request shall be submitted for review and approval by EPA, after consultation with West Virginia, pursuant to Paragraphs 23-27 of this Consent Decree. The request must include, with supporting documentation, (a) demonstration that the technology was not previously available or a previously available technology has improved; (b) demonstration that the technology has proven success at full-scale operational capacity; and (c) analysis of the benefits of

selecting this technology over a Reverse Osmosis, Active Biological Treatment, or Biochemical Reactor system. Regardless of whether a request for revision is pending, Selenium Defendants shall implement the approved Alternative SCP as required and in accordance with the schedule established therein unless and until EPA approves the revisions to the Alternative SCP.

88. Starting six months after the applicable Selenium Compliance Deadline and at any point thereafter, EPA, after consultation with West Virginia, may require Selenium Defendants to implement an Alternative Selenium Compliance Plan if the applicable Selenium Compliance Plan has failed to maintain consistent satisfactory compliance with the Selenium Limits. In making this determination, EPA may consider all relevant data, including the information and documentation contained in the SCP Reports and any sampling data collected pursuant to Paragraph 80 or 85(f).

89. Selenium Defendants shall commence implementation of the Alternative Selenium Compliance Plan for the applicable Selenium Outlet immediately upon receipt of written notification of EPA's determination under Paragraph 88. Implementation of the Alternative SCP shall be completed in the manner and in accordance with the schedule established in the Alternative SCP as approved by EPA. The approved Alternative SCP shall be deemed incorporated into this Consent Decree.

#### **IX. OSMOTIC PRESSURE INJUNCTIVE RELIEF**

90. Except as set forth in Paragraph 96 below, Osmotic Pressure Defendants shall design, construct, and operate a wastewater collection and treatment system for treatment of the Cumberland and Emerald Discharges (the "Cumberland and Emerald Treatment System"). The Cumberland and Emerald Treatment System shall consist of treating the Cumberland and Emerald Discharges to meet

applicable NPDES permit limits using nanofiltration, and using evaporator/crystallizer technology (as necessary) to evaporate water from the nanofiltration reject. The final discharge will be to the Monongahela River pursuant to NPDES Permit No. PA0033511.

91. The Cumberland and Emerald Treatment System shall be designed and constructed to ensure consistent satisfactory compliance with the Osmotic Pressure Limits and any other NPDES permit limits applicable to any discharge from the Cumberland and Emerald Treatment System by the Cumberland and Emerald Compliance Deadline.

92. Implementation of the C&E Treatment System. Osmotic Pressure Defendants shall design, permit, and construct the selected C&E Treatment System in accordance with the following schedule:

a. Engineering: Osmotic Pressure Defendants shall complete preliminary engineering on or before February 14, 2014, and final engineering on or before November 21, 2014.

b. Permitting: Osmotic Pressure Defendants shall submit complete applications for all necessary permitting for the C&E Treatment System, including, but not limited to, permits required under the Pennsylvania Surface Mining Conservation and Reclamation Act and/or modifications to existing NPDES permit(s), as soon as possible, but no later than April 25, 2014.

c. Initiation of Construction: Osmotic Pressure Defendants shall initiate construction of the C&E Treatment System on or before December 8, 2014.

d. Mechanical Completion: Osmotic Pressure Defendants shall achieve mechanical completion of construction of the C&E Treatment System on or before April 22, 2016.

For purposes of this Subparagraph, “mechanical completion” shall mean that the C&E Treatment

System has been constructed and the equipment has been installed such that the plant is ready to begin commissioning.

e. Commissioning and Training: On or before September 15, 2016, Osmotic Pressure Defendants shall (i) complete the commissioning stage of the C&E Treatment System construction during which equipment shall be tested and adjusted as necessary to ensure that the treated discharge consistently meets the requirements in Paragraph 91; and (ii) complete training of C&E Treatment System operators in proper operation of the plant to ensure that the treated discharge consistently meets the requirements in Paragraph 91.

f. C&E Treatment System Operation: On or before September 30, 2016, Osmotic Pressure Defendants shall commence operation of the C&E Treatment System and meet the requirements in Paragraph 91.

93. Osmotic Pressure Defendants shall continue to operate the C&E Treatment System to treat the Cumberland and Emerald Discharges throughout the term of this Decree.

94. For 30 Days after commencing operation of the C&E Treatment System pursuant to Paragraph 92(f), Osmotic Pressure Defendants shall collect daily samples of specific conductance, total dissolved solids (TDS), osmotic pressure, sulfates, and chlorides at the plant feed water for the C&E Treatment System and at the discharge from the C&E Treatment System.

95. Within 90 Days after commencing operation of the C&E Treatment System pursuant to Paragraph 92(f), Osmotic Pressure Defendants shall submit to the United States and Pennsylvania a Cumberland and Emerald Treatment System Evaluation Report. The C&E Treatment System Evaluation Report shall include: (a) sampling data collected pursuant to Paragraph 94; (b) a summary of compliance with any applicable NPDES permits limits for the Cumberland and Emerald

Discharges, including any Outlet of any NPDES permit with discharge from the C&E Treatment System; (c) an evaluation of the C&E Treatment System's effectiveness in removing chlorides, TDS, and sulfates; (d) an evaluation of the C&E Treatment System's impact on specific conductance and osmotic pressure; and (e) any proposed changes to improve the performance of the C&E Treatment System, along with a schedule for implementation of the changes.

96. Alternative Cumberland and Emerald Compliance Plan. Osmotic Pressure Defendants may submit a request to EPA for approval of an alternative method or alternative methods for ensuring that the Cumberland and Emerald Discharges comply with the Osmotic Pressure Limits by the Cumberland and Emerald Compliance Deadline.

a. Any proposed Alternative C&E Plan that requests an extension of the Cumberland and Emerald Compliance Deadline or fails to demonstrate that the proposed alternative method or methods will meet the requirements of Paragraph 91 will not be approved.

b. The proposed Alternative C&E Plan must include the following:

(i) Detailed description of proposed alternative method or methods of compliance;

(ii) Demonstration that the proposed alternative method or methods will meet the requirements of Paragraph 91 by the Cumberland and Emerald Compliance Deadline, or sooner if possible;

(iii) Detailed schedule for implementation of the alternative method or methods. The schedule shall include milestones to meet the requirements of Paragraph 91 by the Cumberland and Emerald Compliance Deadline, or sooner if possible, based upon the selected alternative method; and

(iv) Sampling plan designed to demonstrate effectiveness of alternative method or methods in meeting the requirements of Paragraph 91.

c. The proposed Alternative C&E Plan shall be submitted for review and approval by EPA, after consultation with Pennsylvania, pursuant to Paragraphs 23-27 of this Consent Decree.

d. Implementation of an approved Alternative C&E Plan shall be completed in the manner and in accordance with the schedule established in the Alternative C&E Plan as approved by EPA. The approved Alternative C&E Plan shall be deemed incorporated into this Consent Decree.

e. Regardless of whether a proposed Alternative C&E Plan is pending, the requirements of Paragraphs 90-95 above continue to apply unless and until EPA approves an Alternative C&E Plan.

