



Pennsylvania
**Department of
Environmental Protection**

May 7, 2025

Mr. Christopher Madden – Manager, Environmental Compliance
Keystone Cement Company, Inc.
Routes 329 & 987
P.O. Box A
Bath, Pennsylvania 18014-0058
via email: cmadden@keystonecement.com

Re: Hazardous Waste Permit Reissuance
Keystone Cement Company, Inc.
Application #PAD002389559-A182
APS ID #974249, AUTH ID# 1239215
East Allen Township, Northampton County

Dear Mr. Madden:

Enclosed is Hazardous Waste Permit No. PAD002389559. This permit is reissued under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980 (public Law 380, No.97). Keystone Cement Company, Inc., located in East Allen Township, Northampton County, is an existing permitted Hazardous Waste Storage and (Energy Recovery Within Cement Kiln) Facility that specializes in the storage of approved liquid wastes prior to the beneficial use of the liquid waste as a fuel in the site cement kiln.

As per the Hazardous Waste Regulation, 25 Pa. Code Section 270a Hazardous Waste Permit Program, Subchapter II Public Notice and Hearings, the public was afforded forty-five (45) days to comment on the draft permit prepared under the Solid Waste Management Act.

A public meeting/hearing was held on October 28, 2024, at the Nitschmann Middle School located at 1002 W Union Blvd, Bethlehem, PA. The Department also extended the comment period until November 15, 2024.

A public Comment-Response Document is included as an attachment to this this approval. The Hazardous Waste regulations require DEP to prepare a summary of the comments submitted during the public comment period and provide responses to the comments. The Comment-Response Document summarizes public comments received by DEP during the comment period and at the public hearing and provides the Department's responses to those comments. All commenters are individually listed in this document.

The attachments to the permit as well as a complete pdf of the permit with the attachments included are available through the DEP Northeast Regional Office. You, along with the entities cc'd on this letter will be provided access to a DEP shared folder through a follow-up email. If you have any issues accessing this shared folder, please contact me at the email address/phone number below.

The documents will also be made available at the DEP Northeast Community Information website at :
[Keystone Cement | Department of Environmental Protection | Commonwealth of Pennsylvania](#)

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://ehb.courtapps.com> or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

Should you have any questions, please contact me at rbellas@pa.gov or 570-826-2201.

Sincerely,



Roger Bellas
Program Manager
Waste Management Program

Enclosure – Permit No. PAD002389559

cc: Northampton County w/enc. (via email: lheffner@northamptoncounty.org)
Lehigh Valley Planning Commission w/enc. (via email: cruggiero@lvpc.org)
East Allen Township w/enc. (via email: manager@eatwp.org)
Stuart H. Guinther w/enc. (via email: sguinther@keystonecement.com)
Claudia Scott, U.S. EPA Region III w/enc. (via email: Scott.Claudia@epa.com)
Thomas Mellott, PADEP Division of Hazardous Waste Management w/enc. (via email: mtmellott@pa.gov)

**PERMIT
FOR
HAZARDOUS WASTE STORAGE AND (ENERGY RECOVERY
WITHIN CEMENT KILN) FACILITY**

Permit Number: **PAD002389559**

Date Issued: **May 7, 2025**

Date Expires: **May 7, 2035**

Under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980, Act 97, a permit for hazardous waste storage, treatment, recycling, and disposal in (municipality) **East Allen Township** in the County of **Northampton**

is granted to (applicant) **Keystone Cement Company**

(address) **Route 329, P.O. Box A**

Bath, PA 18014-0058

This permit is applicable to the facility named as **Keystone Cement Company** and described as:

Latitude: 40 °42 ' 57.7 " North

Longitude: 75 ° 23 ' 55.5 " West

This permit shall become effective on **May 7, 2025**

This permit allows for the acceptance, blending, and storage of approved hazardous waste and residual wastes in the approved hazardous waste storage tank system prior to the beneficial use of the wastes as fuel in the existing rotary cement kiln (Kiln #1) per the Approved Application as superseded by the Hazardous Waste regulations and conditions and terms of this permit.

This permit is subject to modification, amendment and supplement by the Department of Environmental Protection and is further subject to revocation or suspension by the Department of Environmental Protection for any violation of the applicable laws or the rules and regulation adopted thereunder, for failure to comply in whole or in part with the conditions of this permit and the provisions set forth in the application No. **PAD002389559** which is made a part hereof, or for causing any condition inimical to the public health, safety or welfare.

See attachment for waste limitations and/or special conditions.

Roger Bellas

(signature)

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

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INTRODUCTION

Permittee: **Keystone Cement Company**

Facility: **Keystone Cement Company – Route 329, Bath, PA 18014-0058**

This permit is issued by the Commonwealth of Pennsylvania Department of Environmental Protection (DEP, hereinafter called the Department), under authority of the Act a.k.a. the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. Section 6018.101 et seq., Department waste regulations and Federal hazardous waste regulations to Keystone Cement Company (hereafter called the Permittee), to operate a Hazardous Waste Storage and Energy Recovery within an approved cement facility located in the East Allen Township, Northampton County, at latitude 40 ° 42 ' 57.7 longitude 75 ° 23 ' 55.5 ". See Parts **I – VI** for additional permit restrictions.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Parts **I – VI** consisting of pages **1 through 42** and the applicable regulations contained in 25 Pa. Code Chapters §§260a-270a, 40 CFR §§260-270 and 273 as incorporated by reference in 25 Pa. Code Chapters §§260a-270a and 25 Pa. Code Chapters §§287-299 (hereinafter called "regulations") as specified in the permit.

This permit is based on the assumption that the information submitted in the permit application received by the Department on August 3, 2018 (as subsequently revised on June 9, 2020 and December 21, 2022, respectively) (hereinafter referred to as the "Approved Application" or "permit renewal application" or "Application") is accurate and the facility will be operated as specified in the Approved Application. Any inaccuracies found in this information may be grounds for the revocation or modification of this permit and potential enforcement action. The Permittee must inform DEP of any deviation from or changes in the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is conditioned upon full compliance with all applicable provisions of the Act a.k.a. Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101, et seq.; Department regulations contained in 25 Pa. Code Article VII Hazardous Waste Chapter 260a – 270a; 25 Pa. Code Article IX Residual Waste Chapters 287-299; Federal regulations contained in 40 CFR Parts 260 – 270 and 273 as incorporated by reference in 25 Pa. Code Chapters 260a – 270a; the Clean Streams Law, 35 P.S. 691.1 et seq.; the Air Pollution Control Act, 35 P.S. 4001 et seq.; the Dam Safety and Encroachments Act, 32 P.S. 693.1 et seq.; the

Surface Mining Conservation and Reclamation Act, 52 P.S. 1396.1 et seq.; the Coal Refuse Disposal Control Act, 52 P.S. 30.51 et seq.; the Storage Tank and Spill Prevention Act, 35. P.S. 6021.101 et seq.; 25 Pa. Code Chapter 245 Storage Tank and Spill Prevention Program; 25 Pa. Code Article II Erosion Control Chapter 102; all other Pennsylvania statutes related to the protection of the environment; and all Pennsylvania statutes related to the protection of public health, safety, and welfare.

This permit is effective as of **May 7, 2025**, and shall remain in effect until **May 7, 2035**, unless revoked and reissued, or terminated in accordance with 25 Pa. Code §§270a.41, 270a.42, 270a.43 and 40 CFR §§270.41, 270.42, and 270.43 as incorporated by reference at 25 Pa. Code §270a.1.

All conditions of the attached permit supersede conditions of the original permit and permit modifications issued under this Hazardous Waste Management Permit Number except as specifically noted within this permit. Conditions contained herein that reference "permit" refer to the hereby reissued permit. The Permittee retains liability and responsibility from the original issuance date (**December 27, 1991**) of compliance history, and other responsibilities under the Solid Waste Management Act, the Environmental Protection Acts, PA Title 25 Environmental Protection Regulations, and the terms and conditions of the permit

PART I – STANDARD CONDITIONS

A. EFFECT OF PERMIT

This permit authorizes only the management of hazardous and residual waste expressly described in this permit and does not authorize any other management of hazardous or residual waste. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under the Act or any other law governing protection of public health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, terminated for cause as specified in 25 Pa. Code §§270a.10, 270a.41, 270a.42, 270a.43 and 40 CFR §§270.41, 270.42, and 270.43 as incorporated by reference at 25 Pa. Code §270a.1 or suspended in accordance with the Act. The filing of a request for a permit modification, revocation and reissuance, or revocation or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay or supersede the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held to be invalid, the application of such provision to other circumstances and the remaining provisions of this permit shall not be affected thereby.

D. DEFINITIONS

For the purpose of this permit, terms used herein shall have the same meaning as those in Title 25 of the Pennsylvania Code and Title 40 of the Code of Federal Regulations (25 Pa. Code Chapters 260a – 270a and 40 CFR 260 – 270 & 273 as incorporated by reference in 25 Pa. Code 260a -270a and applicable sections of the Residual Solid Waste Regulations 25 Pa. Code 287 – 299), unless this permit specifically states otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. “The Department” is the Department of Environmental Protection of the Commonwealth of Pennsylvania.

E. REPORTS, NOTIFICATIONS AND SUBMISSIONS TO THE DEPARTMENT

All reports, notifications or other submissions which are required by this permit to be sent or given to the Department should be sent electronically via the Department’s Public Upload system or via certified mail to:

Program Manager
Waste Management Program
Commonwealth of Pennsylvania
Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 18701-1915

F. SIGNATORY REQUIREMENTS

All reports or other information requested by the Department shall be signed and certified as required by 40 CFR §270.11 as incorporated by reference at 25 Pa. Code §270a.1 and as modified by 25 Pa. Code §270a.10(c)(2).

