- The approval herein granted is limited to beneficial use of lime kiln dust (LKD) as a soil amendment, for stabilization/solidification of soils and sludges, treatment of acid mine drainage, as an alkaline activator in cements, grouts for mine reclamation, for roadway subbase stabilization and conditioning, as filler material or an ingredient in various agricultural and construction products, and as a construction material for non-residential projects.
- 2. The beneficial use of LKD as a soil amendments is contingent upon compliance with this permit and, if sold, the *Pennsylvania Fertilizer*, *Soil Conditioner and Plant Growth Substance Law* of the Pennsylvania Department of Agriculture. (Information relating to this law may be obtained from the Department of Agriculture by writing the *Bureau of Plant Industry*, *Division of Agronomic Services*, *230 North Cameron Street*, *Harrisburg*, *PA 17110-9408*.)
- 3. All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall operate the facility as described in the approved application.
- 4. The LKD may be beneficially used directly into the environment provided the calcium carbonate equivalency (CCE) is at least 80 percent and none of the following levels are exceeded:

<b>Constituent</b>	Total (mg/kg) <sup>1</sup>	<b>Leachable (mg/L)</b> 1,2,3
Antimony	30	0.15
Arsenic	41	1.25
Lead	300	1.25
Thallium	6	0.0125

<sup>&</sup>lt;sup>1</sup>This may be based on the 90 percent upper confidence level using *Test Methods for Evaluating Solid Waste* (EPA SW-846) as guidance for the statistical treatment of data.

<sup>&</sup>lt;sup>2</sup>The toxicity characteristic leaching procedure (EPA Method 1311) or the synthetic precipitation leaching procedure (EPA Method 1312) or other leaching procedure approved by the Department shall be used for all leaching analyses.

<sup>&</sup>lt;sup>3</sup>Should the results of total analysis for a particular constituent in a sample be non-detect, a leaching determination of that particular constituent in that particular sample is not required.

Should the LKD contain other constituents at levels which do not meet the requirements of §288.623(a) (relating to minimum requirements for acceptable waste) or which pose a threat of harm to human health or the environment, the LKD shall not be placed directly into the environment. The pH limitations in §288.623(a)(11) do not apply to the LKD.

- 5. Prior to the beneficial use of the LKD, the permittee shall perform chemical analysis on a representative sample of LKD for the appropriate parameters listed in Condition 4. The chemical analyses required in this Condition shall be performed by a laboratory that is registered or accredited under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, No. 90, 27 Pa C.S. §4101 et. seq. The permittee shall perform chemical analysis on additional representative samples of LKD mixture as follows:
  - a. annually or every 15,000 tons, whichever comes first, for LKD obtained directly from the generator and produced on an ongoing basis, as long as the sources of the LKD do not change; or
  - b. each time a new source of LKD waste is received; or
  - c. each time there is a significant change in the process generating the LKD; or
  - d. every 2000 tons for LKD which has previously been disposed and is being mined.
- 6. In addition to the requirements of this general permit, a noncoal/industrial minerals permit approved by the appropriate District Mining Office is required to reprocess LKD under this authorization or approval under 25 Pa. Code Chapter 77 prior to excavation of any previously disposed LKD.
- 7. The LKD shall not be hazardous waste.
- 8. The LKD shall not be mixed with other types of solid wastes, including hazardous waste, municipal waste, special handling waste, or other residual waste, except as otherwise set forth in this or another Department waste permit.
- 9. This permit does not authorize and shall not be construed as an approval to discharge any waste, wastewater, or runoff from the site to the land or waters of the Commonwealth.
- 10. The permittee shall comply with the fugitive emissions standards adopted under 25 Pa. Code Sections 123.1 and 123.2.

- 11. Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, 35 P.S. §6018.101 et seq., or the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
- 12. As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon presentation of appropriate credentials and without delay, to have access and to inspect all areas or permittee controlled adjacent areas where solid waste management activities are being or will be conducted. This authorization and consent shall include consent to collect samples of waste, water, or gases; to take photographs; to perform measurements, surveys, and other tests; to inspect any monitoring equipment; to inspect the methods of operation; and to inspect and/or copy documents, books, and papers required by the Department to be maintained or produced. (See Sec. 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Section 6018.608 and 6018.610(7).) This condition in no way limits any other powers granted to the Department under the Solid Waste Management Act.
- 13. Failure of the measures herein approved to perform as intended, or as designed, or in compliance with the applicable laws, rules and regulations and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee's approval to operate under this permit.
- 14. Any independent contractors or agents retained by the permittee in the completion of activities authorized under this permit shall be subject to prior compliance history review by the Department as specified by the Pennsylvania Solid Waste Management Act of 1980.
- 15. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. The Department may modify, suspend, revoke or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, or the environment.
- 16. Persons or municipalities that propose to operate under the terms and conditions of this general permit after the date of permit issuance must apply for a determination of applicability to the Department's Bureau of Land Recycling and Waste Management, Division of Municipal and Residual Waste, P.O. Box 8472, Harrisburg, PA 17105-8472. At a minimum, the

following information must be provided on forms available from the Department's Bureau of Land Recycling and Waste Management:

- a. Name and street address of applicant;
- b. A chemical and physical analysis, and description of the LKD which fully characterizes their composition and properties; the waste generation process; and a plan for screening, managing and rejecting waste.
- c. Name and location of the generator(s) of the LKD;
- d. Number and title of general permit;
- e. Proof that the LKD and waste management activities will be consistent with the general permit;
- f. Signed and notarized statement by the applicant who seeks to operate under the terms and conditions of this permit that states that the person accepts all conditions of this general permit;
- g. A application fee in the amount specified in the residual waste regulations, payable to the "Commonwealth of Pennsylvania";
- h. Proof that copies of the application have been submitted to the municipality, county, county planning agency and county health department in which the primary beneficial use activities will be conducted;
- i. Information that identifies the applicant (i.e., individual, corporation, partnership, government agency, association, etc.), including the names and addresses of every officer that has a beneficial interest in or otherwise controls the operation of the company;
- j. A list of all previous permits or licenses issued to the permittee by the Department or federal government under the environmental protection acts; the date of issuance and current status of those permits; and the permittee's compliance history concerning the environmental protection acts;
- k. Proof that any independent contractors retained by the permittee to perform any activities authorized under this permit are in compliance with Department regulations as required in Condition 14;
- 1. An irrevocable written consent from the landowner giving the Department permission to enter upon the land where the applicant will be conducting waste management activities;
- m. Additional information the Department believes is necessary to make a decision.

- 17. Any person that operates under the provisions of this permit shall immediately notify the Department (see address in Condition 16) via certified mail of any changes in: the company name, address, owners, operators and responsible officials; the physical or chemical characteristics of the LKD; the generator(s) of the LKD; and the status of any permit issued by the Department or federal government under the environmental protection acts.
- 18. Storage of LKD by the permittee shall be in a manner that complies with 25 Pa. Code Chapter 299 (relating to the storage of residual waste). Leachate and runoff produced from the storage of LKD shall be managed in accordance with The Clean Streams Law.
- 19. The permittee shall immediately notify the Department's Emergency Hotline at (717) 787-4343 and the appropriate DEP regional office in the event of a discharge or spill of LKD and shall take appropriate immediate action to protect the health and safety of the public and the environment. Spills of less 1000 pounds of LKD need not be reported.
- 20. Records of any analytical evaluations conducted on LKD pursuant to the residual waste regulations and this permit shall be kept by the permittee at the permittee's place of business and shall be available to the Department for inspection. At a minimum, these records shall include information on the dates of testing, each parameter tested, the results, the laboratory, sampling procedures, analytical methodologies, and person collecting the sample. This waste analysis information shall be retained by the permittee at the permittee's place of business for a minimum of 5 years after the analyses were performed.
- 21. The permittee shall maintain records that contain: the name, address, and phone number of each source of incoming LKD, the date of receipt and quantity of LKD received at each location, the results of analysis as required in Condition 5, and the name, address and quantity for each shipment of LKD for beneficial use. The permittee shall also maintain records of all spills of 1000 pounds or greater and releases that contain: location, date, time, identification and quantity of spilled or released material, and a description of how the material was cleaned up. These records shall be retained by the permittee at the permittee's place of business for a minimum of 5 years from the date the records were generated and shall be available to the Department for inspection.
- 22. The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. The Department may require an individual permit if the permittee is not in compliance with the conditions of this general permit or is conducting an activity that harms or

presents a threat of harm to the health, safety, or welfare of the people or the environment.

23. The permittee shall inform all persons or municipalities that propose to beneficially use LKD covered under this permit of all the conditions and limitations imposed on the use of LKD by the Department of Environmental Protection. This notification shall be by providing a copy of the appropriate appendices of this permit to the persons or municipalities. In addition, the permittee shall inform all persons or municipalities that propose to beneficially use LKD covered under this permit of the acceptable uses of the LKD being supplied based on the limitations in Condition 4. The conditions in the appendices shall apply to any person who beneficially uses LKD pursuant to this general permit, including persons who obtain a Determination of Applicability to conduct activities authorized by this permit.