## **X. REPORTING REQUIREMENTS**

### **Quarterly Reports**

97. The manager responsible for environmental compliance at each Facility shall submit Quarterly Reports to appropriate management at Alpha Natural Resources, Inc. on issues related to CWA and Consent Decree compliance. Alpha Natural Resources, Inc. shall submit a consolidated Quarterly Report for all Facilities to the United States and the States. The Quarterly Reports may be submitted in electronic form and shall be due at the end of the month following the end of each quarter (i.e. by April 30, July 31, October 31, and January 31), and shall contain, at a minimum, the following information for each Facility:

a. Information regarding any CWA violation, including (i) a summary of Effluent Limit Violations at the Facility, including total number of Effluent Limit Violations, total number of Outlets with two or more Effluent Limit Violations in a row of the same parameter, total number of Outlets with Persistent Noncompliance Issues, and total number of stipulated penalties accrued during that quarter; (ii) a summary of any additional CWA violations, including NOV's or unauthorized discharges; (iii) a summary of steps taken or planned steps to remedy the violations identified in (i) and (ii); (iv) a copy of any consultant report(s) generated pursuant to Paragraph 71 during the previous quarter, and documentation of actions taken in response to the report(s); and (v) a copy of the Violations Database entries with the information identified in Paragraphs 62-64 for all Clean Water Act violations occurring during the relevant quarter;

b. A summary of any instances in which an audit response was not completed by the deadline initially assigned in the Audit Database;

c. A certification of compliance with the approved EMS Manual, or, for any noncompliance, an explanation of the cause of the noncompliance and remedial steps taken or to be taken and a date for achieving compliance;

d. Documentation of training sessions as required under Paragraph 76;

e. The status of Consent Decree implementation, including the status of any construction or compliance measures, and problems encountered or anticipated, together with implemented or proposed solutions;

f. A description of any noncompliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and the remedial steps taken, or to be taken, to prevent or minimize such violation;

g. A description of each Decree violation for which Defendants have submitted to EPA an unresolved Force Majeure claim or intend to submit a Force Majeure claim pursuant to Section XII of this Consent Decree; and

h. If a Third Party Environmental Audit occurred during the preceding Quarter, a summary of responses taken or responses planned for each finding of noncompliance.

98. With respect to Section VIII (Selenium Injunctive Relief), the Quarterly Reports shall also include the following information for each Selenium Outlet. This information in the Quarterly Reports shall be in addition to the reporting required by Paragraph 79:

a. Information regarding any exceedances of the Selenium Limits, including (i) the total number of Selenium Limit exceedances; (ii) stipulated penalties paid during that quarter relating to the exceedances (if applicable); (iii) a summary of steps taken or planned steps to remedy any exceedances occurring after the applicable Selenium Compliance Deadline; and (iv) a copy of the relevant Violations Database entries;

b. Any sampling data collected pursuant to Paragraphs 80 or 85(f);

c. Any Selenium Compliance Plan Reports completed pursuant to Paragraphs 82 and 83;

d. A discussion of progress made in implementing the Alternative Selenium Compliance Plan for any applicable Selenium Outlets since the previous Quarterly Report; and

e. Whether Selenium Defendants are on schedule with construction and implementation of any required Alternative Selenium Treatment Systems, and if behind schedule, an explanation of why they are behind.



99. With respect to Section IX (Osmotic Pressure Injunctive Relief), the Quarterly Reports shall also include the following information:

a. A discussion on progress since the last Quarterly Report on the implementation of the C&E Treatment System;

b. Whether Osmotic Pressure Defendants are on schedule with construction and implementation of C&E Treatment System, and, if behind schedule, an explanation of why they are behind; and

c. Information regarding any exceedances of the Osmotic Pressure Limits, including (i) the total number of Osmotic Pressure Limit exceedances; (ii) stipulated penalties paid during that quarter relating to the exceedances (if applicable); (iii) a summary of steps taken or planned steps to remedy any exceedances occurring after the Cumberland and Emerald Compliance Deadline; and (iv) a copy of the relevant Violations Database entries.

#### **Other Reporting Requirements**

100. If Defendants violate, or have reason to believe that they may violate, any requirement of this Consent Decree, Defendants shall notify the United States and the States of such violation and its likely duration, in writing, within 14 Days of the Day Defendants first become aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendants shall so state in the report. Defendants shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendants become aware of the cause of the

violation. Nothing in this Paragraph or the following Paragraph relieves Defendants of their obligation to provide the notice required by Section XII of this Consent Decree (Force Majeure).

101. Whenever any violation of this Consent Decree or of any applicable permit or any other event affecting Defendants' performance under this Decree, or the performance of its Facilities, may pose an immediate threat to the public health or welfare or the environment, Defendants shall notify EPA and the States orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendants first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

102. All reports shall be submitted to the persons designated in Section XVII of this Consent Decree (Notices).

103. Each report submitted by Defendants under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

104. The reporting requirements of this Consent Decree do not relieve Defendants of any reporting obligation required by the Clean Water Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

105. Any information provided pursuant to this Consent Decree may be used by the United States and the States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

## **XI. STIPULATED PENALTIES**

106. Defendants shall be liable for stipulated penalties to the United States and the States for violations as specified below, unless excused under Section XII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

107. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

108. Any Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due to that Plaintiff under this Consent Decree.

109. Stipulated penalties shall continue to accrue as provided in Paragraph 107 during any Dispute Resolution under Section XIII, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA or the applicable State that is not appealed to the Court, Defendants shall pay accrued penalties determined to be owing, together with interest, to the United States and the States within 30 Days of the effective date of the agreement or the receipt of EPA's or the State's decision or order.

b. If the dispute is appealed to the Court and the United States or the applicable State prevails in whole or in part, Defendants shall pay all accrued penalties determined by the Court to be owing, together with interest, to the United States and the States within 60 Days of receiving the Court's decision or order, except as provided in Subparagraph (c), below.

c. If any Party appeals the Court's decision, Defendants shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

110. If Defendants fail to pay stipulated penalties according to the terms of this Consent Decree, Defendants shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or the States from seeking any remedy otherwise provided by law for Defendants' failure to pay any stipulated penalties.

111. Subject to the provisions of Section XV of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or the States for Defendants' violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of relevant statutory or regulatory requirements, Defendants shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

112. Non-Compliance with Consent Decree. The following stipulated penalties shall accrue per violation per Day for each violation of any requirement of this Consent Decree, except for the Reporting Requirements of Section X (Reporting Requirements) and Paragraph 79:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$1,000 per Day or portion thereof	1st through 14th Day
\$2,500 per Day or portion thereof	15th through 30th Day
\$4,500 per Day or portion thereof	31st Day and beyond

113. Non-Compliance with Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the Reporting Requirements under Section X and Paragraph 79 of this Consent Decree:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500 per Day or portion thereof	1st through 14th Day
\$1,000 per Day or portion thereof	15th through 30th Day
\$2,500 per Day or portion thereof	31st Day and beyond

114. Defendants shall pay any stipulated penalty pursuant to Paragraphs 112 and 113 to the United States and the States within 30 Days of receiving a written demand by any Plaintiff. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiffs.

