



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: May 13, 2025

Effective Date: May 13, 2025

Expiration Date: November 30, 2026

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. 07-03073A

Federal Tax Id - Plant Code: 93-3923225-1

Owner Information

Name: ACTIVATED CARBON INNOVATIONS PA LLC
Mailing Address: 135 US HIGHWAY 202 206
SUITE 14
BEDMINSTER, NJ 07921-2608

Plant Information

Plant: ACTIVATED CARBON INNOVATIONS PA LLC/HOLLIDAYSBURG
Location: 07 Blair County 07802 Hollidaysburg Borough
SIC Code: 2899 Manufacturing - Chemical Preparations, Nec

Responsible Official

Name: FANLI MENG
Title: OPERATIONS MANAGER
Phone: (908) 272 - 6401 Email: fanli@chinooksciences.com

Plan Approval Contact Person

Name: HAITHAM SAFFAR
Title: SITE MANAGER
Phone: (908) 272 - 6401 Email:

[Signature] _____
WILLIAMR. WEAVER, SOUTHCENTRAL REGION AIR PROGRAM MANAGER



Plan Approval Description

This plan approval approves the construction and temporary operation of an activated carbon (AC) facility. The main of the facility is a batch pyrolysis process. Feedstock will include liquid and vapor spent AC or virgin AC. Spent AC will be reactivated. Virgin AC will either be chemically upgraded, or acid washed prior to drying.

Sources and control equipment associated with the facility are as follows:

- One (1) RODECS Unit to process AC (batch process). Operates in one of four operating scenarios depending upon feedstock. Associated processes include bin tipping to remove the material after each batch, followed by screening and bagging of finished product.
- One (1) Thermal Oxidizer with 30 MMBtu/hr natural gas burner. Oxidizer is inherent part of the RODECS system as it supplies heat for the batch process via indirect heat transfer while also providing pollutant control.
- One (1) Dry Scrubber for the control of acid gas emissions. Achieved via sorbent injection with a maximum injection rate of 36 lbs/hr.
- One (1) Catalytic Candle Filter for the control of NO_x and PM emissions, including ammonia injection. Candles will function both as PM filter media and NO_x reduction catalyst media.
- One (1) Dust-Hog Cartridge Filter to control PM emissions from bin tipping.
- One (1) Nederman Bag Filter to control PM emissions from screening and bagging.



SECTION A. Table of Contents

Section A. Facility/Source Identification

Table of Contents
Plan Approval Inventory List

Section B. General Plan Approval Requirements

- #001 Definitions
- #002 Future Adoption of Requirements
- #003 Plan Approval Temporary Operation
- #004 Content of Applications
- #005 Public Records and Confidential Information
- #006 Plan Approval terms and conditions.
- #007 Transfer of Plan Approvals
- #008 Inspection and Entry
- #009 Plan Approval Changes for Cause
- #010 Circumvention
- #011 Submissions
- #012 Risk Management
- #013 Compliance Requirement

Section C. Site Level Plan Approval Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

Section D. Source Level Plan Approval Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements
- D-VI: Work Practice Standards
- D-VII: Additional Requirements

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

Section E. Source Group Restrictions

- E-I: Restrictions
- E-II: Testing Requirements
- E-III: Monitoring Requirements
- E-IV: Recordkeeping Requirements
- E-V: Reporting Requirements
- E-VI: Work Practice Standards
- E-VII: Additional Requirements

Section F. Alternative Operating Scenario(s)

- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements



SECTION A. Table of Contents

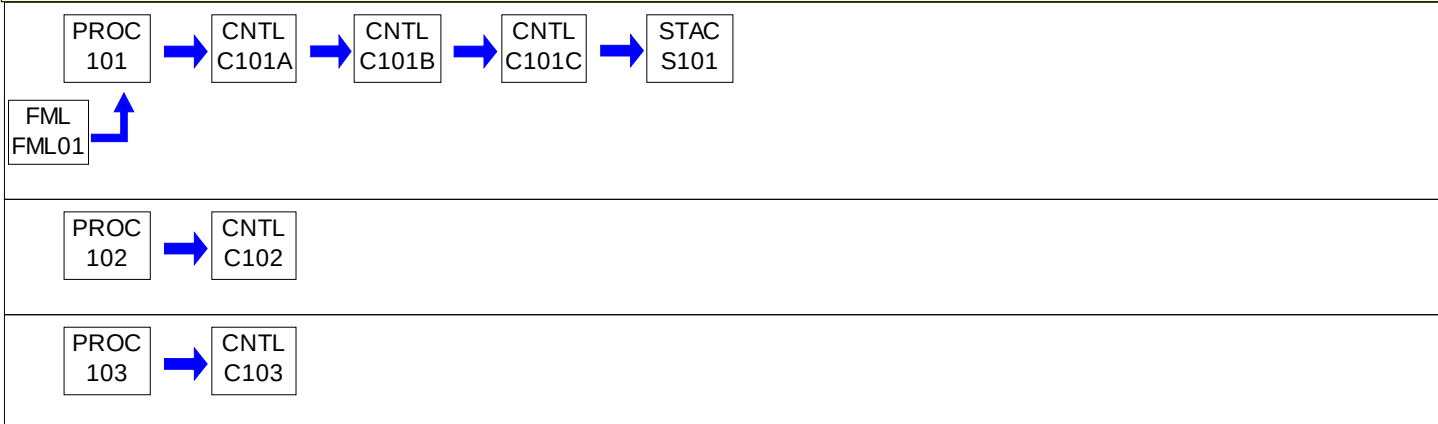
F-IV: Recordkeeping Requirements
F-V: Reporting Requirements
F-VI: Work Practice Standards
F-VII: Additional Requirements

Section G. Emission Restriction Summary

Section H. Miscellaneous

**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	RODECS	10,670.000 Lbs/HR	SPENT/MRGIN AC
102	BIN TIPPING		
103	SCREENING & BAGGING		
FML01	NATURAL GAS PIPELINE		
S101	RODECS 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 § 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.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

No person shall permit the emission into the outdoor atmosphere of any fugitive air contaminant from a source other than the following:

- (a) Construction or demolition of buildings or structures.
- (b) Grading, paving and maintenance of roads and streets.
- (c) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (d) Clearing of land.
- (e) Stockpiling of materials.
- (f) Sources and classes of sources other than those identified above, for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - 1) the emissions are of minor significance with respect to causing air pollution;
 - 2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air standard.

002 [25 Pa. Code §123.2]**Fugitive particulate matter**

No person shall permit the emission of particulate matter into the outdoor atmosphere from a source specified in Site Level Requirements, Condition #001 if the emissions are visible at the point the emissions pass outside the person's property.

003 [25 Pa. Code §123.31]**Limitations**

No person shall permit the emission into the outdoor atmosphere of malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

004 [25 Pa. Code §123.41]**Limitations**

The permittee may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60 % at any time.

005 [25 Pa. Code §123.42]**Exceptions**

The emission limitations of Section 123.41 shall not apply when:

- (1) The presence of uncombined water is the only reason for failure of the emission to meet the limitation;
- (2) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions;
- (3) The emission results from sources specified in Site Level Requirements, Condition #001 (relating to prohibition of certain fugitive emissions).

**SECTION C. Site Level Plan Approval Requirements****# 006 [25 Pa. Code §129.14]****Open burning operations**

(a) No person shall conduct the open burning of materials in such a manner that:

(1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.

(2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.

(3) The emissions interfere with the reasonable enjoyment of life and property.

(4) The emissions cause damage to vegetation or property.

(5) The emissions are or may be deleterious to human or animal health.

(b) The requirements of Section (a), above, do not apply when the open burning operations result from:

(1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

(2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

(3) A fire set for the prevention and control of disease or pests, when approved by the Department.

(4) A fire set solely for recreational or ceremonial purposes.

(5) A fire set solely for cooking food.

(c) This permit does not constitute authorization to burn solid waste pursuant to Section 610 (3) of the Solid Waste Management Act, 35 P.S. Section 6018.610 (3), or any other provision of the Solid Waste Management Act.

II. TESTING REQUIREMENTS.**# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Department reserves the right to require exhaust stack testing of the sources referenced in this permit as necessary during the permit term to verify emissions for purposes including emission fees, malfunctions or permit condition violations.

008 [25 Pa. Code §139.1]**Sampling facilities.**

Upon the request of the Department, the person responsible for a source shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on the source. The Department will set forth, in the request, the time period within which the facilities shall be provided, as well as the specifications for the facilities.