### APPENDIX A

### Restrictions on Use of Lime Kiln Dust As Construction Material General Permit No. WMGR089

The following restrictions apply to the beneficial use of Lime Kiln Dust (LKD) as construction material. Persons receiving, storing, and/or using LKD for beneficial use purposes are required to comply with the following requirements:

### STORAGE AND TRANSPORTATION

- A1. LKD shall not be stored in direct contact with ground water.
- A2. Storage of LKD must comport with the following limitations:
  - a. Except in the case of a generator of LKD who intends to use LKD at the site of generation for beneficial use as a construction material, the total amount of LKD that may be stored at any site at any time under the authorization of this general permit is limited to that amount of LKD that is intended to be used, and can be practicably used, on the site for the next 365 days, and in no case shall more than 5000 tons of unused LKD be stored on any one site, unless otherwise approved by the Department in writing.
  - b. Where a generator of LKD intends to use LKD at the site of generation for beneficial use as a construction material, the LKD intended to be beneficially used on site must be segregated from any other LKD stored or disposed of at the site. The total amount of LKD that may be segregated at the site of generation for on-site beneficial use under the authorization of this general permit is limited to that amount of LKD that is intended to be used, and can be practicably used, on the site for the next 365 days, and in no case shall more than 5000 tons of unused LKD be segregated at the site of generation for on-site beneficial use unless otherwise approved by the Department in writing.
- A3. Runoff from LKD storage areas shall not cause surface water pollution or groundwater degradation.
- A4. The storage and transportation of the LKD shall be in a manner that will not create a nuisance or be harmful to the public health, safety or the environment.
- A5. LKD shall not be transported to or stored at any site prior to obtaining any necessary zoning and planning approvals for the proposed development project.

### APPENDIX A

### Restrictions on Use of Lime Kiln Dust As Construction Material General Permit No. WMGR089

### ACCEPTABLE USES:

- A6. Approval to use LKD as a construction material is limited to the following activities and must comply with the following technical standards developed by the Pennsylvania Department of Transportation (PennDOT) as outlined in their Publication 408, <u>Specifications</u>.
  - (a) 206 (Embankment)
  - (b) 210 (Subgrade)
  - (c) 350 (Subbase)
  - (d) 600 (Incidental Construction)
  - (e) 703 (Aggregate)

Approval to use LKD for roadway subbase stabilization and conditioning shall comply with common engineering practices for this use. The maximum quantity of LKD used for roadway subbase stabilization and conditioning shall be determined using the test method in the appendix to American Society for Testing and Materials (ASTM) C977, D6276, or other appropriate engineering testing procedure.

### **USE RESTRICTIONS:**

- A7. LKD shall not be placed in direct contact with surface water or groundwater.
- A8. This general permit does not authorize the use of LKD as a valley fill material, to fill open pits from coal or non-coal mining or other fills; or to level an area or bring an area to grade where the construction activity is not completed promptly after the placement of the solid waste.
- A9. Use of LKD as fill material in landfill closure and site remediation is not authorized under this general permit.
- A10. Hazardous wastes, municipal waste, special handling waste, and other residual wastes may not be mixed and/or beneficially used with the LKD, except as otherwise set forth in this or another Department waste permit.
- A12. The beneficial use of LKD shall be in a manner that will not create a nuisance or be harmful to the public health, safety or the environment.
- A13. Placement of LKD on any one project shall not continue for longer than 365 days without written authorization from the Department.

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# APPENDIX B Restrictions on Lime Kiln Dust Used on Agricultural Lands General Permit No. WMGR089

The following restrictions apply to the beneficial use of lime kiln dust (LKD) when used on agricultural lands. Persons receiving, storing, and/or using the LKD for beneficial use purposes are required to comply with the following requirements:

- B1. LKD shall not be stored in direct contact with, or applied directly into ground water.
- B2. The amount of the LKD that may be stored on agricultural lands at any point in time is limited to that amount of LKD that is intended to be used, and can be practicably applied, on the site for the next 30 days, but in no case shall more than 600 tons of the LKD be stored on any one acre of agricultural lands.
- B3. Runoff from the LKD storage areas shall not cause surface water pollution or groundwater degradation.
- B4. LKD may only be applied where the following maximum lifetime loading rates are not exceeded:

<b>Constituent</b>	Limit (lbs/acre)
Antimony	26
Arsenic	36
Lead	264
Thallium	5

*Note:* The Department recommends background levels for the above constituents be determined at agricultural sites prior to the application of LKD.

- B5. The application rate of LKD at an agricultural site shall not exceed 3 tons per acre per growing season.
- B6. LKD shall not be applied to the land during periods of rain or to ground that is saturated, covered with snow, or frozen.

