Pennsylvania Department of Environmental Protection

Coal Remining and Reclamation XL Project

FINAL PROJECT AGREEMENT

September 22, 2000

Final Project Agreement
Pennsylvania Department of Environmental Protection
Coal Remining and Reclamation XL Project

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I. Introduction to the Agreement

A. Executive Summary

The Pennsylvania Department of Environmental Protection ("PADEP"), has proposed this XL Project to explore a new approach to encourage the remining and reclamation of abandoned coal mine sites. The approach would be based on compliance with in-stream pollutant concentration limits and implementation of best management practices ("BMPs"), instead of National Pollutant Discharge Elimination System ("NPDES") numeric effluent limitations measured at individual discharge points. This XL project would provide for a test of this approach in up to eight watersheds with significant acid mine drainage ("AMD") pollution. The project will collect data to compare in-stream pollutant concentrations versus the loading from individual discharge points and provide for the evaluation of the performance of BMPs and this alternate strategy in PADEP's efforts to address AMD.

B. Purpose of the XL Program

This Final Project Agreement ("FPA") states the intentions of the Project Signatories to carry out a pilot project as part of EPA's "Project XL" which tests innovative approaches to environmental protection. Project XL is an EPA initiative to test the extent to which regulatory flexibility, and other innovative environmental approaches, can be implemented to achieve both superior environmental performance and reduced economic and administrative burdens. (See Federal Register: May 23, 1995 (Volume 60, Number 99 page 27282-27291).

C. Purpose of this Final Project Agreement

This FPA is a joint statement of the Project Signatories' plans and intentions with respect to the PADEP Coal Remining and Reclamation XL Project. This FPA outlines the details of how this project is expected to be implemented and how the superior environmental performance is to be measured and sets forth the regulatory flexibility that is necessary to implement this project.

The Project Signatories expect significant environmental benefits from the implementation of this project, including:

- the encouragement of the reclamation of scarred and abandoned mine land,
- the reduction of acid mine drainage and improvement of in-stream water quality,
- the opportunity to test the effects of using best management practices in remining, and
- the emphasis on pollution prevention and watershed approaches in coal remining.

This FPA sets forth the plans of the Project Signatories and represents the firm commitment of each signatory to support the XL process, to implement the necessary regulatory flexibility in a timely fashion and to follow the terms of this FPA. This FPA is not, however, intended to create legal rights or obligations and is not a contract, a final agency action or a regulatory action such as a permit or rule. This FPA does not give anyone a right to sue the Project Signatories for any alleged failure to implement its terms, either to compel implementation or to recover damages.

This FPA and materials relating to this project are available on the Project XL Web Site at www.epa.gov/projectxl and www.dep.state.pa.us/dep/deputate/minres/Districts/homepage.htm

D. Project Signatories and Contacts

The Project Signatories to this Final Project Agreement (FPA or Agreement) are EPA, Region III and the Pennsylvania Department of Environmental Protection. The Project contacts are:

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II. Description of the Project

The Pennsylvania Department of Environmental Protection ("PADEP"), together with the EPA Office of Water and the Interstate Mining Compact Commission ("IMCC")-member states, have been exploring a new approach to encourage remining. The approach would be based on compliance with in-stream pollutant concentration limits and implementation of best management practices ("BMPs"), instead of National Pollutant Discharge Elimination System ("NPDES") numeric effluent limitations measured at individual discharge points. The project will collect data to compare in-stream pollutant concentrations versus the loading from individual discharge points and provide for the evaluation of the performance of BMPs and this alternate strategy in PADEP's efforts to address AMD.

Under this project, PADEP would continue to apply current effluent limitations/permitting requirements to pre-existing discharges that are physically encountered and collected with discharges during active remining operations. PADEP is requesting regulatory relief from numeric effluent limits for preexisting discharges that are not directly encountered during remining, and for all preexisting discharges after completion of remining, including both those discharges that were encountered and were not encountered during remining.

For this project reminers will be required to meet or improve water quality at an in-stream monitoring point (or points) rather than at each individual discharge to the stream. In certain circumstances, in-stream water quality monitoring is the most effective way to measure the performance of AMD remediation activities within the watershed, as the water quality impact of all remining, reclamation, and abatement activities are manifest there. The XL Project will use concentration, rather than loading data, because: 1) in-stream concentration data are more stable than load data; 2) concentration data are much easier and less costly to collect than load data (however for this test load data will also be collected); 3) pollution loads from individual discharges are manifested in the in-stream concentration; and 4) loading data, particularly in large streams, tend to be dominated by flow, which makes it difficult and impractical to monitor actual changes in in-stream quality. Accordingly, when using in-stream monitoring as a measure of environmental performance, concentration data are much more practical and sensitive than loading data. This would not be an appropriate method of monitoring if a stream were so large that massive dilution was taking place that would mask the effect of the remining. As stated previously, the testing required by the project will provide for the collection of both in-stream concentration and individual discharge loading data in order to assess the BMP approach to remining permits.

