



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: March 10, 2026

Effective Date: March 10, 2026

Expiration Date: September 30, 2027

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 24-00016K

Federal Tax Id - Plant Code: 25-1635401-1

Owner Information

Name: KEYSTONE POWDERED METAL CO

Mailing Address: 251 STATE ST
SAINT MARYS, PA 15857-1658

Plant Information

Plant: KEYSTONE POWDERED METAL CO/ST MARYS

Location: 24 Elk County 24814 Saint Marys City

SIC Code: 3499 Manufacturing - Fabricated Metal Products, Nec

Responsible Official

Name: PAUL M. ORR

Title: VP OF OPERATIONS

Phone: (814) 781 - 1591

Email: porr@keystonepm.com

Plan Approval Contact Person

Name: KEVIN BAUER

Title: VP OF ENGINEERING

Phone: (814) 781 - 4236

Email: kebauer@keystonepm.com

[Signature] _____

LORI L. MCNABB, NORTHWEST REGION AIR PROGRAM MANAGER



Plan Approval Description

This Plan Approval is for the installation of two thermal oxidizers on two existing electric furnaces that will now be used to make long duration storage batteries. Two existing endothermic gas generators will also be added through this plan approval.



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Note: These same sub-sections are repeated for each source!

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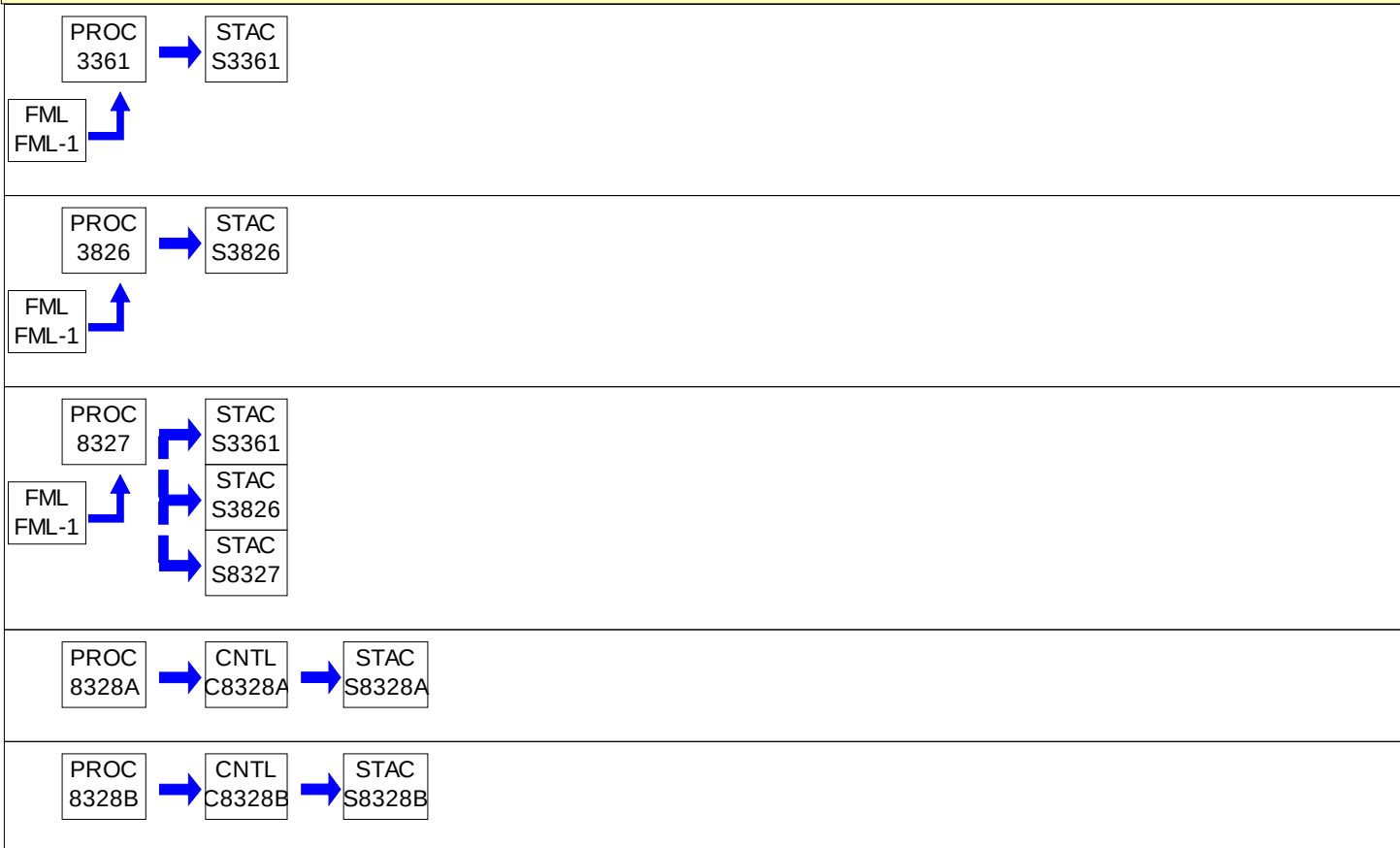
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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
3361	HEAT TREATER FURNACE	3.000 MMBTU/HR	
3826	HEAT TREATER FURNACE	3.000 MMBTU/HR	
8327	ENDOTHERMIC GENERATORS(2)		
8328A	ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY		
8328B	ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY		
C8328A	THERMAL OXIDIZER		
C8328B	THERMAL OXIDIZER		
FML-1	NATURAL GAS PIPELINE		
S3361	HEAT TREATER STACK		
S3826	HEAT TREATER STACK		
S8327	ENDO GAS BURNER STACK (2) NOT FOR PRODUCED ENDO GAS		
S8328A	STACK		
S8328B	STACK		