115. Defendants shall pay 50 percent of any stipulated penalty pursuant to Paragraphs 112 and 113 to the United States and the remaining 50 percent to the State in which the violation occurs. If the violation is not specific to any State, Defendants shall pay 50 percent of the stipulated penalty to the United States, 32.5 percent to West Virginia, 15 percent to Pennsylvania, and 2.5 percent to Kentucky.

116. Effluent Limit Violations. The following stipulated penalties shall accrue for each Effluent Limit Violation by any of Defendants' Facilities after the Effective Date of this Consent Decree:

<u>Per Daily Violation</u> \$2,500 \$5,000	<u>Category of Noncompliance</u> Category 1 Daily Violation Category 2 Daily Violation and all subsequent Daily Violations for the same parameter, until two consecutive compliant DMR Sample results for that parameter are achieved at the Outlet, as set forth in Paragraph 71(a)(ii).
<u>Per Monthly Violation</u> \$5,000 \$10,000	<u>Category of Noncompliance</u> Category 1 Monthly Violation Category 2 Monthly Violation and all subsequent Monthly Violations for the same parameter, until the Outlet achieves compliance with the monthly average effluent limit for that parameter for two consecutive months, as set forth in Paragraph 71(b)(ii)

117. Non-Compliance with Selenium Limits. The following stipulated penalties shall accrue for each violation of a Selenium Limit after the Selenium Compliance Deadline:

Per Exceedance of Daily Maximum Selenium Limit: \$8,000  
Per Exceedance of Monthly Average Selenium Limit: \$15,500

Selenium Defendants shall continue to pay stipulated penalties for each violation of a Selenium Limit during any dispute of a requirement to implement the Alternative Selenium Compliance Plan under Paragraph 88.

118. Outlets with persistent noncompliance issues. The following stipulated penalties shall accrue for each Effluent Limit Violation or violation of a Selenium Limit at any Outlet with three or more violations of the same parameter in the preceding twelve month period. These stipulated penalties shall be in addition to those accruing under Paragraphs 116 and 117:

Additional Penalty Per Daily Violation: \$2,000  
Additional Penalty Per Monthly Violation: \$4,000

Violations of the Selenium Limits prior to the applicable Selenium Compliance Deadline shall not be counted for purposes of this Paragraph.

119. Non-Compliance with Osmotic Pressure Limits. The following stipulated penalties shall accrue for each violation of an Osmotic Pressure Limit by a Cumberland and Emerald Discharge after the Cumberland and Emerald Compliance Deadline:

a. For violations of a daily maximum Osmotic Pressure Limit:

<u>Number of daily maximum violations at an Outlet</u>	<u>Stipulated Penalties</u>
First violation	\$1,000
Second consecutive violation	\$2,500
Third consecutive violation	\$5,000
Fourth consecutive violation and each consecutive violation thereafter	\$10,000

b. For violations of a monthly average Osmotic Pressure Limit:

<u>Number of monthly average violations at an Outlet</u>	<u>Stipulated Penalties</u>
First violation	\$2,000
Second consecutive violation	\$5,000
Third consecutive violation	\$10,000
Fourth consecutive violation and each consecutive violation thereafter	\$20,000

120. Defendants shall pay any stipulated penalties due under Paragraphs 116-119 at the end of the month following the end of each quarter (i.e., by April 30, July 31, October 31, and January 31).

121. For stipulated penalties due pursuant to Paragraphs 116-119:

a. Defendants shall pay 50 percent of all stipulated penalties due to the United States.

b. Defendants shall pay the remaining amount of stipulated penalties to the State in which the violation occurred, or to the United States if the violation occurred in Tennessee or Virginia.

122. Defendants shall pay stipulated penalties owed to the United States pursuant to this Section in the manner set forth in Paragraph 15 and with the confirmation notices and transmittal letter information required by Paragraph 15, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

123. Defendants shall pay stipulated penalties owed to West Virginia pursuant to the procedure specified in Paragraph 16.

124. Defendants shall pay stipulated penalties owed to Pennsylvania pursuant to the procedure specified in Paragraph 17.

125. Defendants shall pay stipulated penalties owed to Kentucky pursuant to the procedure specified in Paragraph 18.

## **XII. FORCE MAJEURE**

126. “Force Majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendants, of any entity controlled by Defendants, or of Defendants’ contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendants’ best efforts to fulfill the obligation. The requirement that Defendants exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential Force Majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. “Force Majeure” does not include Defendants’ financial inability to perform any obligation under this Consent Decree.



127. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a Force Majeure event, Defendants shall provide notice orally or by electronic or facsimile transmission to the United States and the States within 72 hours of when Defendants first knew that the event might cause a delay. Within 7 Days thereafter, Defendants shall provide in writing to the United States and the States an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendants' rationale for attributing such delay to a Force Majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendants, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Defendants shall include with any notice all available documentation supporting the claim that the delay was attributable to a Force Majeure. Failure to comply with the above requirements shall preclude Defendants from asserting any claim of Force Majeure for that event. Defendants shall be deemed to know of any circumstance of which Defendants, any entity controlled by Defendants, or Defendants' contractors knew or should have known.

128. If EPA, after a reasonable opportunity for review and comment by the States, agrees that the delay or anticipated delay is attributable to a Force Majeure event, the time for performance of the obligations under this Consent Decree that are affected by the Force Majeure event will be extended by EPA, after a reasonable opportunity for review and comment by the States, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the Force Majeure event shall not, of itself, extend the time for performance

of any other obligation. EPA will notify Defendants in writing of the length of the extension, if any, for performance of the obligations affected by the Force Majeure event.

129. If EPA, after a reasonable opportunity for review and comment by the States, does not agree that the delay or anticipated delay has been or will be caused by a Force Majeure event, EPA will notify Defendants in writing of its decision.

130. If Defendants elect to invoke the dispute resolution procedures set forth in Section XIII (Dispute Resolution), it shall do so no later than 15 Days after receipt of EPA's notice. In any such proceeding, Defendants shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a Force Majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Defendants complied with the requirements of Paragraphs 126 and 127, above. If Defendants carry this burden, the delay at issue shall be deemed not to be a violation by Defendants of the affected obligation of this Consent Decree identified to EPA and the Court.

### **XIII. DISPUTE RESOLUTION**

131. Unless otherwise expressly provided for in this Consent Decree, the Dispute Resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendants' failure to seek resolution of a dispute under this Section shall preclude Defendants from raising any such issue as a defense to an action by the United States or the States to enforce any obligation of Defendants arising under this Decree.

132. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendants send the United States and the States a written Notice of Dispute. The Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States, after consultation with the States, shall be considered binding unless, within 10 Days after the conclusion of the informal negotiation period, Defendants invoke formal dispute resolution procedures as set forth below.

133. Formal Dispute Resolution. Defendants shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendants' position and any supporting documentation relied upon by Defendants.

134. The United States shall serve its Statement of Position within 45 Days of receipt of Defendants' Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States, and shall be developed in consultation with the States. The United States' Statement of Position shall be binding on Defendants, unless Defendants file a motion for judicial review of the dispute in accordance with Paragraph 135.

135. Defendants may seek judicial review of the dispute by filing with the Court and serving on the United States and the States, in accordance with Section XVII of this Consent Decree

(Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 10 Days of receipt of the United States' Statement of Position pursuant to Paragraph 134. The motion shall contain a written statement of Defendants' position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of this Consent Decree.

136. The United States and/or the States shall respond to Defendants' motion within the time period allowed by the Local Rules of this Court. Defendants may file a reply memorandum, to the extent permitted by the Local Rules.

137. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 133 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendants shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 133, Defendants shall bear the burden of demonstrating that its position fulfills the terms, conditions, requirements, and objectives of this Consent Decree.

138. The invocation of Dispute Resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendants under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 109. If Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XI (Stipulated Penalties).

#### **XIV. INFORMATION COLLECTION AND RETENTION**

139. The United States, the States, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry onto any property under the ownership or control of the Defendants, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendants or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Defendants' compliance with this Consent Decree.

140. Upon request, Defendants shall provide EPA and the States or their authorized representatives splits of any samples taken by Defendants. Upon request, EPA and the States shall provide Defendants splits of any samples taken by EPA or the States.

141. Until five years after the termination of this Consent Decree, Defendants shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendants' performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or the States, Defendants shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

142. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendants shall notify the United States and the States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or the States, Defendants shall deliver any such documents, records, or other information to EPA or the States. Defendants may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendants assert such a privilege, they shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Defendants. However, no

documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

143. Defendants may also assert that information required to be provided under this Section is protected as Confidential Business Information (“CBI”) by following the procedures set forth in 40 C.F.R. Part 2, W. Va. Code § 29B-1-4(a)(1), 65 P.S. §§ 67.707 & 67.708, or Kentucky Revised Statutes § 224.10-210, as applicable. The United States, West Virginia, Pennsylvania, and Kentucky will treat such materials in accordance with the applicable federal or state CBI regulations.

144. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the States pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendants to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### **XV. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS**

145. This Consent Decree resolves the civil claims of the United States and the States alleged in the Complaint filed in this action, as identified in Appendix A attached thereto. This Consent Decree also resolves the United States’ claims for violations of paragraphs 43 (quarterly reports), 27(d) (violation response), and 39 (stream restoration) of the Massey CD arising out of facts disclosed by Defendants to the United States prior to the date of lodging of this Decree.

146. Upon the Effective Date, this Consent Decree supersedes all terms and conditions of the Massey CD. Prior to the Effective Date, the Massey CD remains in full force and effect under the terms and conditions therein.

147. The United States and the States reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 145. This Consent Decree shall not be construed to limit the rights of the United States or the States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 145. The United States and the States further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendants' Facilities, whether related to the violations addressed in this Consent Decree or otherwise.

148. In any subsequent administrative or judicial proceeding initiated by the United States or the States for injunctive relief, civil penalties, or other appropriate relief relating to the Defendants' violations, Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 145 of this Section.

149. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. Defendants are responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and Defendants' compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and



the States do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Defendants' compliance with any aspect of this Consent Decree shall result in compliance with provisions of the Act, 33 U.S.C. § 1311, *et seq.*, or with any other provisions of federal, state, or local laws, regulations, or permits.

150. This Consent Decree does not limit or affect the rights of Defendants or of the United States or the States against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendants, except as otherwise provided by law. In any suit brought by third parties, Defendants reserve the right to argue that this Consent Decree constitutes diligent prosecution pursuant to 33 U.S.C. § 1365.

151. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

152. By the execution of this Consent Decree, Defendants release and shall hold harmless the United States and the States, their instrumentalities, agents, and employees, in their official and personal capacities, of any and all liability or claims arising out of or otherwise related to the negotiations leading to this Consent Decree and all matters contained therein.

## **XVI. COSTS**

153. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendants.

## **XVII. NOTICES**

154. Unless otherwise specified herein, whenever notifications, submissions, reports, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

### **To the United States:**

Chief, Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611  
Re: DJ No. 90-5-1-1-08470/1

and

Director, Office of Civil Enforcement  
U.S. Environmental Protection Agency  
Ariel Rios Building, 2241A  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

NPDES Enforcement Branch Chief  
U.S. EPA Region III  
1650 Arch Street, 3WP42  
Philadelphia, PA 19103

Clean Water Enforcement Branch Chief  
U.S. EPA Region IV  
Sam Nunn Federal Building  
61 Forsyth Street, S.E.  
15<sup>th</sup> Floor  
Atlanta, GA 30303

### **To EPA:**

Director, Office of Civil Enforcement  
U.S. Environmental Protection Agency  
Ariel Rios Building, 2241A  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

NPDES Enforcement Branch Chief  
U.S. EPA Region III  
1650 Arch Street, 3WP42  
Philadelphia, PA 19103

Clean Water Enforcement Branch Chief  
U.S. EPA Region IV  
Sam Nunn Federal Building  
61 Forsyth Street, S.E.  
15<sup>th</sup> Floor  
Atlanta, GA 30303

To West Virginia:

Chief Inspector, Environmental Enforcement  
West Virginia Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

Director, Division of Mining and Reclamation  
West Virginia Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

Chief, Office of Legal Services  
West Virginia Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

To Pennsylvania:

Deputy Secretary  
Office of Active and Abandoned Mine Operations  
16th Floor, Rachel Carson State Office Building  
P.O. Box 2063  
Harrisburg, PA 17105-2063

To Kentucky:

Paul Rothman  
Kentucky Department for Natural Resources  
2 Hudson Hollow  
Frankfort, KY 40601

Jeff Cummins  
Director, Division of Enforcement  
Kentucky Department for Environmental Protection  
300 Fair Oaks Lane  
Frankfort, KY 40601

To Defendants:

Alpha Natural Resources  
ATTN: General Counsel  
One Alpha Place  
P.O. Box 16429  
Bristol, VA 24209

155. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

156. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

**XVIII. RETENTION OF JURISDICTION**

157. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XIII (Dispute Resolution) or XIX (Modification) or effectuating or enforcing compliance with the terms of this Decree.

**XIX. MODIFICATION**

158. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

159. Application for construction grants, State Revolving Loan Funds, or any other grants or loans, or other delays caused by inadequate Facility planning or plans and specifications on the part of Defendants shall not be cause for extension of any required compliance date in this Consent Decree.

160. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XIII of this Decree (Dispute Resolution); provided, however, that, instead of the burden of proof provided by Paragraph 137, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

## **XX. TERMINATION**

161. With the exception of Alpha Natural Resources, Inc., any Defendant who has completed the requirements of Paragraphs 33-42 (Environmental Management System and EMS Audit), Paragraph 46 (Initial Treatment System Audits), Paragraph 58 (Initial Audit Database Evaluation), and Paragraph 68 (Initial Violations Database Evaluation) of this Decree; has thereafter maintained consistent satisfactory compliance with this Consent Decree for a period of three years; has complied with all other requirements of this Consent Decree, including those relating to the Injunctive Relief under Section VII, Selenium Injunctive Relief under Section VIII, and Osmotic Pressure Injunctive Relief under Section IX of this Consent Decree; and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, may serve upon the United States and the States a Request for Termination, stating that the Defendant has satisfied those requirements, together with all necessary supporting documentation. Alpha Natural Resources, Inc.

may serve a Request for Termination only after all other Defendants have satisfied the requirements of this Paragraph.

162. Following receipt by the United States and the States of a Defendant's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether the Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States, after consultation with the States, agrees that the Decree may be terminated with respect to that Defendant, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree for that Defendant.

163. If the United States, after consultation with the States, does not agree that the Decree may be terminated, the Defendant may invoke Dispute Resolution under Section XIII of this Decree. However, the Defendant shall not seek Dispute Resolution of any dispute regarding termination, under Paragraph 133 of Section XIII, until 60 Days after service of its Request for Termination.

## **XXI. PUBLIC PARTICIPATION**

164. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding this Consent Decree disclose facts or considerations indicating that this Consent Decree is inappropriate, improper, or inadequate. Defendants consent to entry of this Consent Decree without further notice and agree not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendants in writing that it no longer supports entry of the Decree.

## **XXII. SIGNATORIES/SERVICE**

165. Each undersigned representative of the Defendants, the Acting Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice, and each undersigned representative of the States certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

166. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendants agree to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

## **XXIII. INTEGRATION**

167. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

**XXIV. FINAL JUDGMENT**

168. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the States, and Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

**XXV. APPENDICES**

169. The following appendices are attached to and part of this Consent Decree:

Appendix A: Compliance Focused Environmental Management System Elements

Appendix B: Selenium Compliance Plans

SO ORDERED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2014.

\_\_\_\_\_  
United States District Judge  
Southern District of West Virginia



THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al.*  
*v. Alpha Natural Resources, Inc., et al.*,

FOR THE UNITED STATES OF AMERICA

Date: 2/28/14



ROBERT G. DREHER  
Acting Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice  
Washington, D.C. 20530

Date: 3/4/2014



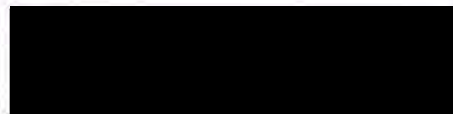
LAURA A. THOMS  
STACY D. COLEMAN  
Trial Attorneys  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al.*  
*v. Alpha Natural Resources, Inc. et al.*,

FOR THE UNITED STATES OF AMERICA

R. BOOTH GOODWIN II  
United States Attorney

Date: FEB. 14, 2014



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GARY L. CALL  
Assistant United States Attorney  
WV State Bar Number 589  
P.O. Box 1713  
Charleston, WV 25326  
Tel. 304-345-2200  
Fax: 304-347-5440  
Email: gary.call@usdoj.gov

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al. v. Alpha Natural Resources, Inc. et al.*,

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Date: 2/24/14

[Redacted Signature]

CYNTHIA GILES, Assistant Administrator  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

Date: 2/19/14

[Redacted Signature]

SUSAN SHINKMAN, Director  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

Date: 2-19-14

[Redacted Signature]

MARK POLLINS, Director  
Water Enforcement Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

Date: 2-19-14

Melissa Raack

MELISSA RAACK, Attorney  
Water Enforcement Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al. v. Alpha Natural Resources, Inc., et al.*,

FOR THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY

Date:

2/18/14



SHAWN M. GARVIN  
Regional Administrator  
U.S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

Date:

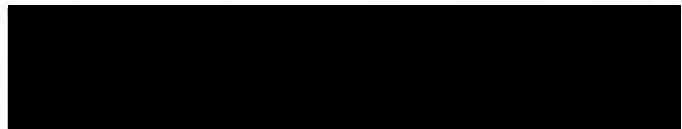
2/11/14



MARCIA E. MULKEY  
Regional Counsel  
U.S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

Date:

2/11/14



DOUGLAS FRANKENTHALER  
Assistant Regional Counsel  
U.S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al. v. Alpha Natural Resources, Inc., et al.*,

FOR THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY

Date: 7/28/2014

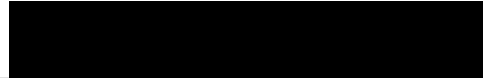


V. ANNE HEARD  
Acting Regional Counsel and Director  
Office of Environmental Accountability  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street SW  
Atlanta, Georgia 30303-8960

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al. v. Alpha Natural Resources, Inc., et al.*,

FOR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date: 2/11/14



CHARLES S. DRIVER  
Office of Legal Services  
W.Va. Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

Date: 2/12/14



HAROLD WARD  
Acting Director  
Division of Mining and Reclamation  
W.Va. Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al.*  
*v. Alpha Natural Resources, Inc., et al.*,

FOR THE PENNSYLVANIA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

Date: 2/10/14



JOHN STEFANKO  
Deputy Secretary  
Office of Active and Abandoned Mining Operations

Date: 2.10.14

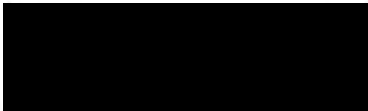


MARTIN H. SOKOLOW, JR.  
Regional Counsel  
Office of Chief Counsel  
Department of Environmental Protection  
Southcentral Regional Office  
909 Elmerton Avenue  
Harrisburg, PA 17110-8200

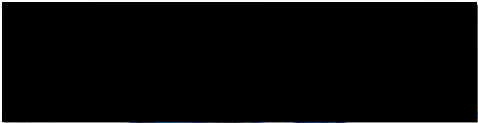
THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al.*  
*v. Alpha Natural Resources, Inc., et al.*,

FOR KENTUCKY ENERGY AND  
ENVIRONMENT CABINET

Date: 2/13/14

  
\_\_\_\_\_  
LEONARD K. PETERS  
Secretary  
Energy and Environment Cabinet  
500 Mero Street, 12th Floor  
Frankfort, Kentucky 40601

Date: 2.13.14


  
\_\_\_\_\_  
MICHAEL HAINES  
General Counsel  
Energy and Environment Cabinet  
500 Mero Street, 12th Floor  
Frankfort, KY 40601



THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of *United States, et al. v. Alpha Natural Resources, Inc., et al.*