BMPs are pollution prevention tools rather than end of pipe treatments. Practices such as preventing or diverting water from contacting acid forming rock materials, applying lime to the rock to neutralize its acid potential, or segregating and isolating acid producing rock strata during mining

will stop water from picking up acidity and leaching iron, aluminum and manganese from the mine overburden. Reclaiming, regrading and revegetating the land can eliminate ponding water, reduce water infiltration and provide for water transpiration/respiration by plants. The goal of the BMPs is to reduce or eliminate the formation of acid mine drainage that would otherwise have to be collected and treated. Remining may be the only economically viable solution for reducing highly degraded or high volume abandoned mine discharges, since long term end of pipe treatment is usually not viable or is cost prohibitive. For each watershed project, a set of BMPs will be designed that are expected to significantly improve water quality. Pennsylvania's past experience with Subchapter F mining permits demonstrates the potential effectiveness of BMP implementation on remining projects.

This XL project will include remining pilot sites in up to eight different watersheds with significant AMD pollution that will be selected throughout Pennsylvania. The first three of these pilot projects are expected to be ready for implementation very soon. As many as five more pilot projects may be implemented within the next year. PADEP will select appropriate remining participants and sites for these pilot projects, in consultation with EPA Office of Water and Project XL staff, to ensure that the sites will provide useful and reliable information on the success of the BMP approach to remining, as well as to ensure that the participating companies have an acceptable environmental compliance history. The potential pilot projects are:

1. Amerikohl Rathmel Operation, Soldier Run Watershed, Butler County.

2. River Hill Mid Penn #1 Operation, Pine Run Watershed, Clearfield County.

3. Sky Haven Coal Company Surveyor Run and Ridge Road Operations, Surveyor Run Watershed, Clearfield County.

Each remining site selected will be an abandoned previously mined area that was left unreclaimed and is not expected to be remined in the future under the existing permitting program. In addition, each of the watersheds for the remining sites that will be selected for this XL Project is severely degraded by acid mine drainage from abandoned mine discharges and will either be currently listed on Pennsylvania's Clean Water Act ("CWA") Section 303(d) list[1] or will have been identified as a water body that does not meet water quality criteria due to abandoned mine drainage. Each watershed will also have significant remining and reclamation potential, suitable overburden and geology and have viable additional options for offsetting increased pollution if the specified BMPs are not fully successful.

States are required to develop Total Maximum Daily Loads ("TMDL") for impaired water bodies

[1] States are required under the Federal Water Pollution Control Act ("FWPCA" or "CWA") to establish a prioritized list of those waters in the state that are impaired waters that do not meet water quality standards.

identified on their CWA Section 303 (d) lists. A TMDL defines the load that can be delivered to a stream from all sources within the watershed while still achieving federal and state water quality standards. The development and implementation of a TMDL for watersheds containing abandoned mine lands presents a unique challenge because in most cases there is no viable responsible party available to control AMD from an abandoned mine. For each watershed, it is expected that remining efforts will be an integral part of a water quality remediation plan following the development of TMDL limitations. Water quality improvements from remining will be achieved by implementing "BMPs" which are described in the recently drafted "Coal Remining – Best Management Practices Guidance Manual," EPA, March 2000[2].

This XL Project is a way for the sponsor and stakeholders to test and obtain data on the effectiveness of using the BMP approach to address in-stream water quality in up to eight AMD degraded watersheds. The flexibility being provided for this testing for these eight sites should not be seen as a precedent for this approach or as EPA's endorsement of this approach in areas or sites outside the scope of this XL Project.

This project will not change the conventional effluent limitation requirements for discharges that are physically encountered [3] by the mining operation, including pit water discharges or discharges from sedimentation ponds. Any pre-existing pollution discharges[4] that are encountered during the course of mining operations and any pit water will be monitored and treated (as necessary) to meet numerical effluent limitations. With respect to these discharges, the pilot projects will regulate the same chemical parameters as a typical remining permit. The pre-existing discharges that are not physically encountered will be addressed by the in-stream pollutant concentration compliance monitoring points. The in- stream monitoring will capture the combined pollution loading of the pre-existing discharges. For the purposes of testing the effectiveness of the BMP approach during the XL pilot projects, the pre-existing discharges will be monitored in order to compare these results with the in-stream concentrations.

III. Project XL Acceptance Criteria

[2]"Coal Remining – Best Management Practices Guidance Manual," EPA, March 2000. This document is available on the EPA website at: www.epa.gov/OST/guide/coal/

[3] A physically encountered discharge is one that during the course of active surface mining, including overburden removal, coal extraction, and backfilling, is diverted into or will be collected in a mine pit, pond. It will be considered encountered until the surface mining area has been backfilled and graded and revegetation work has commenced. A diversion of surface water or shallow groundwater from undisturbed areas is not considered an encountered discharge.

[4] The CWA defines a pre-existing discharge as a pollution discharge that results from mining activities prior to August 3, 1977.

