



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: June 24, 2025

Effective Date: June 24, 2025

Expiration Date: December 24, 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. 23-0038I](#)

Federal Tax Id - Plant Code: 23-7182698-1

Owner Information

Name: DELCORA
Mailing Address: PO BOX 999
100 E 5TH ST
CHESTER, PA 19016-0999

Plant Information

Plant: DELAWARE CNTY REG WADELCORA WESTERN REG TRMT PLT
Location: 23 Delaware County 23001 Chester City
SIC Code: 4952 Trans. & Utilities - Sewerage Systems

Responsible Official

Name: MICHAEL J DISANTIS
Title: DIR OPR MAINT
Phone: (610) 876 - 5523 Ext.264 Email: disantism@delcora.org

Plan Approval Contact Person

Name: IRENE FITZGERALD
Title: ENV PROGRAMS MANAGER
Phone: (610) 876 - 5523 Ext.213 Email: fitzgeraldi@delcora.org

[Signature] _____
JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



Plan Approval Description

This plan approval authorizes construction of an odor scrubber (pack bed tower) to abate malodorous emissions from Pump Station 6 (PS-6).



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

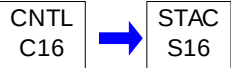
F-IV: Recordkeeping Requirements
F-V: Reporting Requirements
F-VI: Work Practice Standards
F-VII: Additional Requirements

Section G. Emission Restriction Summary

Section H. Miscellaneous

**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
C16	PS-6 SCRUBBER	N/A	WASTEWATER
S16	PS-6 SCRUBBER 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.

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.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall comply with all of the existing requirements of its current Title V Operating Permit, No. 23-00038, unless specifically revised in this plan approval. The provisions in this plan approval shall be construed to supersede any contrary provisions in any previous operating permit.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General 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: C16

Source Name: PS-6 SCRUBBER

Source Capacity/Throughput:

N/A

WASTEWATER

CNTL
C16STAC
S16**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Emissions from this scrubber shall be less than 1.0 ppmv (average of three 1-hour test) hydrogen sulfide (H₂S).

II. TESTING REQUIREMENTS.**# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall perform a stack test using the Department-approved procedures, to show compliance with the emission limits set for the source. The source testing shall be performed within 180 days after completion of construction of the control device, unless extended by DEP. Source testing shall be performed for the following pollutants: H₂S, in parts per million. 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.

(b) The stack test shall, at a minimum, test for H₂S in the inlet to and outlet from the scrubber. Tests shall be conducted in accordance with the provisions of EPA Method 15 or other Department approved methodology and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

(c) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), an electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

(g) The Department reserves the right to require additional testing, including, but not limited to the following:

- (1) concentrations of volatile organic compounds and mercaptans
- (2) removal efficiency of H₂S, volatile organic compounds and mercaptans

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

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

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

Southeast Region
RA-EPSEstacktesting@pa.gov

Central Office
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

1. Test Date(s)
 - a. For protocols, provide the proposed date on which testing will commence or "TBD"
 - b. For reports, provide the first and last day of testing
2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.
3. Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment
4. Testing Requirements (all that apply)
 - a. Plan approval number(s)
 - b. Operating permit number
 - c. Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)
 - d. Special purpose(s) (Consent Order, RFD, RACT, Tier II, etc.)

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

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

- (a) The permittee shall monitor the following operating parameters for this source on a daily basis:
- (1) The pH of the scrubbing solution shall be monitored using an approved continuous pH monitor.
 - (2) The chlorine content of the scrubbing solution shall be monitored using an approved continuous ORP (oxidation reduction potential) monitor.
 - (3) The makeup water flow rate to the scrubber shall be monitored using a flow meter accurate to plus or minus 5% over its operating range.
 - (4) The recirculation water flow rate shall be monitored using a flow meter accurate to plus or minus 5% over its operating range.
 - (5) The pressure drop across the scrubber packing and demister pad.

005 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

- (a) The permittee shall monitor, at least once per day, the H₂S concentration in the scrubber outlet gas stream using a portable or stationary analyzer.

The portable or stationary analyzer readings shall not be relied upon to determine compliance with the H₂S emission limit in the Emission Restriction section of the plan approval. For the purposes of this plan approval, the analyzer readings shall be used to monitor trends in the effluent H₂S concentration. Compliance with the H₂S emission limit shall be determined by stack testing as described in the Testing Requirement section of the plan approval.

- (b) The permittee shall install or maintain the necessary instrumentation to allow the monitoring in part (a) of this condition to be conducted.