III. MONITORING REQUIREMENTS.**# 009 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions (referenced in Section C, Conditions 004, 005 and 010) may be measured using either of the following:

(1) A device approved by the Department and maintained to provide accurate opacity measurements.

(2) Observers, trained and certified in EPA Method 9, to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

**SECTION C. Site Level Plan Approval Requirements****# 010 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall conduct a weekly inspection around the plant periphery during daylight hours when the plant is in production to detect visible emissions, fugitive visible emissions leaving the premises and malodorous air emissions as follows:

- (a) Visible emissions in excess of the limits stated in Section C, Condition #004. Visible emissions may be measured according to the methods specified in Section C, Condition #011, or alternatively, plant personnel who observe such emissions may report the incidence of visible emissions to the Department within two hours of each incident and make arrangements for a certified observer to verify the visible emissions.
- (b) The presence of fugitive visible emissions beyond the plant boundaries as stated in Section C, condition #002.
- (c) The presence of malodorous air emissions beyond the plant boundaries as stated in Section C, Condition #003.

IV. RECORDKEEPING REQUIREMENTS.**# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall maintain records of each weekly inspection conducted in accordance with Section C, Condition 012. At a minimum, these records shall include the following information:

- (1) The name of the company representative conducting each inspection.
- (2) The date and time of each inspection.
- (3) The wind direction during each inspection.
- (4) A description of the emissions and/or malodors observed and the actions taken to mitigate them.

The permittee shall maintain these records for a minimum of five years and shall make them available to Department representatives upon request.

V. REPORTING REQUIREMENTS.**# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall submit semiannual reports to the Department regarding the project that is the subject of this plan approval. The reports shall be due on January 31 and July 31 of each year. The permittee shall continue submitting these reports until either:

- (1) the first plan approval extension application for the project has been submitted; or
 - (2) the operating permit administrative amendment application has been submitted for the project; or
 - (3) an operating permit initial or renewal application addressing the inclusion of this plan approval, has been submitted for the facility.
- (b) The semiannual reports shall contain the following:
- (1) a brief summary of the status of the project, including any key construction milestones during the relevant semiannual period.
 - (2) a statement of whether the equipment that is the subject of the plan approval has begun operating for any purpose, and what was the date that such operation began.
 - (3) a statement of whether a plan approval extension is expected to be needed during the upcoming semiannual period,

**SECTION C. Site Level Plan Approval Requirements**

and if so, when the permittee anticipates submitting the application for such an extension.

(c) The semiannual reports shall be sent to: Air Quality Program Manager, Department of Environmental Protection, Southcentral Regional Office, 909 Elmerton Avenue, Harrisburg, PA 17110-8200.

(d) Within 60 days of the Department's written request to do so, the permittee shall submit either:

(1) an initial state-only or Title V operating permit application for this facility, or

(2) an administrative amendment application to incorporate the provisions of this plan approval into an existing state-only or Title V operating permit.

013 [25 Pa. Code §127.442]**Reporting requirements.**

The permittee shall report malfunctions to the Department. As defined in 40 CFR Section 60.2 and incorporated by reference in 25 Pa. Code Chapter 122, a malfunction is a sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. Malfunctions shall be reported as follows:

(a) Malfunctions which pose an imminent danger to public health, safety, welfare and the environment, shall be immediately reported to the Department by telephone. The telephone report of such malfunctions shall occur no later than two hours after discovery of the incident. Telephone reports can be made to the Air Quality Program at 814-946-7294 during normal business hours, or to the Department's Emergency Hotline at any time. The Emergency Hotline phone number is changed/updated periodically. The current Emergency Hotline phone number can be found at <https://www.dep.pa.gov/About/Regional/SouthcentralRegion/Pages/default.aspx>.

(b) Unless otherwise approved by DEP, all malfunctions shall be reported within five (5) days of malfunction discovery through the Department's Greenport PUP system available through: <https://greenport.pa.gov/ePermitPublicAccess/PublicSubmission/Home>.

VI. WORK PRACTICE REQUIREMENTS.**# 014 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall take all reasonable actions to prevent particulate matter from the sources identified in Section C, Condition #001(a) through (e) from becoming airborne. These actions shall include, but are not limited to, the following:

(1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads or the clearing of land.

(2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

(3) Paving and maintenance of roadways.