PERMIT MAPS

**SECTION B. General Plan Approval Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

Words and terms that are not otherwise defined in this plan approval shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.12b (a) (b)]**Future Adoption of Requirements**

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]**Plan Approval Temporary Operation**

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 30 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]**Content of Applications**

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]**Public Records and Confidential Information**

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the

**SECTION B. General Plan Approval Requirements**

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]**Plan Approval Terms and Conditions**

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

- (i) A justification for the extension,
- (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]**Transfer of Plan Approvals**

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(a)(4) & 35 P.S. § 4008 & § 114 of the CAA]**Inspection and Entry**

(a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

**SECTION B. General Plan Approval Requirements**

(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#009 [25 Pa. Code 127.13a]**Plan Approval Changes for Cause**

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.
- (b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (c) The permittee fails to submit a report required by this plan approval.
- (d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]**Circumvention**

- (a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]**Submissions**

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the plan approval transmittal letter or otherwise notified)

#012 [25 Pa. Code § 127.12(a)(9) & 40 CFR Part 68]**Risk Management**

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

**SECTION B. General Plan Approval Requirements**

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

#013 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. §§ 4001-4015).

#014 [25 Pa. Code § 127.25]**Compliance Requirement**

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.



SECTION C. Site Level Plan Approval Requirements

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All applicable conditions as specified in State Only Operating Permit 24-00016 issued on 06/25/2025 shall remain in effect unless superseded or amended by a condition contained herein. If there is a conflict between a condition contained in the State Only Operating Permit 24-00016 and a condition contained herein, the permittee shall comply with the condition contained herein rather than the conflicting condition contained in the State Only Operating Permit 24-00016.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 3361

Source Name: HEAT TREATER FURNACE

Source Capacity/Throughput:

3.000 MMBTU/HR

Conditions for this source occur in the following groups: ENDO GAS/HEAT TREATING PROCESS

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

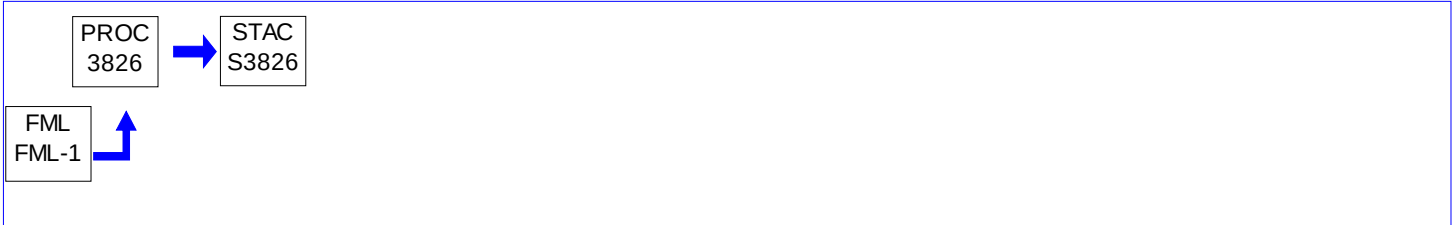
Source ID: 3826

Source Name: HEAT TREATER FURNACE

Source Capacity/Throughput:

3.000 MMBTU/HR

Conditions for this source occur in the following groups: ENDO GAS/HEAT TREATING PROCESS

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 8327

Source Name: ENDOTHERMIC GENERATORS(2)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: ENDO GAS/HEAT TREATING PROCESS

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) Stack 8327 (S8327) shall only be used for the Endothermic Gas Generator BURNER emissions. No produced Endo Gas shall be released through S8327.

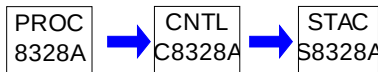
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 8328A

Source Name: ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LONG DURATION STORAGE BATTERY PROCESSES

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

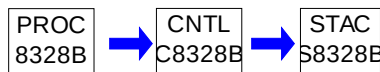
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 8328B

Source Name: ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY

Source Capacity/Throughput:

Conditions for this source occur in the following groups: LONG DURATION STORAGE BATTERY PROCESSES

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: ENDO GAS/HEAT TREATING PROCESS

Group Description: Conditions for Endothermic Gas Generators and Associated Heat Treating Furnaces

Sources included in this group

ID	Name
3361	HEAT TREATER FURNACE
3826	HEAT TREATER FURNACE
8327	ENDOTHERMIC GENERATORS(2)

I. RESTRICTIONS.**Fuel Restriction(s).**

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Only natural gas shall be used as a fuel source for the source(s)

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The company shall perform an initial stack test within 180 days of issuance of Plan Approval 24-00016K to determine the destruction efficiency of EACH heat treating furnace (Sources 3361, 3826) by measuring inlet and outlet Carbon Monoxide (CO) concentration of each heat treating furnace.

(1) The stack test shall be performed while the aforementioned source(s) are operating within 90% of the maximum routine operating capacity.

(2) The stack test shall be performed while endo gas is being sent to the heat treating furnace being tested.

(3) The company may apply to the Department for extension of the time to conduct the initial stack test if there is cause.

(b) In addition to the stack testing required by this condition, the facility shall conduct SUBSEQUENT PERFORMANCE TESTING within six (6) to twelve (12) months prior to the expiration date of the operating permit, for Carbon Monoxide (CO) using the methods above and in accordance with the provisions of Chapter 139 (relating to sampling and testing).

(1) The stack test shall be performed while the aforementioned source(s) are operating within 90% of the maximum routine operating capacity.

(2) The stack test shall be performed while endo gas is being sent to the heat treating furnace being tested.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[The Source Testing Manual is PA DEP document number 274-0300-002. A copy can be obtained at this web address: <https://greenport.pa.gov/elibrary/GetFolder?FolderID=4575>]

(a) At least 90 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval in accordance with paragraphs (b), (c), and (i) of this condition. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(b) When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter, submitted at least 90 calendar days prior to commencing an emissions testing program, referencing the previously approved procedural protocol is sufficient if the letter is approved by the Department. The letter shall be submitted as required in paragraph (a).

If modifications are made to the process(es) or if a different stack testing company is used or if an applicable section of the stack test manual has been revised since the previous approval, a new protocol is required to be submitted for approval.