**SECTION D. Source Level Plan Approval Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall record the following data for this source on a daily basis so that compliance with the conditions in this operating permit can be determined:

- (1) The pH of the scrubbing solution.
- (2) The oxidation reduction potential of the scrubbing solution.
- (3) The pressure drop across the scrubber packing.
- (4) The pressure drop across the demister pad.
- (5) The recycle water flow rate to the scrubber.
- (6) The makeup water flow rate to the scrubber.

(b) The permittee shall keep a copy of the manufacturer's specification for the installation, maintenance, and operation of the odor scrubber.

(c) The permittee shall record the date, time, and reason the odor scrubber was being bypassed.

(d) The permittee shall keep records for this source for a minimum of five (5) years and shall make them available to the Department upon request.

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

The permittee shall keep records of any maintenance performed on this scrubber system to include a description of the maintenance and the date performed.

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

The permittee shall record the H₂S concentration in the scrubber outlet gas stream on a daily basis.

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

(a) Within 60 days of construction completion, the permittee shall provide detailed Standard Operating Procedures and Preventive Maintenance Schedules for this scrubber to the Department for review and approval.

(b) The Standard Operating Procedures and Preventive Maintenance Schedule shall include, but not be limited to, the following:

- (1) Calibration
 - (i) Name of the instrument being calibrated.
 - (ii) The date that the instrument is being calibrated.
 - (iii) The start time and end time that the instrument is being calibrated.
 - (iv) Indicate the function or parameter that is placed on hold while the instrument is being calibrated.
 - (v) Indicate the operational status of the scrubber during calibration.
- (2) Maintenance
 - (i) Name of the equipment being maintained.
 - (ii) The date that the equipment associated with this scrubber is being maintained.
 - (iii) The start time and end time that the equipment associated with this scrubber is being maintained.
 - (iv) Indicate the operational status of the scrubber during maintenance or if back up equipment is being used to maintain scrubber operation during maintenance.

010 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall provide the Department with a copy of any performance test reports, for H₂S, organic compounds, or odor removal by the scrubber, performed in addition to the testing requirements of this section.

(b) Reports shall contain results of the performance test and any operating data collected during the performance test.

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

(c) The reports shall be submitted to the Department within thirty days of receipt of the test report by the permittee, or within 60 days of the performance test if the test is conducted by the permittee.

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

The permittee shall report all instances of scheduled and unscheduled preventive and corrective maintenance on this scrubber to the Department on at least a quarterly basis.

VI. WORK PRACTICE REQUIREMENTS.**# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall adhere to the following operating parameters for this scrubber:

- (1) The scrubbing solution shall consist of a mixture of plant chlorine and sodium hydroxide or sodium hypochlorite and sodium hydroxide. Alternatives to the above solutions may be used if approved by the Department.
- (2) The pH range of the scrubbing solution shall be between pH of 9 - 12.
- (3) The oxidation reduction potential of the scrubbing solution shall be maintained at a minimum potential of +690 millivolts.
- (4) A minimum recycle flow rate of 160 gallons per minute (GPM) shall be maintained whenever the scrubber is operated.
- (5) The make up flow rate to the scrubber shall be at least is 1.5 gpm.
- (6) The pressure drop across the scrubber packing shall be maintained between the following:
 - (A) 1.7 and 3.0 inches water column (in. w.c.) during summer months (defined as April - October by the permittee).
 - (B) 0.4 and 0.75 in. w.c. during winter months (defined as November - March by the permittee).
- (7) The pressure drop across the demister pad shall not exceed 0.5 in. w.c.

013 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall operate and maintain the scrubber and related instrumentation according to Standard Operating Procedures and Preventive Maintenance Schedules recommended by the manufacturer or developed by the permittee and approved by the Department.

(b) The permittee shall ensure that the scrubber and related instrumentation are operated and maintained in a manner consistent with good operating and maintenance practices, in accordance with good air pollution control practices and in accordance with manufacturer's specifications.

014 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall perform calibrations of instrumentation and/or equipment maintenance on the scrubber using Department approved procedures and schedules.

015 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

- (1) The permittee shall optimize the values of the following operating parameters for the scrubber, based on manufacturer's recommendations.
- (2) If any of the above parameters fall out of the specified ranges, the permittee shall immediately take corrective action to bring the parameter(s) into range. The corrective action and results shall be recorded.

VII. ADDITIONAL REQUIREMENTS.**# 016 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The scrubber is a single-staged packed tower countercurrent flow type scrubber manufactured by ECS Environmental Solutions, Model No. XPac1 60. The rated or nominal flow rate of air into the scrubber: 1) 11,000 acfm during the summer

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

months (April - October); and 2) 5,500 acfm during the winter months (November - March).



SECTION E. Source Group Plan Approval Restrictions.

**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 *****