(4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

015 [25 Pa. Code §127.444]**Compliance requirements.**

The permittee shall operate and maintain the emission sources and air cleaning devices referenced in this permit in accordance with the manufacturer's general recommendations and good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.**# 016 [25 Pa. Code §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the act.

**SECTION C. Site Level Plan Approval Requirements****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.

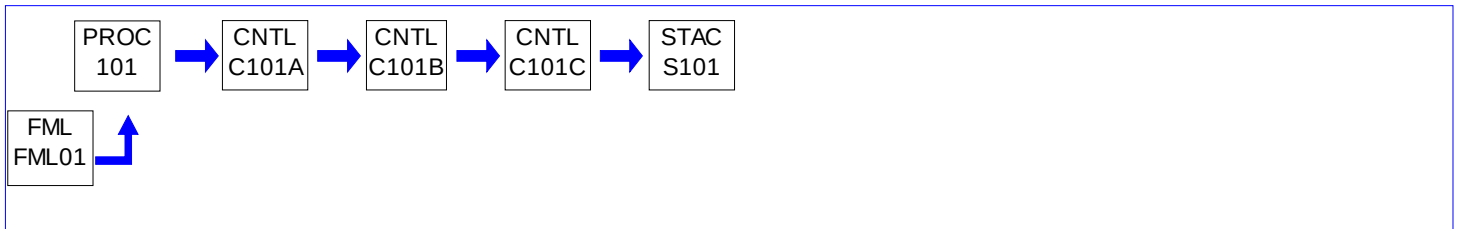
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 101

Source Name: RODECS

Source Capacity/Throughput: 10,670.000 Lbs/HR

SPENT/MARGIN AC

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the Best Available Technology (BAT) requirements of 25 Pa. Code § 127.1, the emissions from the Catalytic Candle Filter (Control ID C101C) exhaust shall not exceed the following:

(1) PM (including phosphorus), CO, VOC, and HCl emissions: 10 milligrams per normal cubic meter (mg/Nm³) (0.0041 grain per dry standard cubic foot).

(2) SO_x (expressed as SO₂): 30 mg/Nm³

[NOTE: This condition ensures compliance with the PM standard in 25 Pa. Code § 123.13(c)(1)(i), and SO₂ standard in 25 Pa. Code § 123.21.]

Control Device Efficiency Restriction(s).**# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Pursuant to the Best Available Technology (BAT) requirements of 25 Pa. Code § 127.1, the Catalytic Candle Filter (Control ID C101C) shall be operated to achieve and maintain a minimum NO_x reduction efficiency of 90% by weight.

II. TESTING REQUIREMENTS.**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) An initial performance stack test program shall be completed for the RODECS (Source ID 101) as follows, unless otherwise approved in writing by DEP:

(1) Processing Liquid Spent AC: A performance test consisting of three (3) 1-hour runs simultaneously measuring the inlet and outlet of the Thermal Oxidizer (Control ID C101A), Dry Scrubber (Control ID C101B), and Catalytic Candle Filter (Control ID C101C), shall be conducted while the RODECS is processing liquid spent activated carbon (AC) for the following pollutants:

(i) At the inlet and outlet of the Thermal Oxidizer (Control ID C101A):

(A) Carbon Monoxide

(B) Volatile Organic Compounds

(ii) At the inlet and outlet of the Dry Scrubber (Control ID C101B):

(A) Sulfur Oxides

(iii) At the inlet and outlet of the Catalytic Candle Filter (Control ID C101C):

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

- (A) Total Particulate Matter (including condensable PM)
- (B) Nitrogen Oxides

(2) Processing Vapor Spent AC: A performance test consisting of three (3) 1-hour runs simultaneously measuring the inlet and outlet of the Thermal Oxidizer (Control ID C101A), Dry Scrubber (Control ID C101B), and Catalytic Candle Filter (Control ID C101C), shall be conducted while the RODECS is processing vapor spent AC for the following pollutants:

- (i) At the inlet and outlet of the Thermal Oxidizer (Control ID C101A):

- (A) Carbon Monoxide
- (B) Volatile Organic Compounds

- (ii) At the inlet and outlet of the Dry Scrubber (Control ID C101B):

- (A) Sulfur Oxides
- (B) Hydrochloric Acid

- (iii) At the inlet and outlet of the Catalytic Candle Filter (Control ID C101C):

