## COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of:

KMP Associates, Inc. 1094 Lantz Road

Avonmore, PA 15618

Ehenger and Park Mines

Permit Nos. 32940109 and 32990110

Young Township, Indiana County

# POSTMINING TREATMENT TRUST CONSENT ORDER AND AGREEMENT

This Consent Order and Agreement ("Consent Order and Agreement") is entered into this 2/5/ day of October, 2009, by and between the Commonwealth of Pennsylvania,

Department of Environmental Protection ("Department"), and KMP Associates, Inc. ("KMP").

The Department has found and determined the following:

- A. The Department is the agency with the duty and authority to administer and enforce the Surface Mining Conservation and Reclamation Act, Act of May 31, 1945, P.L. 1198, as amended, 52 P.S. §§ 1396.1 et seq. ("Surface Mining Act"); the Bituminous Mine Subsidence and Land Conservation Act, Act of April 27, 1966, P.L. 31, as amended, 52 P.S. §§ 1406.1 et seq. (Subsidence Act); the Coal Refuse Disposal Control Act, Act of September 24, 1968, P.L. 1040, as amended, 52 P.S. §§ 30.51 et seq. ("Coal Refuse Disposal Act"); the Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. §§ 691.1 et seq. ("Clean Streams Law"); Section 1917-A of the Administrative Code of 1929, Act of April 9, 1929, P.L. 177, as amended, 71 P.S. § 510-17 ("Administrative Code") and the rules and regulations promulgated thereunder.
- B. Pursuant to § 4(d.2) of the Surface Mining Act, 52 P.S. § 1396.4(d.2), the Department may establish alternative financial assurance mechanisms which shall achieve the objectives and purposes of the bonding program. These mechanisms include the establishment

of a site-specific trust fund funded by a mine operator for the treatment of post-mining discharges of mine drainage. The post-mining treatment trust being established by this Consent Order and Agreement and accompanying Post-Mining Discharge Treatment Trust Agreement constitutes an alternative financial assurance mechanism authorized by § 4(d.2) of the Surface Mining Act.

- C. KMP Associates was a general partnership with a business address of 1094 Lantz Rd., Avonmore, PA 15618, whose business included the mining of coal by the surface method in the Commonwealth of Pennsylvania pursuant to Surface Mining Operator's License No. 1492. Cynthia S. Rupert, Steven P. Kravetsky and William J. Paulisick were the partners of KMP Associates and were the responsible persons for KMP's day to day operations.
- D. KMP Associates, Inc. is a Pennsylvania corporation with a business address of 1094 Lantz Rd., Avonmore, PA 15618, whose business includes the mining of coal by the surface method in the Commonwealth of Pennsylvania pursuant to Surface Mining Operator's License No. 14706. Cynthia S. Rupert is the president of KMP Associates, Inc. and is the person responsible for KMP's day to day operations.
- E. KMP Associates, Inc. ("KMP") is the permittee of the following bituminous surface coal mines that are associated with post-mining discharge liabilities:

Name	Permit No.	Township	County
Ehenger Mine Park Mine	32940109	Young	Indiana
	32990110	Young	Indiana