FOR DEFENDANTS ALPHA NATURAL RESOURCES, INC.; ALPHA APPALACHIA HOLDINGS, INC.; ALEX ENERGY, INC.; ALPHA PA COAL TERMINAL, LLC; AMFIRE MINING COMPANY, LLC; ARACOMA COAL CO., INC.; BANDMILL COAL CORP.; BELFRY COAL CORP.; BIG BEAR MINING CO.; BLACK CASTLE MINING COMPANY, INC.; BLACK MOUNTAIN RESOURCES LLC; BROOKS RUN MINING COMPANY, LLC; BROOKS RUN SOUTH MINING LLC; CLEAR FORK COAL CO.; CUMBERLAND COAL RESOURCES, LP; DELBARTON MINING CO.; DICKENSON-RUSSELL COAL COMPANY, LLC; DUCHESS COAL CO.; EAGLE ENERGY, INC.; ELK RUN COAL CO., INC.; EMERALD COAL RESOURCES, LP; ENTERPRISE MINING COMPANY, LLC; GOALS COAL CO.; GREYEAGLE COAL CO.; HARLAN RECLAMATION SERVICES LLC; HERNDON PROCESSING CO., LLC; HIGHLAND MINING CO.; INDEPENDENCE COAL COMPANY, INC.; JACKS BRANCH COAL CO.; KANAWHA ENERGY CO.; KEPLER PROCESSING CO., LLC; KINGSTON MINING, INC.; KINGWOOD MINING CO., LLC; KNOX CREEK COAL CORP.; LITWAR PROCESSING CO., LLC; LONG FORK COAL COMPANY, INC.; LYNN BRANCH COAL COMPANY, INC.; MARFORK COAL CO.; MARTIN COUNTY COAL CORP.; MILL BRANCH COAL CORP.; NEW RIDGE MINING CO.; OMAR MINING CO.; PARAMONT COAL COMPANY VIRGINIA, LLC; PAYNTER BRANCH MINING, INC.; PEERLESS EAGLE COAL CO.; PERFORMANCE COAL CO.; PETER CAVE MINING; PIGEON CREEK PROCESSING CORP.; PIONEER FUEL CORP.; POWER MOUNTAIN COAL CO.; PREMIUM ENERGY, LLC; RAWL SALES & PROCESSING CO.; REPUBLIC ENERGY, INC.; RESOURCE DEVELOPMENT, LLC; RESOURCE LAND CO.; RIVERSIDE ENERGY CO., LLC; ROAD FORK DEVELOPMENT CO.; ROCKSPRING DEVELOPMENT, INC.; RUM CREEK COAL SALES, INC.; SIDNEY COAL CO.; SOLOMONS MINING COMPANY; SPARTAN MINING CO. (also d/b/a MAMMOTH COAL CO.); STIRRAT COAL CO.; SYCAMORE FUELS INC.; TENNESSEE CONSOLIDATED COAL COMPANY; TRACE CREEK COAL CO.; and TWIN STAR MINING, INC.

Date: 2-10-14



Vaughn R. Groves  
Exec. Vice President, General Counsel, & Secretary

## **APPENDIX A**

## APPENDIX A

### COMPLIANCE-FOCUSED ENVIRONMENTAL MANAGEMENT SYSTEM ELEMENTS

*United States, et al. v. Alpha Natural Resources, Inc. et al.*

#### 1. Environmental Policy

- a. This policy, upon which the EMS is based, must clearly communicate management commitment to achieving compliance with applicable federal, state, and local environmental statutes, regulations, enforceable agreements, and permits (hereafter, “environmental requirements”), minimizing risks to the environment from unplanned or unauthorized releases of hazardous or harmful contaminants, and continual improvement in environmental performance. The policy should also state management’s intent to provide adequate personnel and other resources for the EMS.

#### 2. Organization, Personnel, and Oversight of EMS

- a. Identifies and defines specific duties, roles, responsibilities, and authorities of key environmental staff in implementing and sustaining the EMS (e.g., could include position descriptions and/or performance standards for all environmental department personnel, and excerpts from others having specific environmental duties, and regulatory compliance responsibilities).
- b. Includes organization charts that identify units, line management, and other individuals having environmental duties and regulatory compliance responsibilities.
- c. Includes ongoing means of communicating environmental issues and information among the various levels and functions of the organization, to include all persons working for or on behalf of the organization (e.g., on-site service providers and contractors who function as *de facto* employees), and for receiving and addressing their concerns.

#### 3. Accountability and Responsibility

- a. Specifies accountability and environmental responsibilities of organization’s managers, and managers of other organizations acting on its behalf for environmental protection and risk reduction measures, assuring compliance, required reporting to regulatory agencies, and corrective actions implemented in their area(s) of responsibility.

- b. Describes incentive programs for managers and employees to perform in accordance with compliance policies, standards, and procedures.
- c. Describes potential consequences for departure from specified operating procedures, including liability for civil/administrative penalties imposed as a result of noncompliance.

#### **4. Environmental Requirements**

- a. Describes process for identifying potentially applicable environmental requirements; interpreting their applicability to specific operations, emissions, and waste streams; and effectively communicating those applicable environmental requirements to affected persons working for or on behalf of the organization.
- b. Describes a process for developing, implementing and maintaining ongoing internal compliance monitoring to ensure that facility activities conform to applicable environmental requirements. Compliance monitoring shall include inspections and measurements, as appropriate.
- c. Describes procedures for prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporating those changes into the EMS (i.e., regulatory “change management”).
- d. Describes a procedure for communicating with regulatory agencies regarding environmental requirements and regulatory compliance.

#### **5. Assessment, Prevention, and Control**

- a. Identifies an ongoing process for assessing operations, for the purposes of preventing, controlling, or minimizing reasonably foreseeable releases, environmental process hazards, and risks of noncompliance with environmental requirements. This process shall include identifying operations and waste streams where equipment malfunctions and deterioration, and/or operator errors or deliberate malfeasance, are causing, or have the potential to cause: (1) unplanned or unauthorized releases of hazardous or harmful contaminants to the environment, (2) a threat to human health or the environment, or (3) noncompliance with environmental requirements.
- b. Describes process for identifying operations and activities where documented operating criteria, such as standard operating procedures (SOPs), are needed to prevent noncompliance or unplanned/unauthorized releases of hazardous or harmful contaminants, and defines a uniform process for developing, approving and implementing the documented operating criteria.

- c. Describes a system for conducting and documenting routine, objective, self-inspections by department supervisors and trained staff, especially at locations identified by the process described in (a) above, to check for malfunctions, deterioration, worker adherence to operating criteria, unusual situations, and unauthorized or unplanned releases.
- d. Describes a “management of change” process to ensure identification and consideration of environmental requirements, the environmental aspects/impacts, and potential operator errors or deliberate malfeasance during planning, design, and operation of ongoing, new, and/or changing buildings, processes, equipment, maintenance activities, and products.

