



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: January 17, 2025

Effective Date: July 18, 2026

Revision Date: June 30, 2026

Expiration Date: January 18, 2027

Revision Type: Extension

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. 09-0257

Federal Tax Id - Plant Code: 23-6003005-1

Owner Information

Name: QUAKERTOWN BORO BUCKS CNTY

Mailing Address: 35 N THIRD ST
QUAKERTOWN, PA 18951

Plant Information

Plant: QUAKERTOWN BORO WASTEWATER TREATMENT PLT

Location: 09 Bucks County 09940 Richland Township

SIC Code: 4941 Trans. & Utilities - Water Supply

Responsible Official

Name: SCOTT C. MCELREE

Title: BORO MNGR

Phone: (215) 536 - 5001 Ext.119

Email: smcelree@quakertown.org

Plan Approval Contact Person

Name: DAVID ERWIN

Title: WASTEWATER SUPERINTENDENT

Phone: (215) 536 - 5004

Email: derwin@quakertown.org

[Signature] _____

JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



Plan Approval Description

This Plan Approval is for an upgrade to the Quakertown Wastewater Treatment Plant (WWTP), to install a new anaerobic digestion and co-generation process.



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

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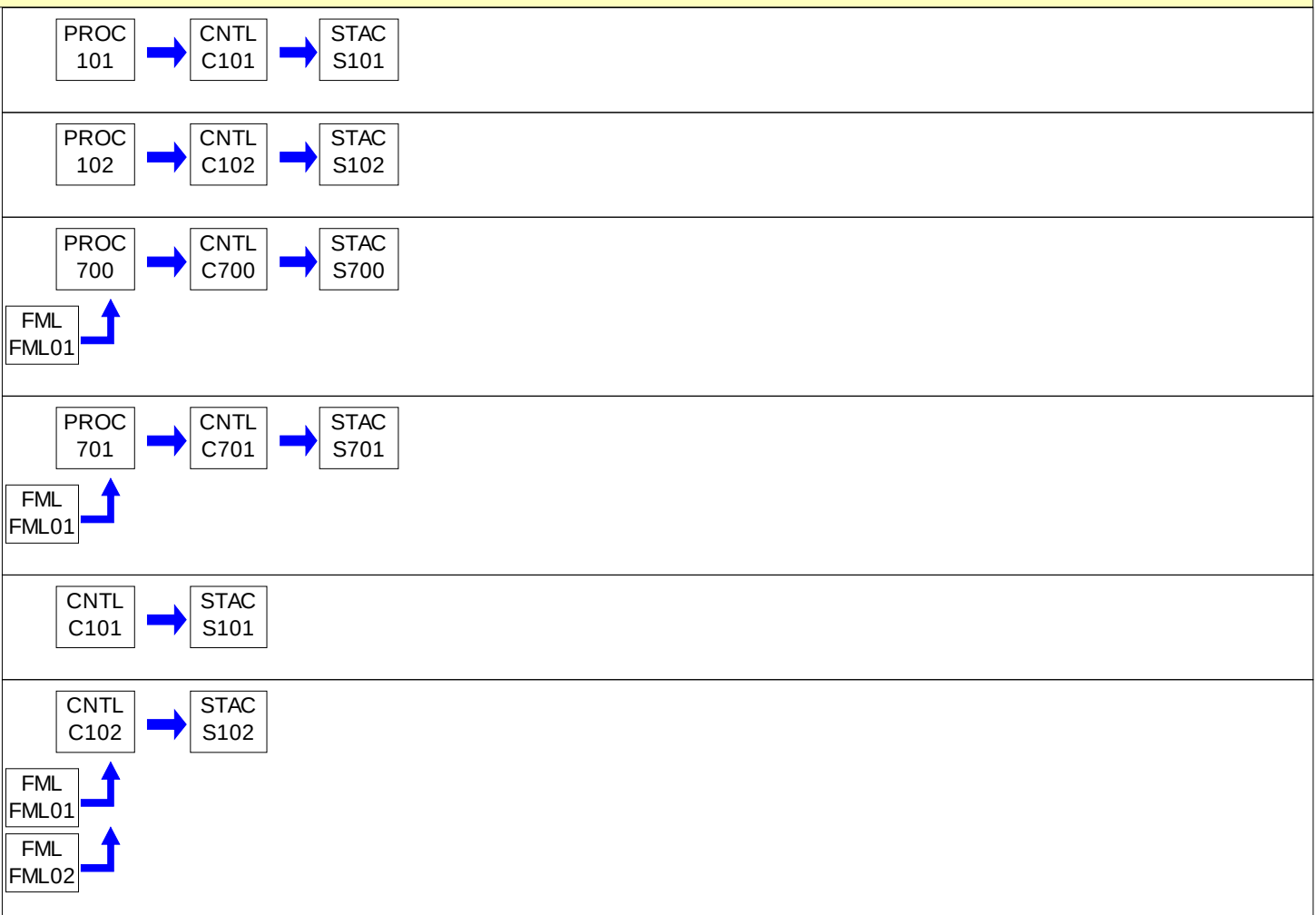
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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	SLURRY BUFFER TANK	N/A	WASTEWATER SLURRY
102	ANAEROBIC DIGESTER TANKS / BIOGAS TRAIN	N/A	ANAEROBIC SLUDGE
700	CHP GENERATOR #01	17.453 MMBTU/HR	
		17.453 MMBTU/HR	Special A
701	CHP GENERATOR #02	17.453 MMBTU/HR	
		17.453 MMBTU/HR	Special A
C101	ODOR CONTROL SYSTEM		
C102	FLARE		
C700	CHP GENERATOR #01 SCR		
C701	CHP GENERATOR #02 SCR		
FML01	BIOGAS		
FML02	PROPANE		
S101	ODOR CONTROL SYSTEM STACK		
S102	FLARE STACK		
S700	CHP GEN #01 SCR STACK		
S701	CHP GEN #02 SCR STACK		