G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY SITE

The Permittee shall maintain at the facility, until closure is completed and certified by an independent

registered professional engineer, the following documents and amendments, revisions, and modifications to these documents:

1. Waste analysis plan required by 25 Pa. Code §264a.13, and 25 Pa. Code §297.203 and this permit.
2. Personnel training documents and records required by 40 CFR §264.16(d) as incorporated by reference at 25 Pa. Code §264a.1 and this permit.
3. Contingency plan required by 40 CFR §264.53(a) as incorporated by reference at 25 Pa. Code §264a.1 and this permit.
4. Closure plan required by 25 Pa. Code §§264a.115, 264a.120, 40 CFR §264.112(a) and (b) and 40 CFR §264.118(a) and (b) as incorporated by reference at 25 Pa. Code §264a.1 and this permit.
5. Annually-adjusted cost estimate(s) for facility closure required by 25 Pa. Code §§264a.115, 264a.120, 264a.162, 40 CFR §§264.142 and 264.144 as incorporated by reference at 25 Pa. Code §264a.1 and this permit.
6. Operating record required by 40 CFR §264.73 as incorporated by reference at 25 Pa. Code §264a.1 and Part II, Section H.1 of this permit.
7. Inspection schedules and logs required by 25 Pa. Code §264a.15 and 40 CFR §264.15(b)(2) as incorporated by reference in 25 Pa. Code §264a.1 and this permit.
8. Documents required by Part I, Sections H.9, H.13, H.14, H.15, I, and J; by Part II, Sections B, D, E, F, H, I, J, L, and M.2; by Part III Sections F.3, K.2, L.2, M, and P.4; Part IV Sections B, E; Part V Sections B, C, D, E, Part VI Sections A, B, I, F, and renewal application Appendix A of this permit.
9. Source Reduction Strategy required by 25 Pa. Code §§262a.100 and 287.53 for wastes generated by the permitted operations at this facility-

H. DUTIES AND REQUIREMENTS

1. Duty to Comply: The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and the regulations promulgated hereunder and is grounds for enforcement action; for permit revocation, termination and reissuance, or modification; or for denial of a permit renewal application.
2. Duty to Reapply: If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must submit a complete application for a new permit at least one hundred eighty (180) days before this permit expires.
3. Permit Expiration: This permit and all conditions therein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application and through no fault of the Permittee, the Department has not issued a new permit.
4. Need to Halt or Reduce Activity Not a Defense: It shall not be a defense for the Permittee in an enforcement action to argue that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
5. Duty to Mitigate: In the event of noncompliance with the Act, the regulations, or this permit, the Permittee shall take all necessary steps to prevent and abate any releases to the environment, and shall carry out such measures as are necessary to prevent significant adverse impacts on human health or the environment.
6. Proper Operation and Maintenance: The Permittee shall at all times properly operate and maintain all facilities and systems of storage, treatment and control (and related appurtenances) which are

installed or used by the Permittee to achieve compliance with the Act, the regulations, and the conditions of this permit. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall operate back-up or auxiliary facilities or similar systems if necessary, to achieve compliance with the Act, the regulations, and the conditions of the permit.

7. Duty to Provide Information: The Permittee shall furnish to the Department within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Department, upon request, copies of records required to be kept by the Permittee pursuant to the Act, the regulations, or any permit condition.
8. Inspection and Entry: The Permittee shall allow the Department, its agents, and authorized representatives, upon the presentation of credentials and other documents as may be required by law, or without advance notice or a search warrant to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records concerning the regulated facility or activity are kept;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the Act, the regulations, or this permit;
 - d. Sample or monitor any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by the Act or the regulations; and,
 - e. Engage in any other activities necessary or appropriate to the documentation of events or conditions at any locations including the taking of photographs; the performing of measurements, surveys, and other tests; to inspect monitoring equipment; to inspect methods of operation; and to inspect and/or copy documents, books and papers required by the Department to be maintained.
9. Monitoring and Records:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261 – Criteria, Identification and Listing of Hazardous Waste as incorporated by reference at 25 Pa. Code §261a.1 or an equivalent method approved by the Department. Laboratory test methods must be those incorporated by reference in 40 CFR 260.11 and ; Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (U.S. EPA Document SW-846, most recent edition); Standard Methods of Waste Water Analysis (U.S. EPA; most recent edition); or an equivalent method approved by the Department and as specified in renewal permit application Appendix B.
 - b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by the Act, the regulations, or this permit, and all records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report or record, or application. These periods may be extended by request of the Department at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.
 - c. The Permittee shall maintain any required records of groundwater quality and groundwater surface elevations for the active life of the facility and during the post-closure care period as well.

- d. The Permittee shall, at a minimum, keep monitoring records which include the following information:
 - i. The dates, exact place, and times of sampling or measurements;
 - ii. The individuals who performed the sampling or measurements;
 - iii. The dates analyses were performed;
 - iv. The individuals who performed the analyses;
 - v. The analytical techniques or methods used; and,
 - vi. The results of such analyses.
 - e. Please see Operating Record under Part II Section H.1 for other record and retention requirements
10. Reporting Planned Changes: The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. This notice must include a description of all incidents of noncompliance reasonably expected to result from the proposed changes. The Permittee shall not modify the facility without first obtaining a permit or permit modification from the Department.
11. Anticipated Noncompliance: The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
12. Transfer of Permits: This permit shall not be transferred or assigned to any other person or municipality.
13. Twenty-Four Hour Reporting: The Permittee shall report to the Department any noncompliance with the Act, the regulations or any condition of this permit or any occurrence or event at the facility which may endanger health or the environment.
- a. Information shall be provided orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. The Permittee should notify the Bethlehem District Office at 610-861-2070 and the Regional Office at 570-826-2511. This report shall include the following:
 - i. Information concerning release or potential release of any hazardous or residual waste from the facility that may endanger public drinking water supply sources.
 - ii. Any information of a release, potential release, or discharge of hazardous or residual waste from the facility, or information of a potential or actual fire or explosion at the facility, which may threaten the environment or human health.
 - b. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health at or near the facility; and,
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

- c. A written submission shall also be provided to the Department within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times); if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Department extends it to fifteen (15) days.
14. Other Noncompliance: The Permittee shall report to the Department all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports are submitted. The reports shall contain the information listed in Part I Section H.13.
15. Other Information: Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Department, or whenever the Permittee becomes aware of circumstances which require a modification or clarification of any fact or representation made to the Department in connection with a permit application, it shall promptly submit such facts or information to the Department.
16. Administrative Fees. The Permittee shall submit the annual administrative fee per 25 Pa Code §§264a.82 and 264a.83.
17. Information Repository. The Permittee shall comply with 25 Pa Code §270a.84.

I. COMPLIANCE SCHEDULE REPORTING

1. The Permittee shall submit written reports of compliance or noncompliance with interim and final requirements contained in any compliance schedule of this permit to the Department no later than fourteen (14) days following each schedule date.
2. See Part IV Section E for the Compliance Schedule

J. CERTIFICATION OF CONSTRUCTION OR MODIFICATION

The Permittee may not manage hazardous waste at the facility at any new or modified waste management area/unit until:

1. The Permittee has submitted to the Department by the submittal methods listed in Part I, Section E, a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and,
2. The Department has inspected the modified or newly constructed facility and finds it in compliance with the conditions of the permit; or,
3. The Department has either waived the inspection or has not within fifteen (15) days notified the Permittee of its intent to inspect.

PART II – GENERAL FACILITY CONDITIONS

A. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or release of hazardous or residual waste or waste constituents to air, soil, surface water, or groundwater which could threaten human health or the environment.

B. GENERAL WASTE ANALYSIS

1. Analytical Procedures. The Permittee shall follow the procedures described in renewal permit application Waste Analysis Plan, Appendix B. The Permittee shall verify its waste analysis as part of its quality assurance program, in accordance with current EPA practices (Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, most recent edition) or equivalent methods approved by the Department in accordance with procedures in 40 CFR §260.21 as incorporated by reference at 25 Pa. Code §260a.1; and at a minimum maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations.
2. New Waste Streams. Before accepting new hazardous or residual waste streams by any generator, a Module 1, a Generic Module I application in accordance with the requirements detailed at 25 Pa. Code §265a.13(6 – 9) and renewal application Appendix B, or Form U must be submitted to the Department per the submittal methods in Part I, Section E, of this operating permit. If the Permittee can certify in their submittal that the waste stream(s) are not characteristically hazardous for pesticides and herbicides D012, D013, D014, D015, D016, D017, D020, D031, D037, D041 & D042), then the Module 1 will be reviewed in the following way:
 - a. If the Module 1/Form U is not returned within fifteen (15) working days from the date of receipt. Then the waste may be accepted for storage.
 - b. If at any time after fifteen (15) working day period, it is determined that the waste accepted is not consistent with this Permit, then the Permittee may be subject to applicable enforcement actions under the Act or Regulations.

If the above-mentioned Permittee certification is not submitted with the Module 1 / Form U, then the submittal shall be reviewed within the standard one hundred twenty (120) day review time-frame for new Module 1s.

Existing Approved Waste Streams. The Department is incorporating all existing approved waste streams (Module 1 / Form U) with the relevant conditions of approval into the permit except as superseded by the permit. If there are any changes in the generator's / fuel blender's manufacturing, operations, process, or raw material(s) which chemically alter make-up of their waste streams(s), a new Module 1 / Form U will have to be submitted to the Department per the submittal methods in Part I, Section E, of this operating permit. If the Permittee can certify in the submittal that the waste stream(s) are not characteristically hazardous for pesticides and herbicides (D012, D013, D014, D015, D016, D017, D020, D031, D037, D041 & D042), then the Module 1/Form U will be reviewed in the following way:

- c. If the Module 1/Form U is not returned within fifteen (15) working days from the date of receipt. Then the waste may be accepted for storage.
- d. If at any time after fifteen (15) working day period, it is determined that the waste accepted is not consistent with this Permit, then the Permittee may be subject to applicable enforcement actions under the Act or Regulations.

If the above-mentioned Permittee certification is not submitted with the Module 1 / Form U, then the submittal shall be reviewed within the standard one hundred twenty (120) day review time-frame for new Module 1s.

3. Waste Consistency. All waste streams approved for acceptance through the Module 1/Form U process must remain consistent with the Module 1/ Form U process description, Module 1/Form U waste ranges, and requirements stated in this permit. If a waste changes and becomes inconsistent with these requirements, the Permittee must cease accepting the waste until the Module 1 / Form U is resubmitted for Department approval per Part II Section B.3 above. On the Anniversary date of issuance of this permit, the Permittee shall reevaluate each waste stream to verify that the waste remains physically and chemically consistent with their original Module 1 / Form U analysis (if a waste stream is approved for acceptance within a year of the anniversary date, however, no update is required for the year for that particular waste stream). The reevaluation procedure shall be as follows:
- a. If the waste is chemically or physically different from that described in the original Module 1 /Form U submittal because of a process change, the generator must resubmit a new Module 1 / Form U. A full pre-qualification Module 1 / Form U analysis shall be performed by the permittee any time the generator identifies that the waste stream and/or process generating the waste stream has significantly changed in chemical composition, or if the waste stream has changed in hazardous characterization or management methods of waste.
 - b. If lieu of annually performing an analysis, an authorized representative of the generator of waste may sign a certification that the physical and chemical properties of the waste and the process by which the waste was generated has not changed from those set forth for the previous year. This certification shall include a copy of the original Module 1 / Form U.
 - c. Notwithstanding the certification permitted in (b) above, a Module 1 / Form U chemical analysis shall be completed every five (5) years.
 - d. This re-evaluation will identify any significant environmental and operational impacts that the wastes have had on the facility, and identify any special processing requirements for the waste streams.
 - e. Documentation regarding this annual waste stream evaluation will be made available to the Department upon request.
 - f. Each waste load's analytical results and waste acceptance / rejection procedure documents shall be compared with the approved Module 1 / Form U for consistency.
4. Herbicides & Pesticides. The Permittee shall implement the Pesticide and Herbicide Management Implementation Plan located in the renewal permit Appendix A and per other conditions of this permit.
5. Site Records. Copies of all Department approved Module 1 / Form U for waste fuels must be kept and maintained at the Keystone Cement Company plant office in East Allen Township.