## EHENGER MINE

- F. The permit for Ehenger Mine, Surface Mining Permit ("SMP") No. 32940109, was originally issued on July 14, 1995, to KMP Associates. On November 22, 2004, the permit was transferred to KMP Associates, Inc.
- G. All mining has been completed on the Ehenger Mine. There are two acid mine drainage discharges associated with the Ehenger Mine, which are identified as MD6 and MD1 (collectively referred to as the "Ehenger Discharges"). MD6 and MD1 are identified and located on the topographic map attached hereto as **Exhibit A**.
- H. The MD6 discharge is a degraded Subchapter F point that exceeds the baseline pollution loading rates for iron and manganese set forth in the Subchapter F special conditions of SMP No. 32940109. The MD1 discharge is a below water level, in-pond seep characterized by depressed pH; acidity greater than alkalinity; and iron and manganese concentrations that exceed the limitations of 25 PA Code §87.102. The specific water quality for MD6 and MD1 is more specifically described in **Exhibit B**, attached hereto.
- I. KMP constructed a passive treatment system to treat the MD6 discharge. This Treatment System consists of a 350 foot open limestone channel that flows into a limestone–filled pond.
- J. KMP constructed a chemical treatment system to treat the MD1 discharge. Caustic soda is dripped into the discharge, which then flows into four settling basins for solids retention. Alkaline, waste sludge from this chemical treatment system is removed by a vacuum truck and disposed of at a permitted disposal site. A third discharge, Subchapter F point MD-1, is directed to this treatment system for enhancement, only. KMP did not adversely affect MD-1. The treatment systems for the MD1 and MD6 discharges are hereinafter collectively referred to

as the Ehenger Mine Treatment Systems.

- K. The treated effluent from the Ehenger Mine Treatment Systems discharges to an unnamed tributary to Whisky Run, a water of the Commonwealth, under authority of SMP No. 32940109 and NPDES Permit No. PA0212954.
- L. The effluent limits for the MD6 discharge have been established by the Department in accordance with the requirements of Section 301 and 402 of the Federal Clean Water Act, 33 U.S.C., Sections 1311 and 1342, and represent the Department's best engineering judgment of the capacity of the best available technology economically achievable to treat the discharge. The effluent limits applicable to the MD6 discharge are as follows:

Discharge <u>Parameter</u>	Average Monthly (Loading in Pounds/Day)	Instantaneous Maximum (Loading in Pounds/Day)
Acidity	4.00	9.00
Iron	.15	.34
Manganese	.08	.18

M. The effluent limits applicable to the MD1 discharge are as follows:

Discharge Parameter	Average Monthly	Maximum Daily	Instant <u>Maximum</u>
Iron, total (mg/l)	3.0	6.0	7.0
Manganese, total (mg/l)	2.0	4.0	5.0
Total suspended solids (mg/l)	35.0	70.0	90.0

- pH not less than <u>6.0</u> nor greater than <u>9.0</u> at all times.
- Alkalinity must exceed acidity at all times.
- N. The Treatment Systems are constructed on property owned by Joan Ehenger.

  KMP previously obtained Consent to Right of Entry, also known as a Supplemental 'C', granting permission to conduct surface mining activities on the Ehenger property. This document was recorded in the Recorder of Deeds Office of Indiana County on December 5, 1994.

- O. The annual treatment cost for operating and maintaining the Ehenger Mine Treatment Systems is Five Thousand Four Hundred Seventy Three Dollars (\$5,473.00), and the present value of recapitalization costs is Twenty Thousand Three Hundred and Forty Six Dollars (\$20,346.00).
  - P. KMP posted the following financial instruments for the Ehenger Mine:

DEP Financial Guarantee (Remining) #484043FG \$67.5	<u>int</u>
	00.00
First Commonwealth Bank Letter of Credit #015R0177 \$57.0 \$124.5	

#### **PARK MINE**

- Q. The permit for Park Mine, SMP No. 32990110, was originally issued on May 15, 2000 to KMP Associates. On February 15, 2005, this permit was transferred to KMP Associates, Inc.
- R. All mining has been completed on the Park Mine. There are three acid mine discharges associated with the Park Mine, identified as seeps A, B, and C (hereinafter collectively referred to as the "Park Mine Discharges"). The Park Mine Discharges are identified and located on the topographic map attached hereto as **Exhibit A**.
- S. The Park Mine Discharges are characterized by depressed pH, acidity greater than alkalinity, and manganese concentrations that exceed the limitations of 25 PA Code §87.102.

  The specific water quality for the Park Mine Discharges is more specifically described in **Exhibit B,** attached hereto.
- T. KMP constructed a chemical treatment system to treat the Park Mine Discharges.