PERMIT MAPS

**PERMIT MAPS**

CNTL C700	➔	STAC S700
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CNTL C701	➔	STAC S701
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**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.****Emission Restriction(s).****# 001 [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. Section 4003).

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

No person may permit the emission into the outdoor atmosphere of 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) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) sources and classes of sources other than those identified in (a)-(f), above, for which the permittee 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; and,
 - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]**Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

004 [25 Pa. Code §123.31]**Limitations**

A person may not permit the emission into the outdoor atmosphere of any 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.

005 [25 Pa. Code §123.41]**Limitations**

A person 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:

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

006 [25 Pa. Code §123.42]**Exceptions**

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in either of the following instances:

- (a) When the presence of uncombined water is the only reason for failure to meet the limitations.

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

(b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

(c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

007 [25 Pa. Code §129.14]**Open burning operations**

No person may permit the open burning of material in the Southeast Air Basin except where the open burning operations result from:

(a) 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;

(b) any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department;

(c) a fire set for the prevention and control of disease or pests, when approved by the Department;

(d) a fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation;

(e) a fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure;

(f) a fire set solely for recreational or ceremonial purposes; or

(g) a fire set solely for cooking food.

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

(a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139 and the most current version of the DEP Source Testing Manual, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

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

Visible emissions may be measured using either of the following:

(a) a device approved by the Department and maintained to provide accurate opacity measurements; or

(b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

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

(a) The permittee shall monitor the facility, once per operating day, for the following:

(1) odors which may be objectionable (as per 25 Pa. Code §123.31);

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

- (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
- (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:

- (1) be investigated;
- (2) be reported to the facility management, or individual(s) designated by the permittee;
- (3) have appropriate corrective action taken (for emissions that originate on-site); and
- (4) be recorded in a permanent written log.

(c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.

(d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.

(e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification (if applicable), complaints, monitoring results, and/or Department findings.

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

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (a) date, time, and location of the incident(s);
- (b) the cause of the event; and
- (c) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.

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

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a) emissions increase of minor significance without notification to the Department.
- (b) de minimis increases with notification to the Department, via letter.
- (c) increases resulting from a Request for Determination (RFD) to the Department.
- (d) increases resulting from the issuance of a plan approval and subsequent operating permit.

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

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any 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. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of

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

excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

- (1) Name, permit or authorization number, and location of the facility;
- (2) Nature and cause of the malfunction, emergency or incident;
- (3) Date and time when the malfunction, emergency or incident was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Part 68.]

(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 threshold quantity at a facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i) Three years after the date on which a regulated substance is first listed under 40 CFR § 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 EPA 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 permit 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

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release, shall be considered a single process.