## **6. Environmental Incident and Non-compliance Investigations**

- a. Describes standard procedures and requirements for internal and external reporting of environmental incidents and noncompliance with environmental requirements.
- b. Establishes procedures for investigation, and prompt and appropriate correction of noncompliance. The investigation process includes root-cause analysis of identified problems to aid in developing the corrective actions.
- c. Describes a system for development, tracking, and effectiveness verification of corrective and preventative actions.

## **7. Environmental Training, Awareness, and Competence**

- a. Identifies specific education and training required for organization personnel or those acting on its behalf, as well as process for documenting training provided
- b. Describes program to ensure that organization employees or those acting on its behalf are aware of its environmental policies and procedures, environmental requirements, and their roles and responsibilities within the environmental management system.
- c. Describes program for ensuring that personnel responsible for meeting and maintaining compliance with environmental requirements are competent on the basis of appropriate education, training, and/or experience.
- d. Identifies training on how to recognize operations and waste streams where equipment malfunctions and deterioration, and/or operator errors or deliberate malfeasance, are causing, or have the potential to cause: (1) unplanned or unauthorized releases of hazardous or harmful contaminants to the environment,

(2) a threat to human health or the environment, or (3) noncompliance with environmental requirements.

## **8. Environmental Planning and Organizational Decision-Making**

- a. Describes how environmental planning will be integrated into organizational decision-making, including plans and decisions on capital improvements, product and process design, training programs, and maintenance activities.
- b. Requires establishing, on an annual basis, written targets, objectives, and action plans for improving environmental performance, by at least each operating organizational subunit with environmental responsibilities, as appropriate, including those for contractor operations conducted at the facility, and how specified actions will be tracked and progress reported. Targets and objectives must include actions that reduce the risk of noncompliance with environmental requirements and minimize the potential for unplanned or unauthorized releases of hazardous or harmful contaminants.

## **9. Maintenance of Records and Documentation**

- a. Identifies the types of records developed in support of the EMS (including audits and reviews), who maintains them and, where appropriate, security measures to prevent their unauthorized disclosure, and protocols for responding to inquiries and requests for release of information.
- b. Specifies the data management systems for any internal waste tracking, environmental data, and hazardous waste determinations.
- c. Specifies document control procedures.

## **10. Pollution Prevention**

- a. Describes an internal process or procedure for preventing, reducing, recycling, reusing, and minimizing waste and emissions, including incentives to encourage material substitutions. Also includes mechanisms for identifying candidate materials to be addressed by the pollution prevention program and tracking progress.

## **11. Continuing Program Evaluation and Improvement**

- a. Describes program for periodic (at least annually) evaluation of the EMS, which specifies a process for translating assessment results into EMS improvements. The program shall include communicating findings and action plans to affected organization employees or those acting on its behalf.

- b. Describes a program for periodic audits (at least annually) of facility compliance with environmental requirements by an independent auditor(s). Audit results are reported to upper management and instances of noncompliance are addressed through the process described in element 6 above.

**12. Public Involvement/Community Outreach**

- a. Describes a program for ongoing community education and involvement in the environmental aspects of the organization's operations and general environmental awareness.

## **APPENDIX B**



## APPENDIX B1

### **Selenium Compliance Plan for:**

NPDES Permit No. WV0093912, Outlets 013, 014, 030, 031 and 036

NPDES Permit No. WV0093929, Outlets 004, 005, 014, 015, 017, and 40

NPDES Permit No. WV1012452, Outlets 002, 009, 011 and 014

1. This Selenium Compliance Plan applies to Outlets 013, 014, 030, 031, and 036 of NPDES Permit No. WV0093912; Outlets 004, 005, 014, 015, 017, and 40 of NPDES Permit No. WV0093929; and Outlets 002, 009, 011, and 014 of NPDES Permit No. WV1012452 (the “Appendix B1 Outlets”).

2. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B1 Outlets by implementing a water management system that redirects wastewater from the Appendix B1 Outlets and conveys that wastewater for discharge into the Kanawha River (the “Jacks Branch Water Management System”). The Jacks Branch Water Management System shall consist of using gravity-fed pipelines to gather and convey wastewater from the Appendix B1 Outlets to an underground mine storage system, which shall be used to equalize flow variability. The wastewater shall then be conveyed by a series of pump stations to one of two new Outlets to be installed on the Kanawha River (the “Jacks Branch Water Management System Outlets”).

3. Selenium Defendants shall meet the following deadlines for construction and implementation of the Jacks Branch Water Management System:

a. Detailed design shall be completed by the date of lodging of this Consent Decree;

b. Complete applications for all permits and/or permit modifications necessary to initiate construction shall be submitted by 90 days from the date of lodging of this Consent Decree;

c. Construction shall be commenced within 30 days after approval of necessary permits and/or permit modifications; and

## **APPENDIX B1**

d. Construction shall be completed by December 1, 2014.

4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B1 Outlets and the Jacks Branch Water Management System Outlets no later than December 1, 2014 (the “Selenium Compliance Deadline”).

## APPENDIX B2

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1016890, Outlets 002 and 004

NPDES Permit No. WV1029711, Outlet 001

1. This Selenium Compliance Plan applies to Outlets 002 and 004 of NPDES Permit No. WV1016890; and Outlet 001 of NPDES Permit No. WV1029711 (the “Appendix B2 Outlets”).

2. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B2 Outlets by implementing an active moving bed bioreactor process (the “Progress MBB”).

a. The Progress MBB shall consist of (i) a two-step anoxic and anaerobic moving bed bioreactor to reduce nitrates to nitrogen gas and soluble selenium to elemental solid form, (ii) ballasted sand clarifiers that use a sand media to separate biological and selenium solids, and (iii) reaeration tanks to raise the dissolved oxygen and polish any remaining soluble organics added to reduce nitrates and selenium. Water shall be discharged from the Progress MBB to NPDES Permit No. WV1016890, Outlet 002, which shall be moved to a new location.

b. The Progress MBB shall have a treatment capacity of at least 530 gallons per minute. Flows that exceed 530 gallons per minute shall be conveyed to an underground mine for storage under an appropriate permit.

c. The Progress MBB shall be designed to accommodate the ability to heat the water if necessary to enhance system performance during cold weather.

3. Selenium Defendants shall meet the following deadlines for construction and implementation of the Progress MBB:

a. Construction shall be commenced within 30 days after approval of necessary permits and/or permit modifications; and

## **APPENDIX B2**

- b. Construction shall be completed by June 1, 2014.
4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B2 Outlets no later than December 1, 2014 (the “Selenium Compliance Deadline”).