C. SECURITY

The Permittee shall comply with the security provisions of 40 CFR §§264.14(b) and (c) as incorporated by reference at 25 Pa. Code §264a.1.

D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection plan(s) as dictated by the inspection(s) included in renewal application Appendix D. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR §264.15 as incorporated by reference at 25 Pa. Code §264a.1. Records of inspections including preventive maintenance inspections shall be kept as required by 40 CFR §264.15(d) as incorporated by reference at 25 Pa. Code §264a.1.

E. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by 40 CFR §264.16 as incorporated by reference at 25 Pa. Code §264a.1. This training program shall follow the attached outline, renewal application Appendix P. The Permittee shall maintain training documents and records as required by 40 CFR §264.16 (d) and (e) as incorporated by reference at 25 Pa. Code §264a.1.

F. PREPAREDNESS AND PREVENTION

1. Required Equipment: At a minimum, the Permittee shall equip the facility with the equipment set forth in the PPC plan, renewal application Appendix C, as required by 40 CFR §264.32 as incorporated by reference at 25 Pa. Code §264a.1.
2. Testing and Maintenance of Equipment: The Permittee shall test and maintain the equipment specified in the previous permit condition and in renewal application Appendix C, as necessary to assure its proper operation in time of emergency and as required by 40 CFR §264.33 as incorporated by reference at 25 Pa. Code §264a.1.
3. Access to Communications or Alarm System: The Permittee shall maintain access to the communications or alarm system as required by 40 CFR §264.34 as incorporated by reference at 25 Pa. Code §264a.1.
4. Required Aisle Space: At a minimum, the Permittee shall maintain aisle space as required by 25 Pa. Code §264a.173 and 40 CFR §264.35 as incorporated by reference at 25 Pa. Code §264a.1.
5. Arrangements with Local Authorities: The Permittee shall maintain arrangements with State and local authorities as required by 40 CFR §264.37 as incorporated by reference at 25 Pa. Code §264a.1. If State or local officials refuse to enter in or renew existing preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

G. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

1. Implementation of PPC Plan: The Permittee shall immediately carry out the provisions of the PPC plan, renewal application Appendix C and follow the emergency procedures described by 25 Pa. Code §264a.56 and 40 CFR §264.56 (a) – (i) as incorporated by reference at 25 Pa. Code §264a.1 whenever there is a fire, explosion, emission or discharge of hazardous waste or hazardous waste constituents which could threaten human health or the environment.
2. Copies of Plan: The Permittee shall comply with the requirements of 40 CFR §264.53 as incorporated by reference at 25 Pa. Code §264a.1.
3. Amendments to Plan: The Permittee shall review and immediately amend, if necessary, the PPC plan, as required by 40 CFR §264.54 as incorporated by reference at 25 Pa. Code §264a.1.
4. Emergency Coordinator: The Permittee shall comply with the requirements of 40 CFR §264.55 as incorporated by reference at 25 Pa. Code §264a.1.
5. Emergency Procedures: The Permittee shall comply with the requirements of 40 CFR §264.56(a-i) as incorporated by reference at 25 Pa. Code §264a.1.
6. Corrective Action at Solid Waste Management Units: In event of uncontrolled releases, the Permittee shall comply with all requirements of 40 CFR §264.101 as incorporated by reference at 25 Pa. Code §264a.1.

H. RECORDKEEPING AND REPORTING

1. Operating Record: The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR §264.73 as incorporated by reference at 25 Pa. Code §264a.1. The operating record shall contain information from a waste inventory and tracking system. The system must identify the waste description, quantity, generator, date received, transport manifest number, location stored, and any unusual conditions noted by the site personnel. The storage location and

quantity shall be cross-referenced with transport document numbers.

2. Biennial Report: The Permittee shall comply with all applicable biennial facility reporting requirements of 25 Pa Code §264a.75 and 40 CFR §264.75 as incorporated by reference at 25 Pa. Code §264a.1.
3. Required Reports: The Permittee shall comply with all applicable reporting requirements as described in 40 CFR §264.77 as incorporated by reference in 25 Pa. Code §264a.1, 40 CFR §270.30(l)(7,8) as incorporated by reference in 25 Pa. Code §270a.1; Part I Sections E, F, H.7, H.9, H.10, H.11, H.13, H.14, H.15, I, J; Part II, Sections B, G.2, L and M; Part IV Sections A.6.d, B.4.c, and E; Part V Section B; and Part VI Sections B, C, and E of this permit.

I. CLOSURE

1. Performance Standard: The Permittee shall close the facility as required by 40 CFR §264.111 as incorporated by reference at 25 Pa. Code §264a.1, 40 CFR §266.102(e)(11) as incorporated by reference at 25 Pa. Code §266a.20, and in accordance with the closure plan in renewal application Appendix E and conditions of this permit.
2. Amendment to Closure Plan: The Permittee shall amend the closure plan in accordance with 40 CFR §264.112(c) as incorporated by reference at 25 Pa. Code §264a.1 whenever necessary.
3. Notification of Closure: The Permittee shall notify the Department in writing at least forty-five (45) days prior to partial or final closure per 40 CFR §264.112(d) as incorporated by reference at 25 Pa. Code §264a.1.
4. Time Allowed for Closure: After receiving the final volume of hazardous waste, the Permittee shall remove from the site or dispose of on-site all hazardous and residual waste and shall complete closure activities in accordance with 40 CFR §264.113 as incorporated at 25 Pa. Code §264a.1 unless an alternative schedule is approved in writing by the Department.
5. Disposal or Decontamination of Equipment, Structures, and Soils: The Permittee shall decontaminate and/or dispose of all facility equipment, structures, and soils as required by 40 CFR §264.114 as incorporated by reference in 25 Pa. Code §264a.1 and the closure plan from renewal permit application Appendix E.
6. Analysis of Samples: The Permittee shall conduct analysis to verify that all decontaminated facility equipment and structures are adequately decontaminated as required by 40 CFR §264.114 as incorporated by reference in 25 Pa. Code 264a.1 and the closure plan from renewal permit application Appendix E.
7. Certification of Closure: The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan as required by 25 Pa. Code §264a.115, §264a.166, and 40 CFR §264.115, as incorporated by reference at 25 Pa. Code §264a.1. The owner /operator certification must comply with the signature requirements of 40 CFR §270.11 as incorporated by reference at 25 Pa. Code §270a.1.

J. COST ESTIMATE FOR FACILITY CLOSURE

1. Annual Adjustment: The Permittee shall adjust the closure and post-closure cost estimate for inflation within thirty (30) days after each anniversary of the date on which the first cost estimate was made as required by 40 CFR §264a.153, 40 CFR §§264.142 and 264.144(b) as incorporated at 25 Pa. Code 264a.1. See Closure Plan from renewal application Appendix E.
2. Adjustment for Changed Conditions: The Permittee shall revise the cost estimate whenever there is a change in the facility's closure plan or in the measures necessary to prevent adverse effects upon the environment as required by 40 CFR §264.142 and §264.144(c) as incorporated by reference at 25 Pa. Code §264a.1.
3. Availability: The Permittee must keep at the facility the latest cost estimate as required by 40 CFR §264.112 as incorporated by reference at 25 Pa. Code §264a.1.
4. Incapacity of Permittee or Financial Institutions: The Permittee shall comply with 25 Pa. Code

§264a.148 and 40 CFR §264.148 as incorporated by reference at 25 Pa. Code §264a.1 whenever necessary.

K. BONDING REQUIREMENT

1. The Permittee shall maintain the collateral bond submitted to and approved by the Department as required by 40 CFR §264 Subpart H, as incorporated by reference at 25 Pa. Code §264a.1 and as modified by 25 Pa. Code §264a Subpart H. The Permittee shall comply with all applicable financial assurance requirements. See permit renewal application Appendix E.
2. The facility shall not exceed the bonded tank storage volume amount (220,000 gallons) when transitioning from closing the existing four (4) storage tanks (1A, 1B, 2, 3) to the installation of seven (7) new storage tanks (5,6,7,8,9,10,11).
3. The Permittee shall include an annual adjustment to the bond amount to account for inflation and provide the inflation calculations as part of the 4th quarter facility report.
4. The permittee shall have a Department approved bond for all previously approved and new construction.

L. LIABILITY INSURANCE

The Permittee shall comply with the liability insurance requirements of 25 Pa. Code §264a.147 and the documentation requirements of 40 CFR §264.147(e) as incorporated by reference at 25 Pa. Code §264a.1. These include the requirements to have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs, and for non-sudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. If combined, the coverage levels for sudden and non-sudden occurrences shall be in the amount of at least \$4 million per occurrence and \$8 million annual aggregate pursuant to 40 CFR §264.147(a, b) as incorporated by reference in 25 Pa. Code §264a.1. The Permittee shall submit new certificates of liability insurance annually or sixty (60) days prior to the expiration of the current certificate.

M. REQUIRED NOTICES

1. Notice to Department: 40 CFR Part 262.84(b)(1) requires that the importer to provide notification in English to EPA of the proposed transboundary movement of hazardous waste at least sixty (60) days before the first shipment is expected to depart the country of export. Notice of subsequent shipments of the same waste from the same foreign source is not required. The notice shall demonstrate that the requirements of 25 Pa. Code §262a Subchapter H (Transfrontier Shipments of Hazardous Waste for Recovery within the Organization for Economic Cooperation and Development (OECD)) have been met.
2. Notice to Generator: When the Permittee plans to receive hazardous waste from an off-site source (except where the Permittee is also the generator), they must inform the generator in writing that they have the appropriate permits for, and will accept, the waste the generator is shipping (i.e. for storage (i.e., combusting for energy recovery) in the kiln)). The Permittee must keep a copy of this written notice as part of the operating record. (See Part II Section H.1).
3. Notice from Generator: Whenever the generator violates any environmental laws in the processing of waste at a permitted facility or violates any laws or regulations relating to the generation of a waste in an industrial process, the generator will report this to the Permittee. The Permittee shall then notify the Department per 40 CFR §264.12 Required Notices, as incorporated by reference at 25 Pa. Code §264a.1.

N. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee shall comply with the requirements of 40 CFR §264.17 as incorporated by reference at 25 Pa. Code §264a.1. Reactive and /or incompatible wastes may not be accepted at this facility.

O. MANIFEST SYSTEM

1. Use of the Manifest System: The Permittee shall comply with the manifest requirements of 25 Pa. Code §264a.71 and 40 CFR §§264.70, 264.71, 264.72, 264.72(a) & 264.72(b), as incorporated by reference at 25 Pa. Code §264a.1.
2. Hazardous Waste Management Fees. The Permittee will comply with the requirements of 25 Pa. Code §§264a.78 – 264a.79, 264a.82 and 264a.83.