(d) If this facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that this facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If this facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When this facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if the permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

015 [25 Pa. Code §135.3]**Reporting**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

(a) If the permittee has been previously advised by the Department to submit a source report, the permittee shall submit by March 1, of each year, a source report for the preceding calendar year. The report shall include information from all previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported, including those sources listed in the Miscellaneous Section of this permit.

(b) The permittee may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.**# 016 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified 25 Pa. Code § 123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following

(a) use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land;

(b) application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts;

(c) paving and maintenance of roadways; and

(d) 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 by other means.

017 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall ensure that the source(s) and air pollution control device(s), listed in this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

018 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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

The permittee shall immediately, upon discovery, implement measures which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

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**

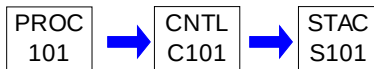
Source ID: 101

Source Name: SLURRY BUFFER TANK

Source Capacity/Throughput:

N/A

WASTEWATER SLURRY

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

(a) Emissions of hydrogen sulfide (H₂S) at the outlet of the Odor Control System (Source ID C101) shall not exceed 0.5 ppmv.

(b) Emissions of volatile organic compounds (VOC) at the outlet of the Odor Control System shall not exceed 5 ppmv, as isopentane.

[DEP retains the right to revisit the referenced compound, isopentane, under Condition #001(b) after DEP's evaluation of the portable analyzer.]

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

(a) The permittee shall perform sampling from the outlet of the Odor Control System (Source ID C101) on a quarterly basis for the analysis of the H₂S concentration in ppmv.

(b) Sampling and analysis shall be first performed within the first 30 days of startup of the Slurry Buffer Tank and Odor Control System.

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

(a) Using a portable analyzer approved by the Department, the permittee shall take VOC readings from the outlet of the Odor Control System (Source ID C101) on a quarterly basis to determine the VOC concentration in ppmv. If the portable analyzer can be calibrated to a specific VOC, the permittee may calibrate the portable analyzer to report results as isopentane.

(b) The first VOC readings shall be performed within the first 30 days of startup of the Slurry Buffer Tank and Odor Control System.

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

The permittee shall monitor on a weekly basis the condensate drain associated with the Odor Control System (Source ID C101) to ensure water build up does not impact operation of the unit.

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

The permittee shall maintain the following records associated with the Odor Control System (Source ID C101) for a minimum of 5 years in a format that is readily available upon request:

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

- (a) H₂S sample results.
- (b) VOC analyzer results.
- (c) Results from the weekly inspections of the condensate drain, including any corrective actions taken.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain records and results of calibrations made to the VOC portable analyzer.

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.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All emissions from the Slurry Buffer Tank shall be vented to the Odor Control System (Source ID C101).

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall calibrate the VOC portable analyzer in accordance with the manufacturer's specifications, at the frequency recommended by the manufacturer.

VII. ADDITIONAL REQUIREMENTS.

009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The Slurry Buffer Tank will store and prepare material as a step before the Anaerobic Digester Tanks (Source 102).
- (b) The odor control system shall be manufactured by Syneco Systems (Peacemaker Converting Scrubber – 4x4 Passive), or equivalent, with a design flow of 200 cfm.

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

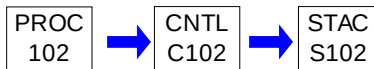
Source ID: 102

Source Name: ANAEROBIC DIGESTER TANKS / BIOGAS TRAIN

Source Capacity/Throughput:

N/A

ANAEROBIC SLUDGE

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

Emissions of filterable particulate matter (PM) from the Flare (Source ID C102) shall not exceed 0.04 grains per dry standard cubic feet.

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

The hydrogen sulfide (H₂S) concentration of the biogas at the inlet of the Flare (Source ID C102) shall not exceed 100 ppmv.

[Compliance with this condition ensures compliance with 25 Pa. Code § 123.21.]

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

Emissions from the Flare (Source ID C102) shall not exceed the following short-term emission rates:

- (a) Nitrogen Oxides (NO_x) – 0.06 lb/MMBtu
- (b) Carbon Monoxide (CO) – 0.20 lb/MMBtu

Throughput Restriction(s).**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The biogas production from the Anaerobic Digester Tanks (Source ID 102) shall not exceed 252.29 MMcf per 12-month rolling period.