**SECTION E. Source Group Plan Approval Restrictions.**

(c) Pursuant to 25 Pa. Code §§ 139.53(a)(1) and 139.53(a)(3):

(1) Submittals pertaining to emissions testing, specifically test protocols and test reports, shall be made by emailing electronic copies submissions to both PSIMS Administration in Central Office and to the Regional Office AQ Program at the following e-mail addresses:

CENTRAL OFFICE: RA-EPstacktesting@pa.gov

NORTHWEST REGIONAL OFFICE: RA-EPNWstacktesting@pa.gov

(2) The notifications of emissions testing dates shall be submitted directly to:

(i) the DEP's OnBase electronic upload website where it will be forwarded to the Northwest Regional Office Air Quality Inspector. Upload the written notification at this web address: <https://www.pa.gov/agencies/dep/data-and-tools/onbaseelectronic-forms-upload.html>

(ii) IF the Protocol Reviewer at Central Office Division of Source Testing requested a copy of the notification, then submit a copy to the email address provided by the protocol reviewer.

(d) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Department in accordance with paragraph (c) of this condition. Notification shall not be made and testing shall not proceed without prior receipt of a Protocol Acceptance letter from the Department.

(e) If the proposed testing did not occur per the required notification in paragraph (d) above, an electronic notification shall be sent within 15 calendar days after the expected completion date of the onsite testing to the Department, in accordance with paragraph (c) of this condition, indicating why the proposed completion date of the on-site testing was not adhered to.

(f) A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the onsite testing portion of an emission test program.

(g) A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

(1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.

(2) Permit number(s) and condition(s) which are the basis for the evaluation.

(3) Summary of results with respect to each applicable permit condition.

(4) Statement of compliance or non-compliance with each applicable permit condition.

(h) Pursuant to 25 Pa. Code § 139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(i) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(j) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

(k) Actions Related to Noncompliance Demonstrated by a Stack Test:

(1) If the results of a stack test, performed as required by this permit, exceed the level specified in any condition of this

**SECTION E. Source Group Plan Approval Restrictions.**

approval, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permittee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permittee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(2) If the results of the required stack test exceed any limit defined in this permit, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the permit, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) All recordkeeping shall commence upon startup of the source
- (b) The company shall maintain a log of all preventative maintenance inspections of the source(s). The inspection logs, at a minimum, shall contain the dates of the inspections, the name of the person performing the inspection, any mechanical repairs and/or adjustments, any potential problems or defects that were encountered, and the steps taken to correct them
- (c) All records shall be kept onsite for a period of five (5) years and shall be made available to the Department upon request.
- (d) The company shall maintain records of the following operational parameters: (these records may be done with strip charts recorders, data acquisition systems, or manual log entries)
 - (1) Natural Gas entering the endothermic gas generators (Daily)
 - (2) Amount of Endothermic Gas produced by endothermic generators (Daily)
 - (3) Which furnace(s) is being operated to consume the produced endothermic gas (Daily)
 - (4) The amount of gas consumed by the furnace(s) (Daily)
 - (5) Hours that each Endothermic Gas Generator operated (Daily)
 - (6) Temperature of each furnace during operation (Daily)
- (e) The company shall maintain weekly inspection records.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) All endothermic gas produced by the endothermic gas generators (Source 8327) shall be consumed by the heat treating furnaces (Sources 3361, and 3826).
- (b) Only ONE endothermic gas generator shall operate at a time. The endothermic gas generator not in operation shall be idled.
- (c) Each endothermic gas generator shall only operate for a total of 4,380 hours per year for a combined total of 8,760 hours

**SECTION E. Source Group Plan Approval Restrictions.**

per year between the two endothermic gas generators

(d) Sources 3361, and 3826 shall maintain a Carbon Monoxide (CO) destruction efficiency of 90%.

(e) The source(s) shall be operated and maintained as recommended by the manufacturer and in accordance with good engineering practices.

(f) The permittee shall perform a weekly operational inspection of the source(s). This shall include visible, audible, and olfactory observations for malfunctions, leaks, missing components, etc.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The bypass stack to atmosphere shall be permanently removed from the endothermic gas generators (Source 8327) by May 1st, 2026.

[Plan Approval 24-00016K]

(b) The remaining stack (S8327) for the endo gas generators shall only be used for endo gas generator burner emissions. No PRODUCED Endo Gas shall be sent through S8327

(c) Conditions (c) through (l) are part of the excess endo gas reduction compliance schedule.

(d) The company shall submit monthly reports of the status of Source 3826 beginning five days after issuance of the plan approval and ending after the initial stack test is performed and demonstrates compliance. The reports shall include the progress of repairs, and the progress of using reduced endo gas in the source.