PART III - STORAGE IN TANKS

A. WASTE IDENTIFICATION

1. The Permittee may store and blend the hazardous and/or residual waste in the tanks listed below, subject to the terms of this permit:

Tanks No(s)

Aboveground Waste Solvent Storage
Tanks Nos. 1A, 1B, 2, 3, 5, 6, 7, 8, 9, 10,
11 (when constructed)

Approved Hazardous Waste Code No(s) for listed tanks

D001, D018, D035, F001, F002, F003, F004, F005, F037, F038, K014, K015, K016, K017, K018, K019, K020, K022, K023, K025, K026, K028, K030, K035, K036, K048, K049, K050, K051, K052, K083, K085, K086 (solvent washings only), K087, K156, K169, K170, K171, K172, U001, U002, U004, U009, U012, U019, U031, U051, U052, U055, U056, U057, U072, U075, U078, U105, U112, U113, U115, U117, U127, U128, U131, U140, U153, U154, U159, U161, U169, U171, U188, U194, U220, U239 & approved residual wastes. See renewal application Appendix B.

Approved Secondary Waste Codes

Each primary hazardous waste code listed above may exhibit the following secondary hazardous waste characteristics D004, D005, D006, D007, D008, D009, D010, D011, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D036, D038, D039, D040, and D043.*

*Herbicides & Pesticides – See Part IV Section B. The pesticide & herbicide secondary waste codes include D012, D013, D014, D015, D016, D017, D020, D031, D037, D041, and D042.

Each primary waste code listed above may exhibit the following secondary waste codes for commercial chemical products, manufacturing chemical intermediates, or off-specification commercial products: U003, U037, U043, U044, U070, U077, U080, U118, U121, U122, U162, U165, U196, U210, U211, U213, U226, U227.

U228, U359**.

**These secondary waste codes may only be accepted at concentrations as approved for each individual waste stream via the Module 1 process, in addition to the general waste acceptance limit for chlorides.

See Part IV Section B (Waste Acceptance Criteria) for additional restrictions on Incoming wastes.

See renewal application Appendix B (Waste Analysis Plan) for a description of the waste codes.

2. The Permittee is allowed to store off-spec used oil in an above ground storage tank. Off-spec used oil

will be stored in the tank prior to being combusted in the kiln. The Tank that is holding the off spec RW oil should be identified and information should be submitted to the Department prior to tank installation.

B. DURATION OF STORAGE

The Permittee shall not store hazardous and/or residual waste at this facility in excess of one (1) year.

C. DESIGN AND CONSTRUCTION OF TANKS

1. The permittee shall construct, modify, and maintain all tanks in accordance with the approved plans and specifications. The permittee shall maintain the minimum shell thickness specified in the American Petroleum Institute (API) Standard 650, unless the Department authorizes an alternate standard, identified below, at all times, to ensure sufficient structural strength. The maximum tank capacities are provided in Part IV.D.

<u>Tank No(s)</u>	<u>Minimum Shell Thickness (inches)</u>	<u>Construction Status (C.4)</u>
Tank #1A	0.150 (nominal)	In-Service
Tank #1B	0.150 (nominal)	In-Service
Tank #2	0.1875 (nominal)	In-Service
Tank #3	0.1875 (nominal)	In-Service
Tank #5	0.1875 (nominal) to be determined at time of construction	Future
Tank #6	0.1875 (nominal) to be determined at time of construction	Future
Tank #7	0.1875 (nominal) to be determined at time of construction	Future
Tank #8	0.1875 (nominal) to be determined at time of construction	Future
Tank #9	0.1875 (nominal) to be determined at time of construction	Future
Tank #10	0.1875 (nominal) to be determined at time of construction	Future
Tank #11	0.1875 (nominal) to be determined at time of construction	Future

2. The permittee shall submit all related documentation for each phase of construction previously approved and as detailed in Appendix G of the permit renewal application.
3. The permittee shall have a licensed Professional Engineer conduct a yearly inspection of all existing tanks to ensure minimum shell thickness requirements are met. A copy of the engineer's yearly inspection report shall be submitted to the Department.
4. Status at the time of permit issuance.

D. PROTECTION FROM OVERFILLING

The permittee shall prevent overfilling of tanks by the methods specified in renewal application Appendix A and summarized below.

<u>Tank No(s).</u>	<u>Type of Control</u>
Waste Solvent Tanks Nos. 1A, 1B, 2 and 3	High level Alarm
Waste Solvent Tanks Nos. 5,6,7,8,9,10, 11 (when constructed)	High level Alarm

E. SECONDARY CONTAINMENT

The Permittee shall maintain the existing containment structures and construct and/or maintain new containment structure(s) per 40 CFR §§264.193(b, c, d, e, f) & 264.194(b) and 264.195 as incorporated by reference at 25 Pa. Code §264a.1.

F. EMERGENCY REPAIRS; CONTINGENCY PLAN

1. TER Inspection Plan. The permittee shall inspect the tanks in accordance with the Tank Evaluation and Repair (TER) Plan whenever there is any indication of a possible failure as required by 40 CFR §§264.191(a), 264.192(g) & 264.196 as incorporated by reference at 25 Pa. Code §264a.1 and as modified by 25 Pa. Code §264a.191.

2. Removal from Service. Whenever there is evidence of tank failure, the permittee shall remove the tank from service as required by 40 CFR §264.196(a) as incorporated by reference at 25 Pa. Code §264a.1 and implement the procedures required by 40 CFR §264.196(b)-(e) as incorporated by reference by 25 Pa. Code §264a.1 and specified in the PPC Plan, renewal application Appendix C.

3. Return to Service. Prior to return to service, the permittee shall repair the tank and obtain a certification from a registered professional engineer that it meets the design specifications approved in this permit, as required by 40 CFR §§264.191(a), 264.192(g) & 264.196(f) as incorporated by reference at 25 Pa. Code §264a.1.

4. Closure of Tank. If a tank has been removed from service due to failure and is not being repaired, the permittee shall close it as required by 40 CFR §264.196(e) and 40 CFR §264.197 as incorporated by reference at 25 Pa. Code §264a.1 and submit a Form HW-B certifying closure.

G. ACCESS ROADS

The permittee shall construct and/or maintain access roads as needed to meet Chapter 102 (Erosion Control) requirements.

H. BUFFER ZONE

The Permittee shall establish and maintain a buffer zone of fifty (50) feet between the property line and the permitted facility within which no hazardous waste storage activities shall occur.

I. EQUIPMENT

1. Equipment Maintenance. The Permittee shall maintain tank operating equipment in operable condition and adequate in size and performance capability to assure that the facility operation will not be interrupted during normal working periods and that the facility operation is in accordance with this permit.

2. Standby Equipment. The Permittee shall maintain standby equipment on-site or readily available for use in the event of a major equipment breakdown.

J. PROTECTION FROM CORROSION

The permittee shall protect the tanks from accelerated corrosion, erosion, and abrasion as specified in 40 CFR §264.194(a) as incorporated by reference at 25 Pa. Code §264a.1, renewal application Appendix F and as summarized below:

Tank No(s)

Waste Solvent Storage Tank Nos. 1A, 1B, 2, 3,
5,6,7,8,9,10 and 11 (when constructed)

Type of Protection

Carbon steel construction plus biennial sonic
Testing for corrosion and compatibility testing
of incoming wastes.

K. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE

1. Special Requirements. The permittee shall not accept reactive waste. The permittee shall not place ignitable waste in a tank unless the procedures described in renewal application Appendix B are followed.
2. Documentation. The permittee shall document compliance with the above permit condition as required by 40 CFR §264.17(c) and place this documentation in the operating record (Part II Section H.1).
3. NFPA Requirements. The permittee shall comply with all applicable requirements for covered tanks listed in the National Fire Protection Association's "Flammable and Combustible Liquids Code, 1981", or latest revised edition.

L. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. Incompatible Wastes Precautions: The Permittee shall not accept incompatible wastes. The Permittee shall not place incompatible wastes in the same tank or place hazardous waste in an unwashed tank that previously held an incompatible waste or material unless the procedures specified in renewal application Appendix B are followed.
2. Documentation: The Permittee must document compliance with sections (1) and (2) of this condition as required by 40 CFR §264.17(c) and as incorporated by reference at 25 Pa. Code §264a.1 and place this documentation in the operating record (Part II Section H.1).

M. WASTE ANALYSIS

The Permittee shall conduct waste analyses, or shall obtain written, documented information as required by 40 CFR §264.13 as incorporated by reference at 25 Pa. Code §264a.1 and the Waste Analysis Plan, renewal application Appendix B, before storing a hazardous waste which is different from waste previously stored in a tank. The analyses, tests, and information shall be placed in the operating record (Part II Section H.1).

N. WEIGHING OR MEASURING FACILITIES

The Permittee shall provide, maintain, and operate weighing or measuring facilities that can accurately weigh the incoming waste volumes.

O. OPERATING HOURS

Facility Sign. The Permittee shall maintain at the entrance of the facility a sign displaying hours of operation for receipt of waste, the lettering shall have a minimum of four (4) inches in height and of a color contrasting with the background.

P. TANK CONSTRUCTION OR INSTALLATION

1. Inspections. The Permittee shall inspect the tank for uniformity, damage and imperfections during

construction or installation.

2. Construction Practices. The Permittee shall use best engineering construction practices during all phases of installation and construction.

3. Quality Control Measures. The Permittee shall use the approved quality control measures and tests specified in the relevant approval to ensure that installation and construction conform to the design materials and construction specifications approved in this permit.

4. Professional Engineer Certification. The Permittee shall obtain a written certification from a registered professional engineer for each phase of installation or construction as required by 40 CFR §264.192 as incorporated by reference at 25 Pa. Code §264a.1. Each certification shall be submitted to the Department in accordance with the Compliance Schedule (Part IV Section E.4.).

5. Construction Schedule. The Permittee shall construct or install the tank(s) or other structures in accordance with the schedule approved by the Department, in permit renewal application Appendix G.

Q. SURFACE WATER MANAGEMENT

1. Design Standards. The Permittee shall manage surface water on the site as required by 25 Pa. Code Chapter 102, the Clean Streams Law, the Approved Application, and the Regulations.

2. Run-Off. The Permittee shall manage surface water run-off as required by the Regulations and the Approved Application.

3. Run-On. The Permittee shall manage surface water run-on as required by the Regulations and the Approved Application.

R. WASTE TRACKING

The Permittee shall minimize or eliminate the tracking of waste within or outside the site as required by the Regulations.

S. TRUCK UNLOADING, PARKING AND STAGING AREAS

1. The Permittee shall maintain the Truck Unloading Area to permit vehicles to unload promptly. All vehicles being unloaded shall be parked on the unloading pad within the secondary containment.