Control Device Efficiency Restriction(s).**# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Flare (Source ID C102) shall have a destruction efficiency of 98% for volatile organic compounds (VOC), or a maximum outlet concentration of 11 ppmv (as propane).

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §139.3]****General requirements.**

- (a) Within 180 days of startup of the Anaerobic Digester Tanks (Source ID 102), the permittee shall perform an initial performance test on the Flare (Source ID C102) for NO_x, CO, and VOC. NO_x and CO shall be reported in lbs/MMBtu and lbs/hr. VOC shall be reported in ppmv, as propane, and lbs/hr. Testing for NO_x and CO shall be performed at the same time. Testing for VOC shall include determining VOC emissions prior to the flare and immediately after the flare, to

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

determine the VOC destruction efficiency and the outlet concentration.

(b) Performance testing shall be conducted while the Anaerobic Digesters are producing at or above 90 percent of the maximum biogas production rate. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.

(c) Performance testing shall be performed in accordance with the provisions of Chapter 139 and with all applicable EPA reference method test procedures.

(d) During performance testing, the permittee shall record at the beginning of each test run, and every 15 minutes thereafter, the biogas flow rate, the Btu content of the biogas, and the Flare temperature.

(e) At least ninety (90) days prior to the performance test, the permittee shall submit to the PSIMS Administrator in Central Office 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.

(f) At least thirty (30) days prior to the test, the Regional Air Quality Manager and the PSIMS Administrator in Central Office shall be informed of the date and time of the test.

(g) Within sixty (60) days after completion of the performance test, copies of each performance test report, which includes all operating conditions, shall be submitted to the Regional Air Quality Manager and the PSIMS Administrator in Central Office for approval.

(h) The permittee shall submit an electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) to the AQ Program Manager for the Southeast Regional Office, and the PSIMS Administrator in Central Office. Email addresses are provided below for the PSIMS Administrator and the Southeast Regional Office:

Central Office
RA-EPstacktesting@pa.gov

Southeast Region
RA-EPSEstacktesting@pa.gov

(i) 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.

III. MONITORING REQUIREMENTS.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall monitor daily:

(a) The H₂S concentrations in the biogas:

- (1) Immediately after the Anaerobic Digester Tanks (Source ID 102);
- (2) Immediately after the Lead Lag Ferrosorp Vessels associated with the Biogas Train (Source ID 102); and,
- (3) Immediately prior to the Combined Heat and Power (CHP) Generators (Source IDs 700 and 701).

(b) The methane content of the biogas, whether the biogas is sent to the Flare (Source ID C102) or the CHP Generators.

[Placement of the H₂S monitors shall be such that the permittee can demonstrate compliance with H₂S limits applicable to Source IDs 102, 700, and 701.]

**SECTION D. Source Level Plan Approval Requirements****# 008 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) The permittee shall install flow meters on each line from the Anaerobic Digester Tanks (Source ID 102) to the Flare (Source ID C102), such that the flow rate is monitored daily when biogas is being vented to the Flare.
- (b) A flow meter shall be installed such that the flow of biogas sent to the Combined Heat and Power (CHP) Generators (Source IDs 700 and 701) is monitored daily.

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

The Anaerobic Digester Tanks (Source ID 102) shall be equipped with a pressure gauge to monitor the pressure (in inches water column) inside of the tanks during operations.

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

- (a) The Flare (Source ID C102) shall be equipped with a UV monitor to ensure that there is a flame present when burning biogas.
- (b) The Flare shall be equipped with a thermocouple to measure the flare temperature on a continuous basis.

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

The permittee shall record on a daily basis:

- (a) The H₂S concentrations in the biogas:
- (1) Immediately after the Anaerobic Digester Tanks (Source ID 102);
 - (2) Immediately after the Lead Lag Ferrosorp Vessels associated with the Biogas Train (Source ID 102); and,
 - (3) Immediately prior to the Combined Heat and Power (CHP) Generators (Source IDs 700 and 701).
- (b) The methane content of the biogas, whether it is sent to the CHP Generators or the Flare (Source ID C102).

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

- (a) The permittee shall record flow rates of biogas on a daily basis when directed to the Flare (Source ID C102), along with the associated H₂S concentration.
- (b) The permittee shall record the flow rate of biogas on a daily basis when directed to the Combined Heat and Power (CHP) Generators (Source IDs 700 and 701).
- (c) The permittee shall record the monthly total of biogas generated by the Anaerobic Digester Tanks (Source ID 102) on a monthly basis and as a 12-month rolling sum.