- (A) Total Particulate Matter (including condensable PM)
- (B) Nitrogen Oxides

(3) Processing Acid Washed AC: A performance test consisting of three (3) 1-hour runs simultaneously measuring the pre-control emissions at inlet of the Thermal Oxidizer (Control ID C101A), and emissions to atmosphere at the outlet of the Catalytic Candle Filter (Control ID C101C), shall be conducted while the RODECS is processing acid washed AC for the following pollutants:

- (i) Total Particulate Matter (including condensable PM)
- (ii) Carbon Monoxide
- (iii) Volatile Organic Compounds
- (iv) Nitrogen Oxides
- (v) Hydrochloric Acid

(4) Processing Chemically Upgraded AC: A performance test consisting of three (3) 1-hour runs simultaneously measuring the pre-control emissions at inlet of the Thermal Oxidizer (Control ID C101A), and emissions to atmosphere at the outlet of the Catalytic Candle Filter (Control ID C101C), shall be conducted while the RODECS is processing chemically upgraded AC for the following pollutants:

- (i) Total Particulate Matter (including condensable PM)
- (ii) Carbon Monoxide
- (iii) Volatile Organic Compounds
- (iv) Nitrogen Oxides

(5) The tests described in paragraphs (1) through (4) shall also be conducted to measure the Nitrogen Oxide reduction efficiency of the Catalytic Candle Filter (Control ID C101C).

(b) The tests described in paragraphs (a)(1) through (a)(5) shall be performed while the source is operated at the maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department, for each operating scenario tested.

(c) The initial performance tests shall be conducted with a minimum Thermal Oxidizer (Control ID C101A) combustion chamber temperature of 1,562 degrees Fahrenheit. The permittee may elect to conduct subsequent 3-run performance tests at lower temperatures if accounted for in the approved test protocol.

(d) Results shall be measured and reported as mass emission rates in terms of pounds per hour (lbs/hr), and concentrations in terms of milligrams per normal cubic meter (mg/Nm³).

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

(e) At a minimum, the following process parameters shall be monitored during the performance test:

- (1) Mass process rate in terms of tons per hour (tph).
- (2) Sorbent injection rate in terms of pounds per hour (lbs/hr).
- (3) Pressure differentials across the Dry Scrubber (Control C101B) and Catalytic Candle Filter (Control ID C104C).
- (4) Aqueous reagent injection rate in terms of gallons per hour (gals/hr) and concentration in terms of percent by weight.
- (5) Ammonia slip at the outlet of the Catalytic Candle Filter (Control ID C101C) in terms of parts per million, by volume, dry basis (ppmvd).

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Unless otherwise approved in writing by DEP, the permittee shall do the following:

(1) For the initial performance test of the RODECS (Source ID 101), submit to DEP a test protocol for review and approval within 90 days of issuance of this permit, and not conduct the test that is the subject of the protocol until the protocol has been approved by DEP.

(2) If DEP finds deficiencies in the protocol, the permittee shall provide a response to DEP addressing the deficiencies within 30 days of being notified of the deficiencies.

(3) Complete the performance test within 120 days of DEP's approval of the test protocol.

(b) Pursuant to 25 Pa. Code §139.3 at least 15 calendar days prior to commencing an emissions testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(c) Pursuant to 25 Pa. Code §139.53(a)(3) within 15 calendar days after completion of the on-site testing portion of an emission testing program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.

(d) Pursuant to 40 CFR §60.8(a), 40 CFR §61.13(f) and 40 CFR §63.7(g) a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program. For those tests being conducted pursuant to 40 CFR Part 61, a complete test report shall be submitted within 31 days after completion of the test.

(e) Pursuant to 25 Pa. Code §139.53(b) 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 noncompliance 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.

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

(g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the

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

Department of Environmental Protection.

(h) Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS*Online available through <https://www.depgreenport.state.pa.us/ecommm/Login.jsp> when it becomes available. If internet submittal cannot be accomplished, one digital copy of each submittal shall be made to each of the following:

Regional Office:
Digital copy: RA-epscstacktesting@pa.gov

Bureau of Air Quality:
Digital copy: RA-epstacktesting@pa.gov

(i) 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.

005 [25 Pa. Code §139.11]**General requirements.**

(1) Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(2) The Department will consider for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum all of the following:

(i) A thorough source description, including a description of any air cleaning devices and the flue.

(ii) Process conditions, for example, the charge rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.

(iii) The location of the sampling ports.