A. Anticipated Superior Environmental Performance

This pilot project is expected to provide superior environmental performance ("SEP") because it will encourage coal operators to undertake remining projects that otherwise would have been too risky or expensive because of the potential to have to treat pre-existing acidic discharges. It is hoped that, in return for this lessening of the risk of discharge treatment, the reminers will implement more reclamation activities in the watershed than existing Pennsylvania regulations require. The reminers will still be responsible for an equally protective standard of maintaining overall water quality but will accomplish this via BMPs. Under this project, treatment of discharges will only be undertaken as a last resort if the BMPs fail (or were not implemented) and water quality is degraded. Remining (with reclamation to present-day standards) is an effective way to reclaim abandoned mine lands and improve water quality, at little or no cost to taxpayers. These pilots are designed to increase the number of remining operations providing reclamation and to enhance the degree of reclamation and AMD-abatement measures taken on remining operations.

The source of the water discharging from acid mine drainage seeps or point sources is generally water infiltrating from surrounding areas within the watershed. Application of one or more BMPs to the watershed, should have a positive effect on the loading of AMD that is discharged in the watershed. PADEP has an extensive body of scientific knowledge and experience in successfully remining and reclaiming abandoned mine lands to eliminate acid mine drainage.

A recent study by PADEP of 116 completed remining operations with 233 discharges or hydrologic units showed that approximately 47% of the projects resulted in statistically significant reduction in discharge loadings, while less than 1% resulted in degraded water quality. Although the balance of the remining discharges may not have shown any statistically significant improvement in water quality, no degradation occurred and many other public safety and environmental improvements were implemented with the remining. These included removal of dangerous highwalls, pits and ponded water; sealing mine openings, and regrading and vegetating abandoned mine lands. Overall, remining on these 116 sites reduced acidity load by 15,918 lbs/day (61%), iron load by 517 lbs/day (35%), manganese load by 31 lbs/day (13%), and aluminum load by 302 lbs/day (43%). Of the 283 remining permits issued by PADEP as of December, 1999, only five of the reminers, or less than 2%, ever incurred the cost of long-term treatment due to increased pollution loading.

These Project XL pilot projects are expected to yield results as good as or better than Pennsylvania's existing remining program, while allowing the program to expand into watersheds and undertake projects that otherwise would not have been attempted. Many potential remining projects are never undertaken due to concerns about the possibility of being required to assume the cost of discharge monitoring or treatment, and site constraints or site conditions that make it infeasible to write permits with conventional numeric effluent limits. For example, at sites where the pre-existing mine drainage discharges directly as subsurface baseflow into the groundwater, it may be difficult

or impossible to monitor and develop a loading-based numeric effluent limit.

Initial pilot projects are limited to Clean Water Act § 303(d) impaired watersheds where remining is anticipated to be one component of a TMDL driven watershed restoration plan.[5] In addition, the streams in the pilot sites selected will be small enough so that PADEP can easily evaluate the impact of the use of BMPs on the water quality. The pilot projects should, at a minimum, result in equivalent environmental performance but are expected to demonstrate significant environmental improvement. The chief purpose of the projects, however, is to determine the extent to which superior environmental results can be obtained.

The beneficial water quality impacts of remining are documented in Hawkins (1994, 1995) and Smith and Dodge (1995). Studies on the effectiveness of remining as a mine drainage pollution abatement tool are summarized in Hawkins (1998). These studies are contained and referenced in Coal Mine Drainage Prediction and Pollution Prevention in Pennsylvania,1998, a book published by PADEP[6].

The promise of water quality improvement is only part of the superior environmental performance expected from the project. The reclamation and revegetation of the abandoned mining areas, and possibly other areas of the watershed, will result in reduced erosion and sedimentation in adjacent streams, create habitat for flora and fauna, eliminate physical hazards such as high walls and pits, improve aesthetics through restoration of a barren landscape and removing the remaining coal reserves from scarred land instead of mining in virgin areas.

B. Cost Savings, Paperwork Reduction and Operational Flexibility

This project will significantly reduce the expenditure of public monies for reclamation of abandoned mine lands by encouraging remining by private parties. Remining reclaims land to current standards. Through the extraction of remaining coal reserves and the reclamation and revegetation of the land through remining, remaining coal reserves are utilized, land is reclaimed at no public expense, and water quality can be improved. Further, the proposed project encourages remining by

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[5]Section 303 (d) of the Clean Water Act requires that each state identify those waters within its boundaries that might need effluent limitations that are more stringent that the Federal standards in order to meet their designated uses and assure protection and propagation of indigenous populations of shellfish, fish and wildlife. Once these waters are identified and prioritized, the state will then calculate the Total Maximum Daily Load of pollutants a water can accept and still meet water quality standards.