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

The permittee shall record the pressure inside the Anaerobic Digester Tanks (Source ID 102) at a minimum of once per day.

**SECTION D. Source Level Plan Approval Requirements****# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) The permittee shall continuously record, at increments of 1 minute, the temperature of the Flare (Source ID C102), when operating.
- (b) The permittee shall maintain records of all maintenance and tune-ups of the Flare.

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

The permittee shall calculate and record emissions of NO_x, CO, VOC, PM (total), and SO_x on a monthly basis and as a 12-month rolling sum.

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

The Anaerobic Digester Tanks (Source ID 102) shall be operated in such a way that the pressure inside the Anaerobic Digester Tanks does not exceed 13 inches water column.

017 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

- (a) The Flare (Source ID C102) shall be operated with a flame present at all times when biogas is being vented to it. The flare shall be equipped with an automatic shut-off mechanism designed to immediately stop the flow of biogas when a flame-out occurs.
- (b) The Flare (Source ID C102) shall be designed such that there are no visible flames at the top of the Flare stack during operations.
- (c) The Flare shall be operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.

018 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

- (a) The Flare (Source ID C102) shall be operated with a minimum temperature of 1,500 °F.
- (b) The Flare may be operated at a lower temperature if the Flare has been stack tested and it has been demonstrated that the Flare can comply with a destruction efficiency of 98% for volatile organic compounds (VOC), or a maximum outlet concentration of 11 ppm (as propane).

019 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

All biogas from the Anaerobic Digester Tanks (Source ID 102) shall be treated in the Lead Lag Ferrosorp Vessels for the removal of H₂S prior to being sent to the Flare (Source ID C102) or the Combined Heat and Power (CHP) Generators (Source IDs 700 and 701).

**SECTION D. Source Level Plan Approval Requirements****VII. ADDITIONAL REQUIREMENTS.****# 020 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) The two (2) Anaerobic Digester Tanks (Source ID 102) shall be manufactured by CST Industries Inc., designated as T-14A and T-14B, with a combined maximum capacity of 1.1 million gals (Mgal).
- (b) The Flare (Source ID C102) shall be manufactured by Flare Industries, Model FEF-48, rated for 7.0 MMBtu/hr. The Flare shall use propane for the pilot light.

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

Source ID: 700

Source Name: CHP GENERATOR #01

Source Capacity/Throughput:

17.453 MMBTU/HR

17.453 MMBTU/HR

Special A

Conditions for this source occur in the following groups: GROUP 1

**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: 701

Source Name: CHP GENERATOR #02

Source Capacity/Throughput:

17.453 MMBTU/HR

17.453 MMBTU/HR

Special A

Conditions for this source occur in the following groups: GROUP 1

**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: GROUP 1

Group Description: CHP Generators and SCR Conditions

Sources included in this group

ID	Name
700	CHP GENERATOR #01
701	CHP GENERATOR #02
C700	CHP GENERATOR #01 SCR
C701	CHP GENERATOR #02 SCR

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

Emissions of filterable particulate matter (PM) from the CHP Generators (Source IDs 700 and 701), as measured at the outlet of the Selective Catalytic Reduction (SCR) control devices (Source IDs C700 and C701), shall not exceed 0.04 grains per dry standard cubic feet.

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

The hydrogen sulfide (H₂S) concentration of the biogas at the inlet of the CHP Generators (Source IDs 700 and 701) shall not exceed 100 ppmv.

[Compliance with this condition ensures compliance with 25 Pa. Code § 123.21.]

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

(a) Emissions from each CHP Generator (Source IDs 700 and 701), at the outlet of the Selective Catalytic Reduction (SCR) control devices (Source IDs C700 and C701), shall not exceed the following short-term emission rates:

- | | |
|--|------------------|
| (1) Nitrogen Oxides (NO _x) – | 0.20 grams/hp-hr |
| (2) Carbon Monoxide (CO) – | 0.50 grams/hp-hr |
| (3) Volatile Organic Compounds (VOC) – | 0.10 grams/hp-hr |

(b) Ammonia slip from the SCR system shall not exceed 10 ppmv.

[Compliance with the emission limits under paragraph (a), above, ensures compliance with 40 CFR § 60.4233(e).]