  The Park Mine Discharges are collected in an open ditch, and caustic soda is dripped into the ditch where the flow of each discharge is combined. This flow is then directed to two settling

basins for solids retention. Alkaline, waste sludge from this chemical treatment system is removed by a vacuum truck and disposed of at a permitted disposal site. The treatment system for the Park Mine Discharges is hereinafter referred to as the Park Mine Treatment System.

- U. The treated effluent from the Park Mine Treatment System discharges into an unnamed tributary to Harpers Run, a water of the Commonwealth, under authority of SMP No. 32990110 and NPDES Permit No. PA0235164.
  - V. The effluent limits applicable to the Park Mine Discharges are as follows:

Discharge <u>Parameter</u>	Average Monthly	Maximum <u>Daily</u>	Instant <u>Maximum</u>
Iron, total (mg/l)	3.0	6.0	7.0
Manganese, total (mg/l)	2.0	4.0	5.0
Total suspended solids (mg/l	)35.0	70.0	90.0

- pH not less than <u>6.0</u> nor greater than <u>9.0</u> at all times.
- Alkalinity must exceed acidity at all times.
- W. The Park Mine Treatment System is constructed on property owned by Charles S. & Delores M. Kravetsky and a Supplemental "C", Contractual Consent of Landowner, was recorded in the Recorder of Deeds Office of Indiana County on March 8, 1999.
- X. The annual treatment cost for operating and maintaining the Park Mine Treatment System is One Thousand Nine Hundred Fifty Dollars (\$1950.00), and the present value of recapitalization costs is Four Thousand Two Hundred Seventy Eight Dollars (\$4,278.00).
  - Y. KMP posted the following financial instruments for the Park Mine:

Instrument	Amount
First Commonwealth Bank Letter of Credit #015R0179	\$ 6,838.00 \$29,600.00 \$ 603.00 \$37,041.00

Z. Surface reclamation at the Ehenger and Park Mines has been completed, except

for elimination or treatment of the Discharges and reclamation of the surface areas occupied by the Treatment Systems.

- AA. KMP has the legal responsibility to treat or abate the Ehenger Mine and Park Mine Discharges pursuant to, *inter alia*, the Surface Mining Act and Clean Streams Law.
- BB. In accordance with Paragraph 14 of this Consent Order and Agreement, KMP must obtain newly executed "Consent to Right of Entry" forms for both the Ehenger and Park Mines that grant the parties and the trustee a right of access to the properties on which the Treatment Systems are located. A copy of the "Consent to Right" of Entry form is attached hereto as **Exhibit E.**
- CC. KMP desires to establish a irrevocable post-mining treatment trust with First Commonwealth Bank Trust Division as an alternative financial assurance mechanism in order to provide for the long-term treatment of the Ehenger Mine and Park Mine post-mining discharges and secure the release of reclamation bonds upon completion of all other reclamation requirements. KMP agrees to establish the trust by executing a Post-Mining Treatment Trust Agreement with First Commonwealth Bank Trust Division which conforms with the Department's model trust agreement ("Trust").
- DD. In order to calculate the amount necessary to fully fund the Trust, the Department and KMP have agreed to use actual operation and maintenance costs from past operations of the Treatment Systems, or AMD Treat cost estimates where insufficient operation and maintenance cost data exist. A summary of current annual operation and maintenance costs for the Treatment Systems is as follows:

Table of Current Annual Operation and Maintenance Costs

CATEGORY	SAMPLING	LABOR	MAINTENANCE	CHEMICAL (liquid caustic soda)	SLUDGE REMOVAL
Rate	(\$/sample) \$27/sample	(\$/hr.) \$35/hour)			
Annual Cost	\$1,804	\$3,412	\$944	\$1,120	\$143