[6]Coal Mine Drainage Prediction and Pollution Prevention in Pennsylvania is available on the PADEP website at: www.dep.state.pa.us/dep/deputate/minres/Districts/CMDP/main.htm.

shifting or reducing some of the risk that operators take when mining degraded land. This risk of incurring the cost of treatment of unencountered pre-existing discharges frequently discourages operators from remining areas that would otherwise be prime candidates for reclamation through remining. PADEP has shown that it is more cost effective to implement BMPs than risk the long term financial liability of treating an AMD discharge to meet numeric limits. If post mining treatment were required, it would make these operations economically infeasible. For example, the capital costs for treating AMD at the Amerikohl Rathmel site would be $182,000, plus annual operating costs of $108,000, for an estimated 50 years. However, the estimated cost of implementing the abatement plan based on BMPs is $56,686, and this is economically feasible given the expected profit from the extraction of the coal in the remining.

In addition, the BMPs will have an overall benefit to the surrounding environment and enhance future land use and aesthetics, increase safety and provide employment to local residents. Some relatively minor cost savings and paperwork reduction will be gained through the BMP approach, which will only require quarterly, rather than monthly, monitoring of pre-existing discharges after permit issuance.

C. Stakeholder Involvement and Support

PADEP sponsored a Project XL meeting for stakeholders on June 6, 2000, to present the details of this proposed XL Project and to solicit participation by stakeholders in the development of the project. Both before and after permit issuance, all water quality data, the permit and supporting application materials, the Consent Order and Agreement, inspection reports, correspondence, and other associated materials will be maintained and made available for public inspection at the appropriate PADEP district mining office for each pilot watershed. In some cases, citizen watershed organizations have formed around efforts to remediate AMD-impacted streams. Such organizations and other stakeholders, will be invited to stakeholder meetings held by PADEP to consider the best watersheds to become part of this pilot and possible BMPS to bring about water quality improvements.

In July 1999, the Mining and Reclamation Advisory Board (MRAB) met and toured the Amerikohl Soldier Run Site in order to learn more about this BMP approach to remining permits. The MRAB is made up of a cross section of entities, from coal mining companies to environmentalists, that are stakeholders in the remining of Pennsylvania's abandoned coal mine lands. Members of the MRAB will be invited to participate in this project as stakeholders. In late October 1999, PADEP issued a statewide press release to publicize the BMP approach in coal remining

permits.[7] PADEP also made a presentation on the BMP approach in remining permits was also made by PADEP at the April 27, 2000 MRAB meeting in Harrisburg, Pennsylvania.

D. Innovative Approach and Multi-media Pollution Prevention

The project will be a test of an innovative approach to encourage remining with an emphasis on BMPs as opposed to numeric effluent standards. The use of BMPs without numeric limits is an innovative approach that focuses on preventing pollution at the source(s) in the abandoned mine land areas of the watershed regardless of whether they will be disturbed (encountered) during the remining. This project will provide EPA's Office of Water with data and experience as it examines coal mining effluent limitations and the effect of the BMP approach on the overall water quality in degraded streams. This XL project will also allow PADEP, EPA and the reminers to gain more experience in how to implement BMPs, develop new BMPs and refine the application of existing BMPs, as well as provide data on the most effective BMPs and information on possible improvements in their use.

E. Transferability of the Approach to Other Entities or Sectors

Pennsylvania has over 2,400 miles of streams degraded by acid mine drainage and an estimated $15 billion public liability for the remediation of abandoned mine lands. There are significant reminable coal reserves in the abandoned mine lands throughout the bituminous and anthracite regions of Pennsylvania in AMD-degraded watersheds, where this pilot project could be directly transferred. In addition, as evidenced by the interest of the Interstate Mining Compact Commission ("IMCC") and a possibility noted in EPA's current examination of coal mining effluent limitations, this project might be applicable to all of the Appalachian coal producing states and to other states with abandoned coal mines with AMD problems.

F. Feasibility of the Project

The Sponsor has the financial capability, personnel and senior management commitment necessary to implement and oversee the elements of this XL Project. The Agencies, by signing this FPA, agree to support the project, subject to any public review procedures necessary to implement the legal mechanism for the project.

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[7]The press release can be found at http://www.dep.state.pa.us/dep/deputate/polycomm/pressrel/ 2000/BaumgardnerCoal010500.html

The proposed project watersheds are well-suited for the application of this alternative remining approach for the following reasons: 1) the affected stream segments are not currently meeting in-stream water quality standards; 2) remining, employing the appropriate BMPs is likely to result in an overall improvement to in-stream water quality and reduce the total daily load of mine drainage pollutants; 3) significant reminable coal reserves are present in the watershed; 4) there is significant acreage in the watersheds in need of surface reclamation; 5) there are numerous sources of mine drainage entering the watersheds, making monitoring at each individual discharge point less practical than in-stream performance monitoring, 6) discharges are in a location that makes monitoring and establishment of numerical effluent limitations very impractical or impossible; and 7) there are multiple mining and reclamation opportunities available in the watersheds, making it more practical to monitor the combined effect of these projects rather than focusing on the performance at smaller individual parts of the projects.