(iv) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO₂, O₂ and N₂), static and barometric pressures.

(v) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.

(vi) Laboratory procedures and results.

(vii) Calculated results.

III. MONITORING REQUIREMENTS.**# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The Thermal Oxidizer (Control ID C101A) shall be equipped with instrumentation to continuously measure and display the combustion chamber temperature.

(b) The Dry Scrubber (Control ID C101B) shall be equipped with instrumentation to continuously measure and display differential pressure and sorbent injection rate (in terms of lbs/hr).

(c) The Catalytic Candle Filter (Control ID C101C) shall be equipped with instrumentation to continuously measure and display:

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

- (1) Differential pressure.
- (2) Reagent injection rate (in terms of gals/hr).
- (3) Ammonia slip (in terms of ppmvd)

IV. RECORDKEEPING REQUIREMENTS.**# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The continuous monitoring instrumentation utilized to measure and display the Thermal Oxidizer (Control ID C101A) combustion chamber temperature shall be recorded digitally every 5 minutes while the Thermal Oxidizer is operating.

(1) During periods of instrumentation malfunction or its maintenance/repair, the permittee shall:

(i) Notify DEP in accordance with Section C, Condition #006 of this permit, except that the report shall be submitted to DEP within 24 hours of discovery.

(ii) Manually record the Thermal Oxidizer's combustion chamber temperature at a minimum frequency of once every one (1) hour of operation.

(b) The permittee shall monitor and record the sorbent and reagent injection rates. The injection rates shall be recorded a minimum of once per week while the RODECS (Source ID 101), Dry Scrubber (Control ID C101B), and Catalytic Candle Filter (Control ID C101C) are operating.

(c) The permittee shall monitor and record pressure differential across the Dry Scrubber (Control ID C101B) and Catalytic Candle Filter (Control ID C101C). The pressure differential shall be recorded a minimum of once per week while the RODECS (Source ID 101), Dry Scrubber (Control ID C101B), and Catalytic Candle Filter (Control ID C101C) are operating.

(d) All records shall be maintained on-site for a period of five (5) years and be made available to DEP upon request.

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.**# 008 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Thermal Oxidizer (Control ID C101A) shall be operated to achieve and maintain a minimum combustion chamber temperature of no more than 28 °C (50.4 °F) below the average combustion temperature during the most recent performance test in which compliance with the Carbon Monoxide and Volatile Organic Compound BAT limits were demonstrated.

009 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall operate and maintain the RODECS (Source ID 101) and air pollution control system (Control IDs C101A, C101B, and C101C):

- (a) in such a manner as to not cause air pollution;
- (b) in a manner consistent with good operating and maintenance practices; and
- (c) in accordance with the manufacturer's specifications.

**SECTION D. Source Level Plan Approval Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

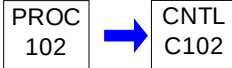
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 102

Source Name: BIN TIPPING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 001

**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).

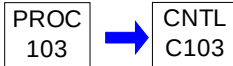
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 103

Source Name: SCREENING & BAGGING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 001

**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: 001

Group Description: Conventional Particulate Filters

Sources included in this group

ID	Name
102	BIN TIPPING
103	SCREENING & BAGGING

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

001 [25 Pa. Code §123.13]

Processes

Particulate matter emissions from the sources in this group shall not exceed 0.04 grain per dry standard cubic foot.

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.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The control devices associated with the sources in this group shall be equipped with instrumentation to continuously measure and display differential pressure.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall monitor and record pressure differential across the control devices associated with the sources in this group. The pressure differential shall be recorded a minimum of once per week while the control device and its associated source is operating.

(b) All records shall be maintained on-site for a period of five (5) years and be made available to DEP upon request.

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.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain on-site a sufficient quantity of spare bags/cartridges for the control devices associated with sources in this group in order to immediately replace any bags/cartridges requiring replacement due to deterioration resulting from routine operation.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall operate and maintain the control devices associated with sources in this group:

(a) in such a manner as to not cause air pollution;

(b) in a manner consistent with good operating and maintenance practices; and

(c) in accordance with the manufacturer's specifications.

**SECTION E. Source Group Plan Approval Restrictions.****# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall operate the control devices associated with sources in this group at all times the associated source is operating.

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.**

No emission restrictions listed in this section of the permit.



SECTION H. Miscellaneous.



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