- EE. Based on actual operation and maintenance costs from past operations and AMD Treat cost estimates the current annual cost of operating and maintaining the Treatment Systems is Seven Thousand, Four Hundred and Twenty Three Dollars (\$7,423.00).
- FF. In order to calculate the amount necessary to fully fund the Trust, the Department and KMP agree to use recapitalization and demolition cost data generated by the Department's AMD Treat software tool. According to the AMD Treat software tool, the present value of recapitalization costs is **Twenty Four Thousand**, **Six Hundred Twenty Four Dollars** (\$24,624.00). The AMD Treat Recapitalization Cost schedule for the Treatment Systems is attached hereto as **Exhibit F**.
- GG. In order to ensure adequate funding of the alternative financial assurance mechanism, the Department requires accurate and timely information on the costs related to operation and maintenance of the Treatment Systems.
- HH. The parties have agreed to use the formulas and procedures in this Consent Order and Agreement to determine the present value of the trust. The parties agree that One Hundred Seventy Six Thousand and Five Dollars and Thirty Five Cents (\$176,005.35 @ 0.65% Trustee Fee) represents the current present value of the estimated future operation and maintenance costs for the Treatment Systems, and the current present value of the estimated future recapitalization costs for the Treatment Systems. The parties have also agreed to use the information and figures that will be provided by the Accounting required by Paragraph 4 to

recalculate and adjust the amount of the Trust as described in Paragraphs 8 and 10 below.

#### ORDER

After full and complete negotiation of all matters set forth in this Consent Order and Agreement and upon mutual exchange of covenants contained herein, the parties intending to be legally bound, it is hereby ORDERED by the Department and AGREED to by KMP as follows:

1. This Consent Order and Agreement is an Order of the Department authorized and issued pursuant to Section 5 of the Clean Streams Law, 35 P.S. § 691.5; Section 4.3 of the Surface Mining Act, 52 P.S. § 1396.4c; Sections 3.1 and 9 of the Coal Refuse Disposal Act, 52 P.S. §§ 30.53a and 30.59; Section 9 of the Subsidence Act, 52 P.S. § 1409.9, and Section 1917-A of the Administrative Code, 71 P.S. § 510-17. The failure of KMP to comply with any term or condition of this Consent Order and Agreement shall subject KMP to all penalties and remedies provided by those statutes for failing to comply with an order of the Department.

### 2. Findings

- a. KMP agrees that the findings in Paragraphs A through HH are true and correct and, in any matter or proceeding involving KMP and the Department, KMP shall not challenge the accuracy or validity of these findings.
- b. The parties do not authorize any other persons to use the findings in this Consent Order and Agreement in any matter or proceeding.

#### 3. Definitions

- a. <u>Accounting</u>. The accounting method required by Paragraph 4 of this Consent Order and Agreement.
- b. <u>Actual Treatment Cost</u>. The average of three consecutive years of the costs of treatment, calculated by using the Accounting for those three years.

- c. <u>Annual Anniversary Date</u>. Thirty (30) days after the last day of KMP's fiscal year or thirty (30) days after the last day of any fiscal year that KMP may adopt in the future.
- d. <u>Calculated Treatment Cost</u>. The projected future annual costs of treatment, based on the Actual Treatment Cost, compounded at three and one tenth percent (3.1%) annually.
- e. <u>Capital Improvement Account.</u> The sub-account within the Trust that is primarily used to finance anticipated and periodic capital expenditures for the Treatment Systems.
- f. <u>Distribution Payment.</u> The Trustee's disbursement of money from the Trust made at the written direction of the Department to a person and in an amount specified by the Department, as provided by this Consent Order and Agreement.
- g. <u>Formula</u>. The equation used to calculate the Present Value of the future operation and maintenance ("O&M") of the Treatment Systems. The equation is:

PV = (A/[E-I]) + A

where: PV = Present Value of the O&M Costs

A = Actual Treatment Cost

E = Expected annual earnings/Interest Rate

I Inflation Rate (assumed to be 3.1% or .031)

- h. <u>Primary Basis Valuation</u>. One hundred percent (100%) of the present value of the future costs of operating and maintaining the Treatment Systems, as determined by the Formula.
- i. <u>Primary Target Valuation</u>. One hundred and sixteen percent (116%) of the present value of the future costs of operating and maintaining the Treatment Systems as determined by the Formula.