G. Monitoring, Reporting, Accountability, and Evaluation Methods to be Used

EPA and PADEP intend to make all project information available to stakeholders in a form that is accessible and easy to understand. EPA and PADEP Project contacts are listed in Section I.D. of this FPA. Project Information and Progress Reports for this project will also be posted on the PADEP web site at http://www.dep.state.pa.us/dep/deputate/minres/Districts/homepage.htm and the EPA website at http://www.epa.gov/ProjectXL/padep/index.htm. Project documents are also available for review between 8:00 am and 4:00 pm at the Hawk Run District Mining Office on Empire Road in Hawk Run, PA 16840-0209. The telephone number of the office is (814) 342-8200.

The success of the pilot projects in maintaining compliance with environmental laws will be monitored and reported throughout the projects. In addition, each pilot project will be assessed in terms of: 1) the amount of abandoned mine lands that have been reclaimed, 2) water quality improvements that have been realized that would not have occurred under the conventional remining permit program, 3) determining the effect of the BMPs on pollution loads from pre-existing discharges, and 4) determining the impact/effectiveness of the additional BMPs implemented that would not have been required under the conventional Pennsylvania remining program. PADEP will attempt to quantify the number of stream miles now meeting water quality standards as a result of the project. The above criteria will allow a rigorous assessment of SEP.

Also, because implementation of the BMPs is such an important component of these operations, PADEP recognizes that more frequent inspections may be needed to oversee BMP sites versus standard remining permit sites. PADEP inspection frequencies will be increased appropriately to ensure the BMPs have been fully implemented. The actual PADEP inspection frequency will depend on the complexity of the BMPs selected for each site. Periodic reports and updates regarding the activity on these pilot sites and water quality monitoring results will be submitted to EPA.

For each pilot site, environmental performance will be measured at one or more key in-stream monitoring points as well as at the pre-existing pollution discharge monitoring points. In-stream monitoring during baseline, active mining and post mining will be performed both upstream (if available) and downstream of the pre-existing discharge monitoring points. A pre-project water quality baseline of at least one year's duration will be established at each of these points. During active mining, the principal in-stream water quality station will be monitored at least twice a month for the key mine drainage parameters (pH, acidity, alkalinity, specific conductance, iron, manganese, aluminum, and sulfates). Individual discharges will be monitored monthly before mining for the same parameters as well as flow rate, so that pollution loading rates can be determined. A pre-project statistical baseline will be established for the in-stream and discharge monitoring points.

Following initiation of the project, monitoring of the principal in-stream monitoring point(s) will continue twice a month. Individual discharges will continue to be monitored quarterly. Water quality performance will be reviewed with each quarterly site inspection. Annually, and for each request for release of reclamation bonds, water quality data from before, during and after mining will be statistically analyzed to determine whether or not there were any statistically significant[8] changes in water quality – both at the in-stream monitoring point and for individual discharge loadings. PADEP believes that monitoring at in-stream monitoring points will provide a better indication of the overall health of the streams and effects of remining on the watershed than monitoring several individual discharge points, that may not capture all the pollution loading inputs to the stream.

The main goal of this project is not just to demonstrate that remining with the BMP approach can produce water quality improvements (this has already been demonstrated in PADEP studies), but rather that implementation of a BMP-based remining permit can further encourage remining in places that otherwise would not have been worth the operator's expense or risk of undertaking a remining project or where a conventional numerical effluent limitation is infeasible. Although water-quality performance will be evaluated, the overall success of the project will also be evaluated based on the following criteria: Acreage of abandoned mine lands remined and reclaimed that would not have been remined under the existing Pennsylvania Remining Subchapter F program (Subchapter F); additional reclamation or remediation projects done in the watersheds as a result of pilot projects; effects on in-stream water quality; effects on pollution loads from pre-existing discharges and additional BMPs implemented that would not have been required under the conventional Subchapter F program. PADEP intends to survey operators and permit writers to determine pilot project that would not have been done under Subchapter F permits.

H. Avoidance of Shifting the Risk Burden to Other Areas or Media

[8] Statistically significant is defined as an approximate 95 percent confidence level above the median of the pre-mining baseline.

As stated above, there will be no transfer of pollution from one media to another in this project but rather a prevention of degradation by reducing or eliminating the contact of water with the acid forming rock overburden or by taking measures to produce alkaline waters.

Information is available on the percentage of minority and low income populations in the areas around the proposed mining sites. The areas generally have a low population and little if any minority population. Both counties where the sites are located have a higher percentage of below poverty population than the state or Region III average

IV. Description of the Requested Flexibility and the Implementing Mechanisms

A. Requested Flexibility

In 1987, Congress amended the Clean Water Act (CWA) in an effort to encourage remining. Section 301(p), known as the Rahall Amendment, grants remining operations an exception to NPDES numeric effluent limits, as stated in 40 CFR 434, for iron, manganese and pH for preexisting discharges from mines abandoned before 1977. It allows less stringent numeric effluent limits, representing best available technology, for iron, manganese and pH to be established on a case-by-case basis in discharges affected by remining. These limits are to be set by using best professional judgement (BPJ) but the limits for pH, iron, and manganese may not exceed preexisting discharge levels. Also, the applicant must demonstrate the potential for improved water quality from the remining operation and assure that the discharges comply with state water quality standards for the receiving stream. In some cases, it may be necessary to seek a variance if achieving water quality standards is not feasible even with improved discharge quality.