(e) The company shall submit proof of solicited quotes received regarding the new temperature control package for Source 3361 by April 10th, 2026.

(f) The company shall submit monthly reports of the status of Source 3361 beginning five days after issuance of the plan approval and ending after the initial stack testing is performed and demonstrates compliance. The reports shall include the progress of repairs, and the progress of using reduced endo gas in the source.

(g) The company shall submit proof of installation of the temperature control unit for Source 3361 by August 21st, 2026.

(h) If the company decides not to fix the furnace a maintenance/reactivation plan or a letter stating that Source 3361 is being removed shall be submitted to the Department of Environmental Protection.

(i) The company shall submit the operating procedures for the lowered volume of generated endogas for Source 8327 within five business days from the issuance of the plan approval. These operating procedures shall be kept on site at all times.

(j) The company shall submit any modification to the operating procedures for the lower volume of generated endogas for Source 8327 by April 21st, 2026. Any changes to the operating procedures shall be kept on site at all times.

(k) Any information required to be submitted as part of this plan approval shall be submitted to the Public Upload with Payment (PUP) system using the link below.

<https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/ValidatePublicSubmission>

(l) Issuance of an Operating Permit is contingent upon satisfactory compliance with the plan approval conditions, upon the source(s) being fixed and maintained, and upon satisfactory demonstration that the emissions from the source will not be in violation of applicable Rules and Regulations of the Department.

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: LONG DURATION STORAGE BATTERY PROCESSES

Group Description: Electric Furnace with associated thermal oxidizer

Sources included in this group

ID	Name
8328A	ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY
8328B	ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY
C8328A	THERMAL OXIDIZER
C8328E	THERMAL OXIDIZER

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §123.13]****Processes**

(a) No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

[Plan Approval 24-00016K]

002 [25 Pa. Code §123.21]**General**

(a) No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

Fuel Restriction(s).**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) Only natural gas shall be used as a fuel source for the electric furnace(s) flame screen(s) and control device(s).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) All recordkeeping shall commence upon startup of the source

(b) The company shall maintain a log of all preventative maintenance inspections of the source(s) and control device(s). The inspection logs, at a minimum, shall contain the dates of the inspections, the name of the person performing the inspection, any mechanical repairs and/or adjustments, any potential problems or defects that were encountered, and the steps taken to correct them.

(c) All records shall be kept onsite for a period of five (5) years and shall be made available to the Department upon request.

(d) The company shall maintain weekly inspection records.

**SECTION E. Source Group Plan Approval Restrictions.****V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The control device(s) and source(s) shall be operated and maintained as recommended by the manufacturer and in accordance with good engineering practices.

[Plan Approval 24-00016K]

(b) The control device(s) shall be operated at all times that the source(s) are being operated

[Plan Approval 24-00016K]

(c) The permittee shall perform a weekly operational inspection of the source(s) and control device(s). This shall include visible, audible, and olfactory observations for malfunctions, leaks, missing components, etc.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description	
8328A	ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY	
Emission Limit		Pollutant
0.040	gr/DRY FT3	Particulate
500.000	PPMV	SOX
8328B	ELECTRIC FURNACE FOR LONG DURATION STORAGE BATTERY	
Emission Limit		Pollutant
0.040	gr/DRY FT3	Particulate
500.000	PPMV	SOX
C8328A	THERMAL OXIDIZER	
Emission Limit		Pollutant
0.040	gr/DRY FT3	Particulate
500.000	PPMV	SOX
C8328B	THERMAL OXIDIZER	
Emission Limit		Pollutant
0.040	gr/DRY FT3	Particulate
500.000	PPMV	SOX

Site Emission Restriction Summary

Emission Limit	Pollutant
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**SECTION H. Miscellaneous.**

(a) The mapping for Source 8327, 3361, and 3826 are incorrect. The system will not allow a process to flow into another process. The endo gas generators release the produced endo gas into each heat treater furnace individually. Each heat treater furnace consumes natural gas and endo gas then exhausts to its own stack. The bypass stack for the endo gas generators shall be removed which means there is no individual stack to atmosphere for the PRODUCED Endo Gas. Stack 8327 is only for the endo gas generator BURNER emissions.



***** End of Report *****