2. Vehicles may be staged at the Truck Staging Area or parked in the Truck Parking Area but must either be unloaded at the Truck Unloading Area or rejected with the waste trucks departing the site. No storage of waste-containing trucks is allowed in the Truck Parking Area outside of normal working hours (overnight). No storage of waste-containing trucks is allowed in the Truck Staging Area beyond forty-eight (48) hours. See Part VI Section C.2 for additional requirements.

3. Truck sampling activities may only occur at the Truck Unloading Area within secondary containment and at the Truck Staging Area while portable secondary containment units (e.g., spill barrows) are in place as described in the applicable Standard Operating Procedures (permit renewal application Appendix A).

T. AIR EMISSION REQUIREMENTS

1. This permit does not authorize the discharge of air emissions unless the Department Air Quality Program has approved the discharge of these emissions.

2. The Permittee will comply with all requirements of 40 CFR § 264.200 and 40 CFR Part 264 Subparts BB and CC as incorporated by reference at 25 Pa. Code § 264a.1, except as superseded by 40 CFR Part

63 Subparts DD and EEE (40 CFR 266.100(b), 40 CFR 264.1064(m), 40 CFR 264.1080(b)(7)).

PART IV – CONDITIONS SPECIFIC TO KEYSTONE CEMENT COMPANY

A. SITE AREA AND AUTHORIZED ACTIVITIES

1. Site Area.

- a. This permit authorizes the operation of a hazardous waste storage facility, at Keystone Cement Company, in East Allen Township, Northampton County, for acceptance of approved wastes that will be stored within the HW Storage Tank System prior to their beneficial energy recovery as alternative fuel within the on-site cement kiln. The site boundaries are labeled as Permit Area Plan of Operations, Figure 4 (RCRA Part B Permit Renewal Application). A separate CKD Contingency Area, for the storage of hazardous waste kiln residues (in roll-offs) for less than 90 days, is identified on the PPC Plan Figure 2B.

- b. Hazardous Waste Management Units (HWMUs):

- i. Active HWMUs:

The “active” hazardous waste management units of the Hazardous Waste Facility and site, located within the “site” boundaries, includes the existing Tanker Truck Parking Area, the existing Tanker Truck Staging Area, the existing Tanker Truck Unloading Area, the existing HW Storage Tank System including all ancillary systems, the existing cement kiln, and the contiguous area immediately impacted by the hazardous waste management activities at these units.

- ii. Future HWMUs:

The currently “future” hazardous waste management units of the Facility include the unconstructed Railcar Area, unconstructed HW Storage Tanks (5 -11), unconstructed direct transfer system, and unconstructed HW fuel mixing system located within the existing Tanker Truck Unloading Area. Construction and operation of the Railcar Area and a portion of the new HW Storage Tanks are authorized to occur within the construction schedule as described in Appendix G of the renewal permit application. The Future HWMUs cannot be operated until the Part IV Section E (Compliance Section) and Part VI (Permitted Railcar and Truck Operations) requirements are satisfied. At that time, the Future HWMUs will become Active HWMUs.

- c. New construction or activities within the hazardous waste storage site will require written Department approval.

2. Railcar Areas. Waste containing railcars may not be accepted onsite prior to written Department approval after construction of the combined HWMU. See Part IV Section E (Compliance Schedule) and Part VI (Additional Railcar/Truck Conditions) for additional requirements.

3. Hazardous Waste (HW) storage tanks. The permittee is authorized to install the HW storage tanks as described in the renewal permit application. Any approval contained in this permit for the unconstructed Tanks will terminate within five (5) years of the issuance of this permit. The permittee will be required to submit a Class 2 or 3 Hazardous Waste Permit Modification if the Permittee proposes to construct additional waste fuel tanks other than those proposed as part of the Combined HWMU.

Processing Conditions. The blending, mixing, and/or treatment of waste streams to meet waste acceptance criteria is prohibited. Use of the existing tank agitators and/or shredders located inside the existing or modified HW Storage Tank System is defined as normal flow control intended to maintain consistent pumpability of waste streams previously meeting waste acceptance criteria upon initial receipt, not blending, mixing, treatment or processing to meet acceptance criteria. This permit does not authorize other processing of waste except for energy recovery by combustion of approved waste streams (with a heating value of ≥ 5000 Btu/lb). Once the waste is received and stored, permittee will blend a fuel to meet its energy recovery criteria.

4. Storage Tank Venting System.

a. This permit authorizes the connection of the Hazardous Waste Storage Tank System's venting system to the unloading waste vehicles (i.e., vapor balancing system).

b. The carbon canister system shall remain in place as a back-up system to the existing, certified vapor balancing system.

c. The permittee is authorized to install and operate a new Hazardous Waste Fuel vapor vent line. This new vapor line will vent vapors (organic emissions) from the HW storage tanks to the first under grate fan of the existing clinker cooler and ultimately to the kiln for combustion.

5. Transfer Facility Operations. This permit does not authorize any transfer activities except for the following:

a. Truck Unloading Area:

- i. Prompt unloading at the existing Truck Unloading Area(s), within secondary containment, for incorporation of incoming waste into the approved hazardous waste storage tank system. See Part III Sections S & Part IV Sections A, B, C, E for overnight storage provisions.

b. Existing Truck Staging Area and New Railcar Staging Area:

- i. All hazardous and/or residual waste-containing trucks plus emptied but not decontaminated trucks or railcars previously used to contain wastes, are limited to staging within the approved active Railcar / Truck Unloading Area, Truck Parking Area, and Railcar / Truck Staging Area(s).
- ii. See Part III Section S (Truck Unloading, Parking, and Staging Areas), Part IV Section E (Compliance Schedule) and Part VI (Railcar Operations).
- iii. The Truck Staging Area shall be utilized for sampling activities in accordance with Standard Operating Procedures approved by the Department (SOP WF-60).
- iv. Railcars may be sampled on any rail track located on-site, including within the Railcar Unloading and Railcar Staging Area per the Railcar Management Plan (permit renewal Appendix L).

6. Direct Transfer System: Direct discharge of waste from incoming vehicles into the cement kiln is authorized through the direct transfer system.

8. Waste Re-Manifesting: Incoming rejected waste loads may be re-manifested for disposal off-site. The Permittee shall maintain in the operating record the following information related to re-manifested loads: the original generator, the waste description, the reasons for rejection, and the name of the facility to where the material was sent. The Permittee shall include all rejected loads in the Biennial reports and the region for each rejected load.

B. WASTE ACCEPTANCE CRITERIA:

No wastes may be accepted if the waste fails to meet the limits set forth below:

1. On-site Waste Screening Tests & Limits and Module 1/Form U Waste Tests & Limits.

- a. Waste Codes: No hazardous waste codes may be accepted other than those listed in Part III Section A above.
- b. On-site Waste Screening Tests and Limits: The on-site waste tests and waste screening limits are set forth in Table 1 below.
- c. Module 1/Form U Screening Tests and Limits:
 - i. Module 1/Form U acceptance criteria limits incorporate all Table 1 On-site Waste Screening Tests and Limits except as noted otherwise.
 - ii. See Part III Section A for the listing of primary and secondary waste codes.
 - iii. See Part II Section B of this permit and the renewal application Appendix B, Waste Analysis Plan for additional Module 1/Form U analytical requirements.
 - iv. Should a waste stream have multiple phases, the Keystone Cement Module 1/Form U analysis will include the following:
 1. Determine the percent (by volume) of all phases of separation comprising the waste.
 2. Determine the percent water content of all phases that are equal or greater than 25% of the sample volume.
 3. For any phase identified in subsection "2" above and containing greater than or equal to 75% water by volume, analysis for the entire range of halogenated inorganic anions will be performed.
 4. The permittee shall retain the capability of analyzing incoming waste loads for the entire range of anions via onsite laboratory test method or by an offsite laboratory which is able to provide results within a reasonable timeframe.

**TABLE 1
WASTE ACCEPTANCE CRITERIA
FOR ON-SITE WASTE TESTING**

PARAMETER	TEST METHOD ¹	SOURCE	APPENDIX B TEST METHOD	LIMITS
%Cl (Chlorine)	9253 (MOD)	SW846	RL.7 detection	≤ 3.0%
PCBs Screening	3620B/8082	SW846	RL.18/RL.19/RL.20	25 ppm
BTU/lbs.	E711 (MOD)	ASTM	RL.6	≥ 5000 BTU/lb.
Peroxide	Manufacturer's Specification	EM QUANT	RL.12	Not Present (per Module 1 analytical data or certification that peroxides are not present with on-site screening at <10 PPM detection limits) ³
pH	9045C	SW846	RL.14	>2.00 – <12.5
Phases ⁴	Visual Inspection	N/A	N/A	Consistent with Mod 1 (Number of Phases)
Iodine ⁵	Keystone SOP	KCC Method	S-1	<2%
Compatibility ⁷	5058 (MOD)	ASTM	RL.9, RL.10, RL.11	Compatible as determined by the cited test methods

¹Changes to analytical methods may be made via the Part IV Section F (SOP Modification) process. Updated methods will be incorporated consistent with the facility's laboratory accreditation.

²Keystone collects a sample every incoming shipment

³On site screening level

⁴The incoming shipment should not indicate a greater number of phases than indicated on the Mod 1 Form. In the event that there are a greater number of phases than indicated on the Mod 1 Form, the generator will be contacted to ensure that the additional phases do not represent a change in waste or process generating waste.

⁵Applies waste streams where there is discrepancy in the number of phases is identified during incoming shipment inspection procedures (i.e. – there are a greater number of phases than identified on the Module 1/Form U). Keystone will determine iodine content for any phase containing 25% or greater of the waste sample by volume and containing 75% or greater water content.

⁷Compatibility testing required from materials to be commingled in the facility tank farm is not required for direct transfer materials.

**PERIOD CONFIRMATION TESTING
SUMMARY OF ANALYTICAL METHODS AND MODULE 1 LIMITS**

PARAMETER	TEST METHOD	SOURCE	KEYSTONE TEST METHOD ²	LIMITS ¹
As (Arsenic)	3051/6010B or 7061A	SW846	RL.15/RL.16	≤ 1120 PPM (combined)
Be (Beryllium)	3051/6010B or 7090	SW846	RL.15/RL.16	
Cr (Chromium)	3051/6010B or 7190	SW846	RL.15/RL.16	
Cd (Cadmium)	3051/6010B or 7130	SW846	RL.15/RL.16	≤ 3500 PPM (combined)
Pb (Lead)	3051/6010B or 7420	SW846	RL.15/RL.16	
Hg (Mercury)	3051/3051A/7470A/7471A	SW846	RL.15/RL.17	≤ 10 PPM

¹Metals testing is only required to be performed on every tenth shipment of waste from each generator. The periodic testing will be used to confirm that the waste stream metals concentrations remain below the limits detailed above.

²Keystone Test Method References are included in Appendix A of permit renewal application.