PADEP currently requires 40 CFR 434 numeric effluent limits for preexisting discharges that are directly encountered by the remining operation. Less stringent BPJ numeric effluent limits are required for preexisting discharges that are not directly encountered, such as adjacent seeps, but which are hydrologically connected and may be affected by the remining operation.

PADEP, as the Project XL sponsor, is requesting regulatory relief from BPJ numeric effluent limits for preexisting discharges that are not directly encountered during remining and for all preexisting discharges after completion of remining, including both those discharges encountered and not encountered during remining. For these pre-existing discharges, the reminers will be required to implement specific BMPs as well as comply with in-stream pollutant concentration limits. Implementation of these BMPs at previous remining sites has been documented by PADEP to improve water quality and achieve the BPJ numerical limits. PADEP will continued to require the 40 CFR 434 numeric limits for the preexisting discharges encountered during the remining operation.

Each of the proposed remining watersheds has been severely degraded by acid mine drainage from abandoned mines or has been identified as a water body that does not meet water quality criteria due to abandoned mine drainage. PADEP has indicated that the potential costs of treatment, monitoring before and after remining, and unpredictable factors regarding monitoring to verify permit compliance, may be such a great disincentive that remining would probably not occur at these particular sites.

In return for the flexibility described above, the reminers will implement more reclamation activities in the watershed than existing Pennsylvania regulations require. These pollution prevention activities that are applied on a watershed scale are a more cost effective remedy than long term end of pipe treatment of point-source discharges, as might be necessary to meet numeric effluent limitations. Moreover, they will provide the superior environmental performance of a sustainable remedy to the abandoned mine land. If environmentally responsible remining is encouraged, society and the environment stand to gain by reclaiming these lands for little if any cost to the taxpayer. The signatories of this FPA believe this XL Project is consistent with the purposes and intent of the CWA because it provides for the prevention, reduction or elimination of pollution of surface and ground water.

PADEP will use best professional judgement to select the appropriate BMPs to be applied in each of the remining areas, and possibly other areas of the watersheds. PADEP and EPA expect that this will result in an overall improvement to water quality from the remining operations. If, after remining and the implementation of the BMPs, the in-stream concentrations show statistically significant degradation of water quality, then PADEP will require the remining company to implement additional BMPs. In order to be selected, the eight XL pilot project sites must have multiple available options available for remediation if the water quality in the stream is degraded. If the company fails to implement the required BMPs then it will have to meet conventional remining effluent limitations.

B. Legal Implementation Mechanism

PADEP intends to exercise its existing authority to implement this XL Project. In addition to the goals stated below, EPA enters into this Project XL Agreement because PADEP will use its enforcement discretion as part of it's implementation strategy. Because of the nature of the candidate sites that exemplify Pennsylvania's long-standing and continuing problems caused by abandoned mine lands and acid mine drainage, EPA recognizes that PADEP's approach in this instance is consistent with the goals of the Clean Water Act to protect and enhance water quality and the goals of the XL Program to test innovative approaches to environmental protection. The approach being taken is dissimilar to that used in the NPDES program and is of little precedential value outside of the context of this XL Project. Stakeholders, including EPA, have been and will continue to be involved in the development of this XL project. The legal mechanisms used to

implement this project will allow for the participation of stakeholders and will provide for public notice and comment.

V. Project Schedule and Reporting

A. Schedule

PADEP is responsible for the schedule for the review and permitting of mining applications. The PADEP remining permit will include the permit issuance date and expiration date as well as the permittee reporting and compliance schedules.

B. Reporting and Evaluation

PADEP will provide a yearly report to notify EPA and the other stakeholders on the status of the XL Project and the individual mining sites in the pilot project. PADEP should provide the information outlined in Section III. G. in the yearly report. PADEP will notify EPA and the stakeholders of new mining permit applications proposing to use the Project XL BMP approach described in this FPA. PADEP will provide any data and information that EPA or stakeholders might request on the Project XL remining sites. PADEP will post Project XL information, including the yearly reports and notification of new mining permit applications, on the website listed in Section II. G.

VI. Legal Basis for the Project

A. Authority to Enter Into the Agreement

By signing this Agreement, EPA, PADEP acknowledge and agree that they have the respective authorities, discretion and resources to enter into this Agreement and to implement all applicable provisions of this Project, as described in this Agreement.