- j. <u>Primary Trust Account.</u> The sub-account within the Trust that is primarily used to finance annual operating and maintenance costs of the Treatment Systems.
- k. <u>Primary Trust Valuation</u>. The cash, cash equivalents, the market value of investments, and the face amount of surety bonds currently held by the Trust in the Primary Trust Account.

## 4. <u>Annual Treatment Costs; Records; Factors; Accounting</u>

- a. KMP shall maintain accurate financial records of all costs and expenses associated with operation and maintenance of the Treatment Systems. The various costs shall be reported using the following categories: Reagent; Polymer; Electrical; Sludge Removal; Labor, including benefits; Maintenance; Sampling; Overhead; and Miscellaneous. KMP shall maintain and report each individual item that comprises each general category. KMP shall keep separate records for each of the three Treatment Systems listed in Paragraphs I, J and T.
- b. KMP shall provide an annual accounting of the costs and expenses of operating and maintaining the Treatment Systems to the Department on or before ninety (90) days following the last day of the fiscal year for which the Accounting is being provided ("the Accounting"). The Accounting shall cover the period beginning the first day of January and continuing through the final day of December of each year, or other fiscal year as KMP may adopt for its corporate finances in the future, and shall be in accordance with Generally Accepted Accounting Principles. The Accounting shall be signed by the treasurer or other corporate officer responsible for the financial affairs of KMP and by the President of KMP. Each signature shall be accompanied by a written statement as follows: "The statements contained herein are made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities."

- c. KMP's obligation to keep records and provide the Accounting shall continue for the period during which KMP is operating the Treatment Systems.
- d. In the event of a dispute about the costs and expenses of the Treatment Systems incurred by KMP, KMP shall bear the burden of proving the accuracy and completeness of the Accounting and the records upon which the Accounting is based. A Special Report prepared pursuant to Generally Accepted Accounting Principles as to the treatment costs and expenses incurred by KMP, prepared by an independent licensed public or certified public accountant, shall satisfy KMP's burden of proof under this paragraph.

#### 5. Treatment Trust

- a. KMP shall establish an irrevocable Trust by executing a Post-Mining
  Treatment Trust Agreement with First Commonwealth Bank Trust Division. The Trust shall
  secure KMP's obligation to treat the Discharges, including its legal obligation to operate and
  maintain the Treatment Systems in perpetuity or until treatment is no longer necessary. The
  Trust shall also secure KMP's obligation to provide financial resources to the Department and
  the citizens of the Commonwealth to maintain and operate the Treatment System, and to treat the
  Discharges in perpetuity in the event KMP becomes unable or unwilling to meet these
  obligations. The Trust shall also provide for the demolition of treatment facilities and
  reclamation of the treatment sites should treatment no longer be needed. The agreement
  establishing the Trust is attached hereto as Exhibit G.
- b. KMP shall establish within the Trust two sub-accounts: a sub-account designated as the Primary Trust Account; and a sub-account designated as the Capital Improvement Account.