**KILN GENERATED WASTES-
SUMMARY OF ANALYTICAL METHODS**

PARAMETER	REFERENCE METHODS ¹	SOURCE	RATIONALE	CRITERIA
TCLP Metals	1311(Mod.)/3051(Mod.)/6010B(Mod.), 7470(Mod.) or 7000 series	SW846	Regulatory	Note 2
TCLP Organics	1311(Mod)/8260/8270/8015/8260(Mod)/8270 (Mod.)	SW846	Regulatory	Note 2

¹Changes to analytical methods may be made via the Part IV Section F (SOP Modification) process

²CKD generated waste will be sampled in accordance with the CKD Sampling and Analysis Plan and the results will be assessed in accordance with the criteria detailed at 40 CFR Part 266.112(b)(1) or (2). Refractory lining will be sampled and compared to the TCLP limits at 40 CFR 261.24.

2. Unacceptable Wastes. Materials contaminated with PCBs, peroxides, and dioxin/furans may not be accepted. Unacceptable materials also include certain listed herbicides and pesticides defined as tri-, tetra-, and pentachlorophenols (i.e., waste codes F027); wastes from the production of specific pesticides, such as chlorodane (i.e., waste code K032); and "P" and "U" wastes defined in 40 CFR §261.33(e) and (f). A generator certification, stating that these parameters are not present, must accompany each incoming load.
3. Incoming Waste Loads.
 - a. Except for the acceptance and processing of heated material subject to the Heated Material and Direct Transfer SOP, the incoming waste loads cannot be heated after the load is generated in an industrial process for any purpose of facilitating shipping or unloading at this facility. The incoming wastes cannot be heated after blending at a permitted facility for any purpose of facilitating shipping or unloading at this facility.
 - b. Incoming loads of sludges may be mixed in bulk tanker trucks using the Mixing System, prior to unloading the mixed sludges to the HW Storage Tanks subject to the Mixing System Operation SOP.
 - c. Should a waste stream have multiple phases, the Permittee's on-site analysis will include the following:
 - i. Determine of the percent (by volume) of all phases of separation comprising the waste.
 - ii. Determine of the percent of water content of all phases that are equal or greater than 25%

of the sample by volume.

- iii. For any phase identified in subsection "ii" above and containing 75% or greater by water by volume, analysis for iodine and chloride will be performed.
- d. Incoming waste loads shall be visually inspected for changes from the approved Module 1/Form U physical description including additional phases, color changes, and reduced pumpability and as otherwise set forth in the Waste Analysis Plan (WAP).
- e. Until the existing HW Truck Unloading Area and existing HW Storage Tank System are closed and converted to the sole management of off-specification waste oil, all off-specification waste oil shall be managed as a residual waste under the terms and conditions of this permit. Upon certification of closure of the existing HW Truck Unloading Area and existing HW Storage Tank System, the Permittee may manage off-specification waste oil under the residual waste regulations. Upon approval, the waste oil may then be managed within the closed Storage Tank System under the residual waste oil regulations (as modified by permit conditions) until the waste oil enters the Cement Kiln HWMU.

4. Approved Waste Sources.

- a. No waste from an unapproved source may be accepted onsite.
- b. All conditions of this permit renewal supersede the conditions of the previous permit modifications if discrepancies or inconsistencies between the documents become evident. See Appendix A (Attachment #1 to SOP WF-02) for a compilation of waste approvals.
- c. Waste Management Municipal Contract (WMMC) Clients:
 - 1. Prior to accepting a new waste stream (not listed in Attachment #1 to SOP WF-02 of Appendix A), from a WMMC Client under the WMMC Module 1/Form U, the Permittee must submit a Module 1/Form U for that waste stream to the Department. The submittal shall be per Part I, Section E, of this operating permit. If the Permittee can certify in their submittal that the waste stream(s) are not characteristically hazardous for pesticides and herbicides (D012, D013, D014, D015, D016, D017, D020, D031, D037, D041, & D042) then the Module 1 will be reviewed in the following way:
 - a. If the Module 1/Form U is not returned to the Permittee within (15) working days from the date of receipt by the Department then the waste may be accepted for storage.
 - b. If at any time after the fifteen (15) working day period, it is determined that the waste accepted is not consistent with this Permit, then the Permittee may be subject to applicable enforcement actions under the Act or Regulations.

If the above-mentioned Permittee certification is not submitted with the Module 1, then the submittal shall be reviewed within the standard one-hundred twenty (120) day review time frame for New Module 1s.

- 2. The Permittee may notify the Department in writing that emergency circumstances exist that require the receipt of a WMMC Client waste stream prior to the fifteen (15) day review period and request priority review. The Permittee must obtain written approval from the Department prior to receipt of the waste stream.
- 3. All analysis and Module 1 /Form U information must be kept onsite and reviewed by trained Permittee staff prior to waste acceptance. The Permittee shall notify the Department in writing or withdraw the submittal in the event that the Permittee determines that the submittal to the Department is deficient.

C. APPROVED APPLICATION

The approved permit application consists of the following:

Volume 1 of 4:

- a. Letter request/application for RCRA Part B permit renewal from Keystone Cement Company, dated August 3, 2018. Responses to Technical Deficiencies dated June 9, 2020 and December 21, 2022.
- b. Form HW-B – Professional Certification
- c. Form GIF – General Information Form
- d. RCRA Hazardous Waste Part A permit application
- e. RCRA Hazardous Waste Part B permit application for Treatment, Storage, and Disposal -Part B Checklist
- f. Proof of Payment
- g. Form HW-E – Contractual Consent of Landowner
- h. Module 9 – Environmental Siting Criteria/Environmental Assessment Process Review Checklist for Hazardous Waste Management Facilities
- i. HW-C - Compliance History
- j. Narrative
- k. Appendix A – Standard Operating Procedures
- l. Appendix B – Waste Analysis Plan

Volume 2 of 4:

- m. Appendix C - Preparedness, Prevention, and Contingency Plan
- n. Appendix D - Inspection Forms
- o. Appendix E - Closure Plan and Financial Requirements
- p. Appendix F - Structural Evaluation of Storage Tanks
- q. Appendix G - Schedule for Related Construction Activities

Volume 3 of 4:

- r. Appendix H – Drawings

Volume 4 of 4:

- s. Appendix I – Management of Waste Oil
- t. Appendix J – Cement Kiln Dust Sampling and Analysis Plan
- u. Appendix K - Report of Details Relative to the Construction of the New Tank Farm and Supporting Unloading Facilities
- v. Appendix L - Railcar Management Plan
- w. Appendix M –Report on Use of Tanks 1A and 1 B to Store Waste Oil
- x. Appendix N – Air Permit Related Correspondence
- y. Appendix O – Design Related Information
- z. Appendix P - Personnel Training
- aa. Appendix Q – Geologic Investigative Report
- bb. Appendix R – Stormwater Management Correspondence

D. MAXIMUM STORAGE VOLUMES

1) The maximum approved liquid waste storage capacity of the approved, existing, and future HW Storage tanks are:

- a. Storage Tank #1A: 15,000 gallons
- b. Storage Tank #1B: 15,000 gallons
- c. Storage Tank #2: 31,500 gallons

d.	Storage Tank #3	31,500 gallons
e.	Storage Tank #5	32,000 gallons
f.	Storage Tank #6	32,000 gallons
g.	Storage Tank #7	32,000 gallons
h.	Storage Tank #8	32,000 gallons
i.	Storage Tank #9	32,000 gallons
j.	Storage Tank #10	32,000 gallons
k.	Storage Tank #11	28,000 gallons

2) The maximum approved in-service liquid waste storage capacity for the facility is 220,000 gallons. This includes any combination of existing and future HW Fuel Storage Tanks.

3) The maximum approved facility liquid waste storage capacity shall not be exceeded any time during new HW Fuel Storage Tank construction or repurposing of existing tanks in combination with new constructed tanks.

E. COMPLIANCE SCHEDULE

1. New Construction and Construction Certification Requirements.

- a. The submitted construction certification will contain any impacted or new Standard Operating Procedures (SOPs) with documentation addressing requirements set forth in Part IV Section F.2 below. These SOPs will be reviewed as part of the construction certification and may not be implemented until the Department approves the submitted construction certification in writing.

2. Combined HWMU-specific Requirements:

- a. General: No Combined HWMU operations (including railcar/tanks/truck acceptance or staging) can begin prior to written Department approval of the construction certification for those systems to be constructed according to general design plans and Construction Schedule of Appendix G of the permit renewal application.

b. Construction Certification: At least ninety (90) days prior to acceptance of hazardous or residual waste at the Combined HWMU, the Permittee shall submit a construction certification, signed and sealed by a Pennsylvania Professional Engineer with identified expertise in fire safety and the field of industrial hygiene, including the following:

i. Professional certification that the Combined HWMU (the HW Storage Tank System including ancillary systems, the Railcar Unloading Area, the Truck Unloading Area, the Railcar Staging Area, Truck Staging Area, secondary containment, spill & leak controls, and structure) has been designed and constructed to minimize the possibility of a fire, explosion, or any unplanned release of hazardous waste or hazardous waste constituents to the air, soil or surface water which could threaten human health or the environment (40 CFR§264.31). This certification will include:

(a) A hazard analysis completed in accordance with the 2008 Edition (or most recent edition) NFPA 30 Chapter 6 (Fire Prevention and Fire Risk Control) based upon an engineering evaluation of the operation and application of sound fire protection and process engineering principles by a Pennsylvania Professional Engineer with identified expertise in the fields of fire safety engineering and industrial hygiene. This hazard analysis shall also address all aspects of the waste-containing railcar operations onsite.

(b) Design calculations, design specifications, and certification that the ancillary systems (nitrogen blanketing system, vapor balancing system, solvent piping/pumping system, carbon canister system, foam system) and related fire hydrant/water supplies have been properly sized and constructed per identified NFPA or other nationally recognized design/safety code.