II. TESTING REQUIREMENTS.**# 004 [25 Pa. Code §139.3]****General requirements.**

[Additional authority for this condition is derived from 40 CFR §§ 60.4243, 60.4244, and 60.4245.]

(a) Within 180 days of startup of each CHP Generator (Source IDs 700 and 701), the permittee shall perform an initial performance test on the Selective Catalytic Reduction (SCR) control devices (Source IDs C700 and C701) for NO_x, CO, VOC, and ammonia slip. NO_x, CO, and VOC shall be reported in grams/hp-hr. Ammonia slip shall be reported in ppmv. Testing for NO_x, CO, and ammonia slip shall be performed at the same time. Subsequent performance testing shall be performed every 8,760 hours or 3 years, whichever comes first.

(b) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR § 60.8 and under the specific conditions that are specified in Table 2 of 40 CFR Part 60, Subpart JJJJ.

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

- (c) Performance testing shall be performed in accordance with the provisions of Chapter 139 and with all applicable EPA reference method test procedures. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.
- (d) During performance testing, the permittee shall record at the beginning of each test run, and every 15 minutes thereafter, the biogas flow rate and the Btu content of the biogas.
- (e) At least ninety (90) days prior to the performance test, the permittee shall submit to the PSIMS Administrator in Central Office 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.
- (f) At least thirty (30) days prior to the test, the Regional Air Quality Manager and the PSIMS Administrator in Central Office shall be informed of the date and time of the test.
- (g) Within sixty (60) days after completion of the performance test, copies of each performance test report, which includes all operating conditions, shall be submitted to the Regional Air Quality Manager and the PSIMS Administrator in Central Office for approval.
- (h) The permittee shall submit an electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) to the AQ Program Manager for the Southeast Regional Office, and the PSIMS Administrator in Central Office. Email addresses are provided below for the PSIMS Administrator and the Southeast Regional Office:
- Central Office
RA-EPstacktesting@pa.gov
- Southeast Region
RA-EPSEstacktesting@pa.gov
- (i) 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.

005 [25 Pa. Code §139.3]**General requirements.**

Between 12 months and 15 months from the initial performance testing on each CHP Generator (Source IDs 700 and 701), and every 12 months thereafter (plus or minus one month), the permittee shall perform sampling on the catalyst to ensure that the catalyst has not been poisoned or deteriorated and that it is still reducing pollutants as follows:

- (a) NO_x – 80% reduction
- (b) CO – 75% reduction
- (c) VOC – 85% reduction

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

The CHP Generators (Source IDs 700 and 701) shall each be equipped with a non-resettable meter to monitor hours of operation.

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

The permittee shall monitor daily:

- (a) The H₂S concentrations in the biogas being used as fuel in the CHP Generators (Source IDs 700 and 701);
- (b) The methane content of the biogas; and,
- (c) The flow rate of biogas to each CHP Generator.

**SECTION E. Source Group Plan Approval Restrictions.****# 008 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

As pertains to the Selective Catalytic Reduction (SCR) unit, the following shall be monitored on a continuous basis:

- (a) The amount of reagent injected into the SCR unit, in gallons per hour or as a percent concentration;
- (b) The temperature prior to the SCR unit, in °F; and,
- (c) The pressure drop across the catalyst bed, in inches water column.

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

- (a) The permittee shall record the operating time on a monthly basis and as a 12-month rolling sum.
- (b) The permittee shall calculate and record emissions of NO_x, CO, VOC, PM (total), and SO_x on a monthly basis and as a 12-month rolling sum.

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

- (a) The permittee shall record daily:
 - (1) The H₂S concentrations in the biogas being used as fuel in the CHP Generators (Source IDs 700 and 701); and,
 - (2) The methane content of the biogas.
- (b) The permittee shall record the monthly throughput of biogas used in each CHP Generator.

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

- (a) As pertains to the Selective Catalytic Reduction (SCR) unit, the following shall be recorded on a continuous basis, at increments of 1 minute:
 - (1) The amount of reagent injected into the SCR unit, in gallons per hour or as a percent concentration;
 - (2) The temperature prior to the SCR unit, in °F; and,
 - (3) The pressure drop across the catalyst bed, in inches water column.
- (b) The permittee shall maintain records of catalyst sampling and testing results.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

[Additional authority for this permit condition is derived from 40 CFR § 60.4243.]