#### 6. Funding of the Primary Trust Account

- a. Payments to the Primary Trust Account: Upon execution of this Consent Order and Agreement, KMP shall make four (4) deposits to the Primary Trust Account totaling One Hundred Seventy Six Thousand and Five Dollars and Thirty Five Cents (\$176,005.35) @ 0.65% Trustee Fee). This sum constitutes the current present value of the amount necessary to fully fund the Treatment Trust, and includes the current present value of the future operation and maintenance of the Treatment Systems and the current amount needed to finance anticipated and periodic capital expenditures for the Treatment Systems.
- b. <u>Initial Payment to the Primary Trust Account</u>: Upon execution of this Consent Order and Agreement, KMP shall deposit an amount of **Forty Two Thousand Dollars** (\$42,000.00) into the Primary Trust Account.
- c. Ongoing Payments to the Primary Trust Account: KMP shall make three additional payments of Forty Two Thousand Dollars (\$42,000.00) into the Primary Trust Account on or before the anniversary date of this Consent Order and Agreement. The final payment amount may need adjusted to correspond with the performance of the Trust Fund. Payments will be required without notice.
  - 7. <u>Annual Distribution or Contribution Payments Primary Trust Account</u>
- a. All calculations under this Paragraph shall be based on the values as determined on the Annual Anniversary Date.
- b. If at the end of any year the Primary Trust Valuation is greater than the Primary Target Valuation, then a Distribution Payment shall be made to KMP. The amount of such Distribution Payment will be equal to the difference between the Primary Trust Valuation and the Primary Target Valuation, or equal to the Calculated Treatment Cost, whichever is less. This amount is depicted graphically at Points 1, 2 and 3 on **Exhibit C.**

- c. If the Primary Trust Valuation is less than or equal to the Primary Target Valuation, but greater than or equal to the Primary Basis Valuation, then no Distribution Payment shall be made and no additional contribution shall be required. This provision is depicted graphically as Point 4 on **Exhibit C.**
- d. If the Primary Trust Valuation is less than the Primary Basis Valuation, then KMP shall make an additional contribution into the Primary Trust Account in an amount equal to the difference between the Primary Basis Valuation and the Primary Trust Valuation, or in an amount equal to the Calculated Treatment Cost, whichever is less except as provided in Paragraph 13.a. This amount is depicted graphically as Points 5 and 6 on **Exhibit C**. This provision does not apply until KMP has fully funded the Trust under Paragraph 6a.
  - 8. <u>Adjustments to the Primary Target Valuation for Deviations Between Actual</u>
    Treatment Cost and Calculated Treatment Cost
- a. All calculations under this paragraph shall be based on values as determined on the Annual Anniversary Date and before any Distribution Payment.
- b. If the Actual Treatment Cost for any year is greater than or equal to 110% percent or less than or equal to 90% percent of the Calculated Treatment Cost, the Department will calculate a new Primary Basis Valuation using the Formula and the newly determined Actual Treatment Cost. A new Primary Target Valuation will then be determined by calculating 116% percent of the new Primary Basis Valuation. **Exhibit D** is a graphical depiction of the adjustment.
  - 9. Distribution Payments for Adjustments to the Primary Target Valuation
- a. If the newly calculated Primary Target Valuation which has been adjusted under Paragraph 8 above is greater than the Primary Trust Valuation, then no distribution payment shall be made under this paragraph.

b. If the newly calculated Primary Target Valuation which has been adjusted under Paragraph 8. above is based on a reduced Actual Treatment Cost, and the Primary Trust Valuation is greater than the newly calculated Primary Target Valuation, then a Distribution Payment shall be made to KMP. The amount of such Distribution Payment will be equal to the percent change in Actual Treatment Cost times the Primary Trust Valuation, or in an amount equal to the difference between the Primary Trust Valuation and the newly calculated Primary Target Valuation, whichever is less. The amount of such Distribution Payment shall be determined by the following formulas:

$$DP = TR (1 - (new ATC/prior ATC))$$

or

$$DP = TR - new TV$$

Where: DP = Distribution Payment

TR = Primary Trust Valuation
TV = Primary Target Valuation
ATC = Actual Treatment Cost

## 10. Capital Improvement Account

- a. Assets of the Capital Improvement Account may be commingled with assets of the Primary Trust Account for purposes of investment, but must be accounted for and reported separately as if they are assets of a separate and distinct fund.
- b. The required balance in the Capital Improvement Account has been determined by use of the AMD Treat Recapitalization tool based on the following methodology: For each planned capital replacement activity, the current cost and the projected year of replacement, are determined. The future cost of each replacement activity is calculated by compounding the present cost at a rate of 3.1% annually. The year in which each replacement activity will be needed is projected based on typical component life cycles. Assuming a net rate