## APPENDIX B3

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1017152, Outlet 019

1. This Selenium Compliance Plan applies to Outlet 019 of NPDES Permit No. WV1017152 (the “Appendix B3 Outlet”).
2. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B3 Outlet by implementing a water management system (the “Endurance Water Management System”). The Endurance Water Management System shall consist of gathering wastewater from Appendix B3 Outlet via a manifolded piping system and injecting the wastewater into a deep mine. Water from the mine will discharge at NPDES Permit No. WV1004140, Outlet 008 (the “Endurance Water Management System Outlet”).
3. Selenium Defendants shall meet the following deadlines for construction and implementation of the Endurance Water Management System:
  - a. Construction shall be commenced within 30 days after approval of necessary permits and/or permit modifications; and
  - b. Construction shall be completed by June 1, 2014.
4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B3 Outlet and the Endurance Water Management System Outlet no later than June 1, 2014 (the “Selenium Compliance Deadline”).

## APPENDIX B4

### **Selenium Compliance Plan for:**

NPDES Permit No. WV0066770, Outlet 031

1. This Selenium Compliance Plan applies to Outlet 031 of NPDES Permit No. WV0066770 (the “Appendix B4 Outlet”).
2. Selenium Defendants shall achieve compliance at the Appendix B4 Outlet by implementing a passive Biochemical Reactor treatment system (the “Riverside BCR”). The Riverside BCR shall have a treatment capacity of at least 300 gallons per minute.
3. Selenium Defendants shall meet the following deadlines for construction and implementation of the Riverside BCR:
  - a. Construction shall be commenced within 30 days after approval of necessary permits and/or permit modifications; and
  - b. Construction shall be completed by June 1, 2014.
4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B4 Outlet no later than December 1, 2014 (the “Selenium Compliance Deadline”).

## APPENDIX B5

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1004328, Outlet 001

1. This Selenium Compliance Plan applies to Outlet 001 of NPDES Permit No. WV1004328 (the “Appendix B5 Outlet”).
2. Selenium Defendants shall achieve compliance at the Appendix B5 Outlet by implementing a passive Biochemical Reactor Treatment System (the “Independence BCR”). The Independence BCR shall have a treatment capacity of at least 50 gallons per minute.
3. Selenium Defendants shall meet the following deadlines for construction and implementation of the Independence BCR:
  - a. Construction shall be commenced within 30 days after approval of necessary permits and/or permit modifications; and
  - b. Construction shall be completed by June 1, 2014.
4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B5 Outlet no later than December 1, 2014 (the “Selenium Compliance Deadline”).

## APPENDIX B6

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1019228, Outlet 019

1. This Selenium Compliance Plan applies to Outlet 019 of NPDES Permit No. WV1019228 (the “Appendix B6 Outlet”).

2. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B6 Outlet by implementing a water management system (the “Upper Big Branch Water Management System”). The Upper Big Branch Water Management System shall consist of using a gravity-fed pipeline and injection well to gather and convey wastewater from the Appendix B6 Outlet to an underground mine storage system. There will be no discharge of wastewater from the underground mine storage system.

3. Selenium Defendants shall meet the following deadlines for construction and implementation of the Upper Big Branch Water Management System:

a. Construction shall be commenced within 30 days after approval of necessary permits and/or permit modifications; and

b. Construction shall be completed by June 1, 2014.

4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B6 Outlet no later than June 1, 2014 (the “Selenium Compliance Deadline”).



## **APPENDIX B7**

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1027668, Outlet 006

1. This Selenium Compliance Plan applies to Outlet 006 of NPDES Permit No. WV1027668 (the “Appendix B7 Outlet”).
2. Selenium Defendants shall achieve compliance at the Appendix B7 Outlet by eliminating intake of water from Seng Creek into any of the series of ponds that ultimately discharge through the Appendix B7 Outlet.
3. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B7 Outlet no later than the date of lodging of this Consent Decree (the “Selenium Compliance Deadline”).

## APPENDIX B8

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1003887, Outlet 012

1. This Selenium Compliance Plan applies to Outlet 012 of NPDES Permit No. WV1003887 (“Appendix B8 Outlet”).
2. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B8 Outlet by implementing a water management system (the “Liberty 012 Water Management System” or “System”). The Liberty 012 Water Management System shall include pumping wastewater from the Appendix B8 Outlet to the upstream impoundment from which the flow originates. As part of the System, Defendants shall install a flow collection tank or deep well with sufficient storage volume to eliminate potential short cycling of the pump and provide back-up storage in the event of a pump failure. Defendants shall also maintain on-site a second pump of equal pumping capacity as the primary pump, which shall be installed immediately should the primary pump fail.
3. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B8 Outlet no later than 30 Days from the date of lodging of this Consent Decree (the “Selenium Compliance Deadline”).

## **APPENDIX B9**

### **Selenium Compliance Plan for:**

NPDES Permit No. WV0093912, Outlet 018

1. This Selenium Compliance Plan applies to Outlet 018 of NPDES Permit No. WV0093912 (the “Appendix B9 Outlet”).
2. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B9 Outlet by eliminating flow from Outlet 009 of NPDES Permit No. WV1012452 and Outlet 011 of NPDES Permit No. WV1012452 (also identified as Outlet 014 of NPDES Permit No. WV093912) to the Appendix B9 Outlet. The eliminated flow will be incorporated into the Jacks Branch Water Management System, as set forth in Appendix B1.
3. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B9 Outlet no later than the date of lodging of this Consent Decree (the “Selenium Compliance Deadline”).

## APPENDIX B10

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1003887, Outlet 004

1. This Selenium Compliance Plan applies to Outlet 004 of NPDES Permit No. WV1003887 (the “Appendix B10 Outlet”).
2. Selenium Defendants shall achieve compliance at the Appendix B10 Outlet by implementing a water management system (the “Liberty 004 Water Management System”). The Liberty 004 Water Management System shall include pumping wastewater from the three ponds in series that discharge to Outlet 004 to a one million gallon holding tank for use in the Liberty Processing preparation plant.
3. Selenium Defendants shall ensure that discharges from any impoundments to which wastewater from the Liberty Processing preparation plant flows, including NPDES Permit No. WV0096199, Outlet 001, comply with applicable Selenium Limits.
4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B10 Outlet and Outlet 001 of NPDES Permit No. WV0096199 no later than the date of lodging of this Consent Decree (the “Selenium Compliance Deadline”).

## APPENDIX B11

### **Selenium Compliance Plan for:**

NPDES Permit No. WV1017152, Outlets 013 and 014

1. This Selenium Compliance Plan applies to Outlets 013 and 014 of NPDES Permit No. WV1017152 (the “Appendix B11 Outlets”).
2. Selenium Defendants shall achieve compliance at the Appendix B11 Outlets by implementing a passive Biochemical Reactor treatment system to remove selenium (the “Trace Branch BCR”). The Trace Branch BCR shall have a treatment capacity of at least 550 gallons per minute.
3. Selenium Defendants shall meet the following deadlines for construction and implementation of the Trace Branch BCR:
  - a. Construction shall be commenced within 30 days after approval of necessary permits and/or permit modifications; and
  - b. Construction shall be completed by September 1, 2014.
4. Selenium Defendants shall achieve compliance with the Selenium Limits at the Appendix B11 Outlets no later than December 1, 2014 (the “Selenium Compliance Deadline”).