The permittee shall keep records of the following information:

- (a) All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ, and all documentation supporting any notification.
- (b) A maintenance plan established by the manufacturer.
- (c) Records of maintenance conducted on the CHP Generators.

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

- (a) The permittee shall only operate the CHP Generators (Source IDs 700 and 701) when the SCR units (Source IDs C700 and C701) are operating properly.
- (b) In case of SCR unit malfunctions, the permittee shall shut down the respective generator immediately, until the SCR unit is operating properly again.
- (c) The SCR unit shall operate within the following parameters, to be established prior to an operating permit:
- (1) A urea flow rate range or minimum percent concentration;
 - (2) A pressure drop range, in inches water column; and,
 - (3) An operating temperature range, in °F.

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

[Additional authority for this permit condition is derived from 40 CFR § 60.4243.]

The permittee shall maintain and operate each engine and its associated control device in a manner consistent with good air pollution control practice and in accordance with the manufacturer's specifications.

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

- (a) The CHP Generators (Source IDs 700 and 701) shall each be rated 800-kW, powered by a 1,192 hp engine manufactured by 2G (Model – Avus 1000plus BG).
- (b) The Selective Catalytic Reduction (SCR) control devices (Source IDs C700 and C701,) shall be manufactured by 2G Energy AG.

016 [25 Pa. Code §129.203]**Stationary internal combustion engines.**

- (a) By October 31 of each year, the permittee shall calculate the difference between the actual emissions from the affected internal combustion engine during the period from May 1 through September 30, and the allowable emissions for that same period.
- (b) The allowable emissions shall be calculated by multiplying the cumulative hours or operations for this source for the period by the horsepower rating of the unit and by the applicable emission rate of 3.0 g of NO_x per brake hp-hr.

017 [25 Pa. Code §129.204]**Emission accountability.**

- (a) If the affected source has NO_x CEMS, the permittee shall determine actual emissions in accordance with the CEMS data reported to the Department shall be used. Any data invalidated under 25 Pa. Code, Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (b) If the permittee is not required to monitor NO_x emissions with a CEMS, one of the following shall be used to determine actual emissions of NO_x:

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

- (1) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NO_x.
- (2) The maximum hourly allowable NO_x emission rate contained in the permit or the higher of the following:
 - (i) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."
 - (ii) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.
- (3) CEMS data, if the owner or operator elects to monitor NO_x emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (4) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

018 [25 Pa. Code §129.204]**Emission accountability.**

- (a) The permittee shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 CFR § 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.
- (b) If the combined allowable emissions from units subject to 25 Pa. Code § 129.204 at a facility from May 1 through September 30 exceed the combined actual emissions from same units at the facility during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the permittee's other facilities.
- (c) By November 1 of each year, the permittee shall surrender the required NO_x allowances to the Department's designated NO_x allowance tracking system account and provide to the Department, in writing, the following:
 - (1) The serial number of each NO_x allowance surrendered.
 - (2) The calculations used to determine the quantity of NO_x allowances required to be surrendered.
- (d) If the permittee fails to comply with (c), above, the permittee shall by December 31 surrender three (3) NO_x allowances of the current or later year vintage for each NO_x allowance that was required to be surrendered by November 1 of that year.
- (e) The surrender of NO_x allowances under (d), above, does not affect the liability of the permittee of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.
 - (1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the permittee demonstrates that a lesser number of days should be considered.
 - (2) Each ton of excess emissions is a separate violation.

[Note: CAIR has been replaced by CSAPR. Beginning May 1, 2021, the permittee shall comply with CSAPR rule as promulgated in 40 CFR parts 51, 52, 78 and 97 as published in the Federal Register, Vol. 86, No. 82 April 30, 2021.]

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description																			
101	SLURRY BUFFER TANK																			
<table><tr><th colspan="2">Emission Limit</th><th>Pollutant</th></tr><tr><td>0.500</td><td>PPMV</td><td>Hydrogen Sulfide</td></tr><tr><td>5.000</td><td>PPMV</td><td>VOC</td></tr></table>			Emission Limit		Pollutant	0.500	PPMV	Hydrogen Sulfide	5.000	PPMV	VOC									
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102	ANAEROBIC DIGESTER TANKS / BIOGAS TRAIN																			
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**SECTION G. Emission Restriction Summary.****Site Emission Restriction Summary**

Emission Limit	Pollutant
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SECTION H. Miscellaneous.



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