- (c) Certification that the installed tanks meet the most recent edition of API 650 Industry Standard unless the Department approves an alternate API 620 standard in writing.
- (d) Certification by a Pennsylvania Professional (Geotechnical) Engineer that the Combined HWMU foundations have been engineered against any potential subsidence or sinkhole formation, with an annual inspection plan to detect any signs of potential sinkhole formation or subsidence. The certification shall include a copy of an inspection plan and contingency plan to be followed in event of signs of potential subsidence or sinkhole formation.
- (e) Written Pennsylvania Department of Labor & Industry (PA DL&I) approval for the Combined HWMU's design and construction in terms of the Title 37 Flammable & Combustible Liquid regulations and any other applicable PADL&I occupational safety regulations.
- (f) Written approval from East Allen Township in regard to compliance with the applicable building codes (Uniform Construction Codes including International Fire Codes).
- ii. Documents to be kept on-site include as-built engineering drawing(s), signed and sealed by a Pennsylvania Professional Engineer, showing & identifying the constructed Combined HWMU, access points/routes for sampling and personnel access (including catwalks), and all associated fire control equipment including fire hydrants, connections to water supplies, spill & leak controls, surface water controls, surface water flow directions, and ultimate destination for any release outside of secondary containment. These drawings will be correlated to:
- (a) A table identifying any specific industry or safety code (API, NFPA 30, etc.) that the constructed Combined HWMU components, equipment, instruments, and structures meet.
- (b) An inspection plan including a written schedule for the inspection of individually identified monitoring equipment (with identifier number); safety and emergency equipment (with identifier number); security devices (with identifier number); and operating and structural equipment (with identifier number) that are important to preventing, detecting or responding to environmental or human hazards. The Plan shall include a table identifying the type of malfunction or deterioration to be inspected for, and the frequency for the required inspections (40 CFR §264.15). Examples of equipment include pumps, valves, pipes, ancillary system equipment that contact waste or waste constituents.
- (c) Security systems including fencing, lighting, locks, alarms, 24 hour-per-day/7-days-per-week video surveillance system location & specifying which areas are being visually monitored by whom, and any form of access control or barrier.
- (d) The Railcar traffic pattern (showing how railcars will be maneuvered onsite), railcar storage/staging aisle space, traffic controls including traffic signals, load-bearing capacity, truck access road & turn/stacking lanes for intersections.
- c. Air Emissions Requirements: 40 CFR Part 63 Subpart DD documentation and PADEP AQP correspondence demonstrating that the Combined HWMU equipment air emissions have been addressed via the PADEP AQP Title V Permit and Plan Approval.

- d. PPC Plan Requirements: An updated "stand alone" PPC Plan.

- e. Standard Operating Procedures: At least ninety (90) days prior to the proposed acceptance of railcar waste shipments, the Permittee shall submit updated Standard Operating Procedures to address changes due to railcar operations with SOP WF-06 (Process Change) documentation.
 - i. New SOP for Railcar Unloading addressing requirements of 40 CFR §270.14(b) (8, 9).
 - ii. New SOP for Railcar Loading Procedure.
 - iii. New SOP for the management of rejected waste-containing railcars.
 - iv. New SOP for Railcar Staging Area Procedure.
 - v. New SOP for operational maneuvering & movement of railcars including traffic control signals or other approved traffic control plan to minimize and prevent potential vehicular accidents. This SOP shall include figures showing all traffic controls, railcar staging areas, railcar storage areas, and rail spurs used to maneuver railcars. This SOP shall address how the Permittee will manage a leaking railcar and if needed to move it to the Railcar Unloading Area in event that the Railcar Unloading Area is filled or if there are additional railcars between the leaking railcar and Unloading Area.
 - vi. Updated SOP WF-01, WF-02, WF-05, WF-07, WF-08, WF-09; WF-10; WF-11; WF-13; WF-26; SOP WF-28; SOP WF-30; SOP WF-34; SOP WF-35; SOP WF-36, WF-50, WF-59, as necessary .

F. STANDARD OPERATING PROCEDURES (SOPs)

1. Approved Site SOPs

- a. Appendix A of the permit renewal application contains the Site SOPs.

2. SOP Modification Procedure.

- a. Any proposed change to Approved Site SOPs shall be submitted in writing to the Department at least fifteen (15) days prior to initiation of changes to site operations except if submitted as part of a construction certification or application for permit or permit modification.
- b. The new or revised SOP submittal (for each SOP) shall include the following:
 - 1. The new or revised SOP;
 - 2. The original SOP being revised (if any);
 - 3. A cover letter identifying the change (if any);
 - 4. The completed WF-06 Process Change form;
 - 5. Certification that the proposed SOP will meet relevant OSHA, MSHA, NFPA or other industry standard, with identification of standard, if applicable; and,
 - 6. Any other documentation needed to show that the change does not affect the safety, health and environment of site personnel and the public or otherwise violate the conditions of this permit.
- c. If the Department does not respond within fifteen (15) working days, the Permittee may implement the new or revised SOP if the SOP does not require changes to site construction or otherwise conflict with conditions of this permit and if the SOP is not part of an application for permit or permit modification or construction certification.
- d. Any SOP change requiring or associated with changes to site construction will require an application for permit modification or submitted construction certification, and shall be approved, rejected or approved with conditions as part of the permit modification application or construction certification.
- e. A complete set of approved SOPs will be maintained onsite. Copies of SOPs shall be provided to the Department upon request.

PART V - INDUSTRIAL FURNACE/CEMENT KILN RELATED REQUIREMENTS

A. SCOPE OF COVERED ACTIVITIES:

1. Combusting for Energy Recovery: This permit authorizes the combustion for energy recovery of approved liquid (pumpable at ambient temperatures and pressures except for the acceptance and processing of heated material subject to Heated Material and Direct Transfer SOP and the mixing of sludges subject to the Mixing System Operation SOP) hazardous and residual wastes, with a minimum fuel value greater than or equal to 5,000 BTU/pound, within the approved cement kiln industrial furnace identified in the permit application per 25 Pa. Code Chapter 266a, 40 CFR Part 266 Subpart H (Hazardous Waste Burned in Boilers and Industrial Furnaces), the terms and conditions of this permit and the terms and conditions of the PADEP AQP Title V Permit (including kiln operating ranges which allow for hazardous waste combustion). In this Part, the term "burn" or "combust" means combusting for energy recovery in the Approved Cement Kiln.
2. Kiln Residue Management: This permit authorizes the management of kiln-generated residues produced during the combusting of wastes within the cement kiln. Kiln residues include cement kiln dust, kiln refractory brick, and other "non-cement product", materials that have been in contact with hazardous wastes or their products of combustion in the kilns (including pipes, ducts, fans, etc.).
 - a. Residues generated during the treatment of hazardous waste shall be managed as hazardous waste unless the Permittee has promptly determined that the residue is non-hazardous as set forth in 25 Pa. Code §261a.3(b) and 40 CFR §266.112 as incorporated by reference at 25 Pa. Code §266a.20. The following criteria must be met to qualify for this exemption:
 - i. A minimum of fifty (50) percent by weight of the normal cement- production raw materials must be processed in the cement kiln during the generation of the waste;
 - ii. The concentration of each constituent of concern, determined by following the CKD Sampling & Analysis Plan, in the hazardous waste-derived CKD or residue must not exceed the limits provided in 40 CFR§266.112(b)(1) or 40 CFR§266.112(b)(2), whichever is higher for the nonmetal constituents; and,
 - iii. Records sufficient to document with the above requirements are retained until closure of the cement kiln.
 - b. Non-hazardous kiln residues, kept segregated from hazardous wastes or potentially hazardous wastes, may be managed as residual waste after removal from the Kiln HWMU.
 - c. Properly decontaminated instruments, equipment, components, and structures may be re-used, sold for scrap, or otherwise disposed.
 - d. In event that cement kiln dust or other kiln residues are generated by kilns combusting less than 50% by weight normal cement-production raw materials, the kiln residues shall be managed as hazardous waste.
 - e. The Department may authorize a reduction in cement kiln dust sampling and analytical requirements in writing. No reduction in current sampling & analysis requirements has been authorized as of the effective date of this renewal permit.
3. Contaminated Stormwater Management: This permit authorizes the use or re-use of contaminated stormwater collected from the HW secondary containment system as an ingredient (water) to the cement kiln as part of the cement- making process (40 CFR §261.1(b) as incorporated by reference at 25 Pa. Code §261a.1).
 - a. This permit does not authorize any alternate use of contaminated stormwater.
 - b. Collected hazardous waste, spills, leaks, clean up residues, and contaminated stormwater from secondary containment or surface water controls shall be removed promptly after the spillage/rainfall event.

c. Stormwater, collected from the HW secondary containment systems, shall be managed as hazardous waste unless the Department approves an alternate disposition or Standard Operating Procedure for determining the regulatory status of the collected stormwater and specific end-uses for this fluid/wastewater. If stored in containers, the containers shall comply with 40 CFR Part 264 Subpart CC (Container) requirements.

d. Hazardous waste released into the secondary containment system may be returned to the HW Storage Tank System if meeting applicable waste acceptance permit requirements including fuel value as combusted.

B. ENGINEERING DESIGN PLANS AND SPECIFICATION:

1. The Cement Kiln HWMU (including associated ancillary systems, instruments, equipment, and structures) will be constructed in accordance with the general design plans.

2. No substantive design or construction modifications may be made without prior Department written concurrence or permit modification as required in Part I Section H.10. Routine replacement of functionally equivalent parts during preventive maintenance will not require pre-approval.

C. GENERAL OPERATING REQUIREMENTS:

1. At all times, the Permittee shall operate and maintain the Cement Kiln HWMU to minimize the possibility of a fire, explosion, or any unplanned release hazardous waste or hazardous waste constituents to air, soil, or waters of the Commonwealth that might threaten human health or the environment.

2. The Permittee shall operate the Cement Kiln HWMU in accordance with this permit and the PADEP AQP Title V Permit.

3. Prohibited Wastes. Combusting of the following wastes is prohibited at all times:

a. Dioxin and furan-containing waste streams, including HW waste codes F020, F021, F022, F023, F026 (40 CFR §261.31).

b. Polychlorinated biphenyl (PCB) waste as defined in 40 CFR §761.3.

c. Radioactive source, special nuclear or byproduct material (as defined by the United States Nuclear Regulatory Commission), except byproduct materials that meet the criteria for exempt concentrations set forth in 10 CFR §30.71 at the point of generation.

d. Explosive material, as defined by the US Department of Transportation under 49 CFR Part 173.

e. Reactive wastes, as defined by 40 CFR §261.23.

f. Containerized gas

g. Municipal waste as defined in 25 Pa. Code §271.1

h. Infectious or chemotherapeutic waste as defined by 25 Pa. Code §271.1.

i. Prohibited inorganic metal-bearing hazardous wastes (listed in 40 CFR Part 268 Appendix XI- Metal Bearing Wastes Prohibited from Dilution in a Combustion Unit), unless the hazardous waste can be demonstrated to comply with one or more criteria specified in 40 CFR §268.3(c) to prepare fuel for the kiln.

j. Wastes which are not pumpable at standard conditions (defined in 25 Pa. Code 121.1 (air quality regulations) as 70 degrees Fahrenheit and 14.7 pounds per square inch absolute pressure i.e. 1 atmosphere) except for the acceptance and processing of heated material subject to the Heated Material and Direct Transfer SOP and the mixing of sludges subject to the Mixing System Operation SOP.

k. Wastes with a heating value of less than 5000 BTU per pound. Blending is prohibited as a means of augmenting the heating value to meet the facility acceptance criteria defined in this permit (40 CFR §268.3).

4. Direct Transfer fuel lines to allow transfer of heated waste fuel from the truck unloading area to the kiln without using a storage unit are permitted.

5. Mixing System allows the mixing of sludges in bulk tanker trucks prior to unloading the mixed sludges into one of the HW storage tanks.

6. Only those waste types approved per this permit's Part II Section B, Part III Section A, and Part IV Section B may be combusted as fuel in the cement kiln. On-specification waste oil shall be managed as a commercial

fuel product as set forth in the Pennsylvania Residual Waste regulations.