B. Legal Effect of the Agreement

This Agreement in itself does not create or modify legal rights and obligations, is not a contract or a regulatory action such as a permit or rule, and is not legally binding or enforceable

against any Project Signatory. Rather, it expresses the plans and intentions of the Project Signatories without making those plans and intentions binding requirements. This applies to the provisions of this Agreement that concern procedural as well as substantive matters. However, while the Project Signatories fully intend to adhere to the provisions of this agreement, they are not legally obligated to do so.

This Agreement is not a "final agency action" by EPA or PADEP, because it does not create or modify legal rights or obligations and is not legally enforceable. This Agreement itself is not subject to judicial review or enforcement. Nothing any Project Signatory does or does not do that deviates from a provision of this Agreement, or that is alleged to deviate from a provision of this Agreement, can serve as the sole basis for any claim for damages, compensation or other relief against any Project Signatory.

C. Other Laws or Regulations That May Apply

The Project Signatories do not intend this Final Project Agreement to modify any existing or future laws or regulations.

D. Retention of Rights to Other Legal Remedies

Nothing in this Agreement affects or limits EPA's or PADEP's legal rights. These rights may include legal, equitable, civil, criminal or administrative claims or other relief regarding the enforcement of present or future applicable federal and state laws, rules, regulations or permits with respect to the project sites/pilot sites.

VII. FPA Implementation Issues

A. Withdrawal From or Termination of the FPA

Because this FPA is not legally enforceable, no Project Signatory may be legally compelled to continue with the PADEP Coal Remining and Reclamation XL Project. However, it is the desire of the Project Signatories for the FPA to remain in effect and be implemented as fully as possible, and it is not their intent to terminate or withdraw from the FPA unless there is a compelling reason to do so.

The Project Signatories agree that appropriate grounds to seek withdrawal from the FPA could include, but are not limited to:

1. Substantial failure by any party to the Agreement to: a) comply with the provisions of the implementing mechanisms for this Project, or b) to act in accordance with the provisions of this Agreement;

2. Substantial failure of any party to the Agreement to disclose material facts during development of this Agreement;

3. Substantial failure of the XL Project to provide superior environmental performance consistent with the provisions of this Agreement;

4. Enactment or promulgation of any environmental, health or safety law or regulation after execution of the Agreement, that renders the Project legally, technically or economically impracticable; and/or

5. Decision by US EPA or PADEP to reject the transfer of the Project to a new owner or operator of a pilot site.

In addition, US EPA and PADEP do not intend to withdraw from the Agreement unless actions by the remining companies constitute a substantial failure to act consistently with intentions expressed in this Agreement and its implementing mechanisms. The decision to withdraw will take the failure's nature and duration into account. The relevant remining companies will be given notice and a reasonable opportunity to remedy any "substantial failure" before EPA's or PADEP's withdrawal. If there is a disagreement between the Project Signatories over whether a "substantial failure" exists, the Project Signatories will use the dispute resolution mechanism set forth in Section VII.E of this Agreement. US EPA and PADEP retain their discretion to use existing enforcement authorities, including withdrawal or termination of this Project, as appropriate. The remining companies retain any existing rights or abilities to defend themselves against any enforcement actions, in accordance with applicable procedures.

B. Procedures for Withdrawal or Termination of the FPA

The Project Signatories agree that the following procedures will be used to withdraw from or terminate the Project before expiration of the Project term. They also agree that the implementing mechanism(s) will provide for withdrawal or termination consistent with these procedures.

1. Any Project Signatory that wants to terminate or withdraw from the Project is expected to provide written notice to the other parties at least sixty (60) days before the withdrawal or termination.

2. If requested by any Project Signatory during the sixty (60) day period noted above, the dispute resolution proceedings described in this Agreement may be initiated to resolve any dispute relating to the intended withdrawal or termination. If, following any dispute resolution or informal discussion, a Project Signatory still desires to withdraw or terminate, that Project Signatory will provide written notice of final withdrawal or termination to the other Project Signatories.

   If any agency withdraws or terminates its participation in the Agreement, the remaining agencies will consult with the reminers to determine whether the Agreement should be continued in modified form, consistent with applicable federal or state law, or whether it should be terminated.

3. The procedures described in this Section apply only to the decision to withdraw or terminate participation in this Agreement. Procedures to be used in modifying or rescinding any legal implementing mechanisms will be governed by the terms of those legal mechanisms and applicable law.

C. Modification of the FPA

This Agreement may be modified by mutual agreement of all of the Project Signatories at any time during the duration of the Project. If the Parties agree to make any substantial modification to this agreement, the general public will receive notice of the modification and be given the opportunity to participate in the process, as appropriate. The Project Signatories recognize that modifications to this Agreement may also necessitate modification of the legal implementing mechanisms or may require the development of new implementation mechanisms and must be done in accordance with regulations and rules that apply to those modifications of such legal implementation mechanisms.

D. Duration of the Agreement

This Agreement will be in effect for no longer than 10 years from the date of the signing of the FPA, unless it is terminated earlier or extended by agreement of all Parties. (If the FPA is extended, the comments and input of stakeholders will be sought and a Federal Register Notice will be published.) Any Project Signatory may terminate its participation in this Project at any time in accordance with the procedures set forth in Sections VII. G. of this FPA.