### APPENDIX C

# Restrictions on Lime Kiln Dust Used at Mine Sites or for Treatment of Acid Mine Drainage at Other Sites General Permit No. WMGR089

The following restrictions apply to the beneficial use of lime kiln dust (LKD) when used at permitted mine sites and at abandoned mine sites and at sites as an alkaline material to treat acid mine drainage (AMD). Persons receiving, storing, and/or using the LKD for beneficial use purposes are required to comply with the following requirements:

- C1. LKD shall not be stored in direct contact with, or applied directly into ground water.
- C2. The amount of the LKD that may be stored at any site at any point in time is limited to that amount of LKD that is intended to be used, and can be practicably applied, on the site for the next 365 days. No more than 5000 tons of the LKD be stored on any one mine site or 1000 tons at any other site unless otherwise approved by the Department.
- C3. Runoff from the LKD storage areas shall not cause surface water pollution or groundwater degradation.
- C4. Surface water and control erosion and sedimentation shall be managed at mine sites to meet the applicable requirements of 25 Pa. Code Chapter 102 (relating to erosion control).
- C5. Prior to use of LKD in mine reclamation projects, the user shall submit to and the appropriate county, county planning agency, and county health department, if one exists, notice of intention to revise the reclamation plan for each permitted and abandoned mine site at which LKD is intended to be applied. For permitted mine sites, the above notification must also be provided to the appropriate District Mining Office of the Department's Bureau of Mining and Reclamation. For abandoned mine sites, the above notification must also be provided to the appropriate District Office of the Department's Bureau of Abandoned Mine Reclamation or contracting governmental agency. Prior to use on LKD for treatment of AMD at other sites, the user shall submit notification of their intent to the Bureau of Water Quality at the Department's appropriate Regional Office.

For permitted mine sites, the revision process shall comply with all requirements for revising reclamation plans at permitted mine sites as promulgated by the Department's Bureau of Mining and Reclamation at 25 Pa. Code Chapters 77, 86, 87 and 88. For abandoned mine sites, the revision procedure shall be that specified in the permittee's contract with the Bureau of Abandoned Mine Reclamation or other contracting governmental agency. For AMD discharges permitted under the National Pollutant Discharge Elimination System (NPDES), the revision process shall comply with all requirements promulgated by the Department's Bureau of Water Quality at 25 Pa. Code, Chapter 92.

### APPENDIX C

## Restrictions on Lime Kiln Dust Used at Mine Sites or for Treatment of Acid Mine Drainage at Other Sites General Permit No. WMGR089

Reclamation activities may not commence on permitted mine sites unless specifically authorized by the Department's Bureau of Mining and Reclamation. Reclamation activities may not commence on abandoned mine sites unless specifically authorized by the Department's Bureau of Abandoned Mine Reclamation or other contracting governmental agency. AMD treatment activities at other sites may not commence unless specifically authorized by the Department's Bureau of Water Quality.

C6. The application rate of LKD at a mine site shall not exceed 60 tons per acre, except when conducted under a remediation plan approved by the Department that requires a greater application rate. The amount of LKD beneficially used for treatment of AMD is limited to the amount necessary to achieve sufficient neutralization to be acceptable for discharge to the receiving body of water.

### APPENDIX D

### Restrictions on Lime Kiln Dust Used for Stabilization/Solidification of Soils and Sludges General Permit No. WMGR089

The following restrictions apply to the beneficial use of Lime Kiln Dust (LKD) for stabilization/solidification of soils and sludges. Persons receiving, storing, and/or using LKD for beneficial use purposes are required to comply with the following requirements:

### STORAGE AND TRANSPORTATION

- D1. LKD shall not be stored in direct contact with ground water.
- D2. The amount of LKD that may be stored at any site at any point in time is limited to that amount of LKD that is intended to be used, and can be practicably used, on the site for the next 365 days, but in no case shall more than 2000 tons of unused LKD be stored on any one site unless otherwise approved by the Department.
- D3. Runoff from LKD storage areas shall not cause surface water pollution or groundwater degradation and shall be managed in accordance with The Clean Streams Law and regulations promulgated thereunder.
- D5. The storage and transportation of the LKD shall be in a manner that will not create a nuisance or be harmful to the public health, safety or the environment. The storage and transportation of LKD shall comply with the requirements of 25 PA Code Chapter 299 (relating to storage and transportation of residual waste).

### **ACCEPTABLE USES:**

D6. Approval to use LKD for stabilization/solidification of soils and sludges shall comply with common engineering practices for this use.

### **USE RESTRICTIONS:**

D7. LKD shall not be placed in direct contact with surface water or groundwater.

### APPENDIX D

### Restrictions on Use of Lime Kiln Dust Used for Stabilization/Solidification of Soils and Sludges General Permit No. WMGR089

- D8. Hazardous wastes, municipal waste, special handling waste, and other residual wastes may not be mixed and/or beneficially used with the LKD, except as set forth in this or another Department waste permit.
- D9. The beneficial use of LKD shall be in a manner that will not create a nuisance or be harmful to the public health, safety or the environment.
- D10. Placement of LKD on any one project shall not continue for longer than 365 days without written authorization from the Department.