D. INSPECTION REQUIREMENTS:

1. The Cement Kiln HWMU, including associated equipment (pumps, valves, pipes, and other ancillary equipment) shall be visually inspected at least daily when they contain or potentially contain hazardous waste or waste constituents. The equipment shall be inspected for leaks, spills, discharges, other releases, fugitive emissions, and signs of tampering.
2. Documentation of each inspection shall be maintained in the operating record for a minimum of five (5) years. At a minimum, the record shall include the following:
 - a. Date of the inspection,
 - b. Identification of each device (e.g., hazardous waste feed pump #1) or operating system (e.g., burner injection system component) inspected, including part number or other descriptive identifier,
 - c. Name of the person(s) conducting the inspection,
 - d. Description of any leaks, spills, other discharges, fugitive emissions observed,
 - e. Description of any corrective measures taken as a result of the inspection,
 - f. Any other information associated with the inspection.
 - g. The automatic waste feed cut-off system (AWFCO) and associated alarms must be tested at least once every thirty (30) days when hazardous waste is combusted to verify operability unless the Department authorizes a different schedule in writing.
3. The Kiln Residue Management areas shall be inspected daily for dust and any potential releases to the environment.

E. MAINTENANCE:

1. The Permittee shall maintain the Cement Kiln HWMU (including the cement kiln, ancillary equipment including air pollution control equipment and instrumentation) per a written preventive maintenance schedule that is consistent with the conditions of this permit.
2. The Permittee shall maintain a written record of all preventive maintenance and repairs performed on the Cement Kiln HWMU (including cement kiln, the ancillary equipment, and instrumentation). At a minimum, the record shall include the following information:
 - a. The date the problem was discovered, if not routine maintenance,
 - b. The piece of equipment or instrumentation repaired or maintained including part number or other appropriate descriptive identifier,
 - c. The type of maintenance or repair,
 - d. The date maintenance or repair,
 - e. The name of the person(s) conducting the maintenance,
 - f. Any data associated with any calibration and testing; and,
 - g. The date the unit was placed back into service.

F. CLOSURE

The Cement Kiln HWMU shall close in accordance with 40 CFR §266.102(e)(11) as incorporated at 25 Pa. Code §266a.20, 40 CFR §264.178 as incorporated by reference at 25 Pa. Code §264a.1, Part II Section I of this permit, and renewal application Appendix E of this permit, as modified by the terms and conditions of this

permit including Part IV Section E.

PART VI - ADDITIONAL RAILCAR/TRUCK REQUIREMENTS

A. SCOPE OF AUTHORIZED OPERATIONS:

1. This Part pertains to the management of waste-containing railcars and trucks onsite:
 - a. Railcar Acceptance & Management:
 - i. The Permittee accepts the railcar and all applicable regulatory and statutory responsibilities for proper management of the waste-containing railcar after the railcar crosses the railcar acceptance point depicted on Permit Area Plan of Operations, RCRA Part B renewal application, Figure 4.
 - ii. The railroad transporter retains any (DOT and Department) transporter regulatory responsibilities and obligations until the manifest is signed by the Permittee or in event that the waste-containing railcar is rejected by the Permittee and departs from the site with the delivering train locomotive.
 - iii. Railcars shall be managed per the updated Railcar Management Plan in Appendix L submitted with the permit renewal application.
 - b. Truck Acceptance & Management:
 - i. The Permittee accepts waste-containing trucks and all applicable regulatory and statutory responsibilities after the manifest is signed or the truck driver/tractor leaves the site (whichever is first).
 - c. Storage: No waste-containing railcar or truck may be staged or stored outside of the approved HWMUs.
 - d. Related Requirements: See Part III Section S (Truck Unloading, Parking, and Staging Areas) and Part IV for related requirements. Part III Sections G (Access Road), H (Buffer Zone), N (Weighing or Measuring Facilities), Q (Surface Water Management), R (Waste Tracking), T (Air Emissions Requirements) are incorporated by reference into this Part.

B. LOADING OF OUTGOING WASTES VIA RAILCAR:

1. Shipment Offsite: Offsite shipments of waste are authorized for rejected loads, emergency removal of unapproved wastes accidentally received and stored in the approved active HW Storage Tanks, or when Keystone's kiln is not combusting waste. Transfer from storage tanks to railcars is performed in accordance with the Railcar Management Plan in Appendix L submitted with the permit renewal application.
2. Shipment Time-frame: The Permittee shall contact the railroad company and a pickup must be scheduled upon completion of loading one or more railcars per the Railcar Management Plan in Appendix L. Shipment occurs when:
 - a. The transporter signs the manifest acknowledging acceptance of the railcar, and returns it to the Permittee; and,
 - b. The railcar crosses the Railcar Acceptance Point (RCRA Part B, renewal application, Figure 4) in departing the site.

3. Additional Recordkeeping: The Permittee must maintain a log of the date and time of each waste-containing or emptied railcar's arrival and departure from the facility. The Permittee must maintain a copy of the Railcar Checklist to verify that the railcar has been inspected for safe shipment off-site.
4. Additional Inspection Requirement: The Permittee will inspect outgoing railcars to verify that the railcar has been inspected for safe shipment off-site.
5. Other Regulatory Obligations: The Permittee shall comply with all applicable requirements of the US Department of Transportation (DOT) including 49 CFR Parts 172, 173, 179 and the Federal Railroad Administration (FRA) requirements of the PA Department of Transportation (DOT) including PA Title 67: and of the US Department of Homeland Security including the Transportation Security Administration.

C. DURATION OF STORAGE

1. Railcar Storage: No incoming waste-containing railcar can remain onsite for more than twenty (20) days total prior to unloading, except for outgoing waste-containing railcars. Upon arrival on-site, the railcar will be moved onto the Keystone rail siding and tracks. Within 10 days, movement into the railcar staging and unloading area will occur. Once inside the railcar facility, the Permittee will unload the waste derived fuel within 10 days. If necessary, a railcar will be rejected and scheduled with the rail company to be returned to the generator or re-manifested to another facility as soon as practicable.

If Permittee is unable to move the railcar into the railcar staging and unloading area, or unload a railcar within 10 days of being placed in the railcar staging and unloading area, then Permittee will notify the Department. Within three (3) days of either of these instances, Permittee will provide a notification to the Department stating why the movement or unloading is delayed beyond 10 days and the date by which it will be moved or unloaded.

2. Truck Storage: The Permittee shall notify the Department immediately if any waste-containing truck is stored for more than forty-eight (48) hours onsite and provide written explanation within twenty-four (24) hours.

D. CONDITION OF CONTAINERS

If a waste-containing truck or railcar container holding hazardous or residual waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall ensure that the truck/railcar is within secondary containment and transfer the waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

E. MANAGEMENT OF TRUCK/RAILCAR CONTAINERS

The Permittee shall manage waste-containing truck and railcar containers as required by 25 Pa. Code §264a.173 and 40 CFR §264.173 as incorporated by reference at 25 Pa.

Code §264a.1. In addition:

1. The Permittee shall store all hazardous and residual waste-containing truck/railcar containers in accordance with the following volume, content, and location requirements:
 - a. Any waste-containing railcar/truck parking or staging area must be monitored 24-hours per day if outside of secondary containment and/or fencing.
 - b. The Permittee shall store waste-containing and emptied railcars and truck containers of hazardous or residual waste as required by 40 CFR §264.173 as incorporated by reference at 25 Pa. Code §264a.1 and 25 Pa. Code §264a.173. The Staging, Storage and Parking Areas shall comply with NFPA 30 aisle space requirements in order to allow for safe management of waste and the unobstructed movement of personnel, fire protection equipment, spill control equipment, decontamination equipment and emergency vehicles to any area of the facility operation in event of an emergency plus inspection, containment and remedial action.
 - c. Unless the Department authorizes additional storage in writing:
 - i. No more than four (4) waste-containing railcars may be located in the fenced railcar staging and unloading area at any one time.
 - d. The Permittee shall maintain onsite and immediately available when waste-containing trucks and/or railcars are onsite, means of moving waste-containing trucks and railcars as needed to allow for access and to move the containers in event of fire, explosion, release or other incident triggering the site PPC Plan. If this capability is not available, no staging outside of the approved Truck/Railcar Unloading Areas is authorized.
 - e. The Permittee shall ensure that any equipment or vehicles which come into contact with waste in the loading/unloading areas, storage, staging, and parking areas have been decontaminated prior to their movement outside of the permit-defined loading/unloading, storage, parking and staging areas. Decontamination can include washing of contaminated equipment and the washing of undercarriages & wheels to remove all waste residues and to prevent spreading of contamination. All wash water shall be collected and disposed.

F. COMPATIBILITY OF WASTES WITH CONTAINERS

If shipping waste offsite, the Permittee shall assure that the ability of the truck or railcar to contain the waste is not impaired as required by 40 CFR §264.172 as incorporated by reference at 25 Pa. Code §264a.1.

G. CONTAINMENT

The Permittee shall construct and/or maintain the containment system as required by 40 CFR §264.175 as incorporated by reference at 25 Pa. Code §264a.1. All secondary containment area floors shall be uniform and free from cracks or holes.

H. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

The Permittee shall not locate trucks, railcars or other containers holding ignitable or reactive wastes within fifteen (15) meters (50 feet) of the facility's property line.

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. Placement of Incompatible Wastes: Incompatible wastes and/or materials will not be placed in the same container. Further, waste shall be separated from any nearby incompatible material.
2. Incompatible Wastes in Unwashed Containers: The Permittee shall not place hazardous or residual waste in an unwashed container that previously held an incompatible waste or material.
3. Storage of Incompatible Wastes: The Permittee shall not accept incompatible waste. If wastes are determined to be incompatible while onsite, the containers of incompatible wastes shall be stored as required by 40 CFR §264.177(c) as incorporated by reference at 25 Pa. Code §264a.1.
4. Documentation: In the event of incompatible wastes, the Permittee must document compliance with sections (1) and (2) of this condition as required by 40 CFR §264.17(c) as incorporated by reference at 25 Pa. Code §264a.1 and place this documentation in the operating record (Part II Section H.1).

J. RCRA ORGANIC AIR EMISSIONS

The Permittee shall comply with all applicable requirements of 40 CFR §264 Subpart CC - Air Emission Standards for Containers as incorporated by reference at 25 Pa. Code §264a.1 except as superseded by 40 CFR Part 63 Subparts DD and EEE.

K. CONTAINER RESIDUES

Residues of hazardous waste in empty containers shall be managed per 25 Pa. Code §261a.7 and 40 CFR §261.7 as incorporated by reference at 25 Pa. Code §261a.1.

L. CLOSURE

Closure must be implemented in accordance with 25 Pa. Code §264a.115, Part II Section I the Closure Plan in renewal application Appendix E and 40 CFR §264.178 as incorporated by reference at 25 Pa. Code §264a.1.