E. Dispute Resolution

Any dispute that arises under or with respect to this Agreement will be subject to informal negotiations between the Project Signatories to the Agreement. The period of informal

negotiations will not exceed twenty (20) calendar days from the time the dispute is first documented, unless that period is extended by a written agreement of the parties to the dispute. The dispute will be considered documented when one party sends a written Notice of Dispute to the other parties.

In the event that the parties cannot resolve a dispute through informal negotiations, the parties may invoke non-binding mediation by setting forth the nature of the dispute with a proposal for resolution to the Regional Administrator for EPA Region III. Prior to the issuance of an opinion, the Regional Administrator may request an additional, informal mediation hearing. If so requested, the Regional Administrator will attempt to resolve the dispute by issuing a written opinion that will be non-binding and does not constitute final EPA action. If this effort is not successful, the parties still have the option to terminate or withdraw from the Agreement, as set forth in Section VII.A.B.

F. Transfer of Project Benefits and Responsibilities to a New Owner

The parties expect that the implementing mechanisms will allow for a transfer of the remining companies' benefits and responsibilities under the Project to any future owner or operator of a pilot site upon request of the remining companies and the new owner or operator, provided that the following conditions are met:

1. The remining companies will provide written notice of any such proposed transfer to the EPA and PADEP at least ninety (90) days before the effective date of the transfer. The notice is expected to include identification of the proposed new owner or operator, a description of its financial and technical capability to assume the obligations associated with the Project, and a statement of the new owner or operator's intention to take over the responsibilities in the XL Project of the existing owner or operator.

2. Within forty-five (45) days of receipt of the written notice, the Project Signatories expect that EPA and PADEP, in consultation with stakeholders, will determine whether: a) the new owner or operator has demonstrated adequate capability to meet EPA's requirements for carrying out the XL Project; b) is willing to take over the responsibilities in the XL Project of the existing owner or operator; and c) is otherwise an appropriate Project XL partner. Other relevant factors, including the new owner or operator's record of compliance with Federal, State and local environmental requirements, may be considered as well.

It will not be necessary to modify the Agreement to reflect the new owner or operator however, it may be necessary for PADEP to amend the implementing mechanisms (subject to applicable public notice and comment) to transfer the legal rights and obligations of the remining companies under this Project to the proposed new owner or operator.

G. Project Completion or Termination

1. Project Completion

The parties intend that there be an orderly return to compliance upon completion, withdrawal from, or termination of the Project. EPA will conduct an evaluation of the project before a decision is made that the project has been completed. If, after an evaluation, the Project is terminated because the term has ended, the reminer will return to compliance with all applicable requirements by the end of the Project term, unless the Project is amended or modified in accordance with Section VII. C. of this Agreement (Amendments or Modifications). The reminers expected to anticipate and plan for all activities to return to compliance sufficiently in advance of the end of the Project term. The reminer may request a meeting with EPA, and PADEP to discuss the timing and nature of any actions that the reminer will be required to take. The parties should meet within thirty days of receipt of the written request for such a discussion. At and following such a meeting, the parties should discuss in reasonable, good faith, which of the requirements deferred under this Project will apply after termination of the Project.

2. Early Withdrawal, Termination or Project Failure

In the event of a withdrawal or termination not based on the end of the Project term and where PADEP and the Project participants have acted in good faith, PADEP will take steps to ensure that the reminer participants are brought into compliance with the requirements of all applicable Federal and State laws and regulations. As necessary, PADEP will issue and/or enforce an order, permit, or other legally enforceable mechanism establishing a schedule for the remining company to return to compliance with otherwise applicable requirements including, but not limited to, compliance with discharge treatment and numerical effluent limitations requirements, as soon as practicable. EPA or PADEP will provide written notice of final withdrawal or termination of the Project, in accordance with Section VII.A. and B. of this Agreement.

H. Periodic Review

The Parties will confer, on a periodic basis to assess progress in implementing the XL Project. Unless it is agreed otherwise, a Periodic Performance Review Conference by the Project Signatories will take place at least every six months. The six month status reports may take the place of the conference, if agreed to by the Project Signatories. Not later than thirty (30) days following the conference, EPA will post a summary of the minutes and/or status reports on the Project XL Web Page and will provide identified and local stakeholders with a copy of the summary minutes. Any additional comments of stakeholders will be forwarded to EPA, PADEP and the remining companies.

I. Effective Date

This FPA is effective on the date it is dated and signed by EPA's Regional Administrator for Region III.

PADEP Coal Remining and Reclamation XL Project Signatories:

_____ _____

Bradley M. Campbell, Regional Administrator, Date Signed
U.S. EPA Region III

_____ _____

James M. Seif, Secretary Date Signed
Pennsylvania Department of Environmental Protection (PADEP)