



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: September 28, 2020

Effective Date: April 28, 2026

Revision Date: April 23, 2026

Expiration Date: October 28, 2026

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. 11-00541A

Federal Tax Id - Plant Code: 23-1303465-1

Owner Information

Name: CLEVELAND BROS EQUIP CO INC

Mailing Address: 190 EARNHARDT DR
HUNKER, PA 15639-1345

Plant Information

Plant: CLEVELAND BROS EQUIP CO INC/ENGINE REBUILD FAC

Location: 11 Cambria County 11923 Cambria Township

SIC Code: 3519 Manufacturing - Internal Combustion Engines, Nec

Responsible Official

Name: VINCENT MEINERT

Title: VP

Phone: (724) 861 - 6092

Email: vmeinert@clevelandbrothers.com

Plan Approval Contact Person

Name: ZACHARY MORCHESKY

Title: PLANT MANAGER

Phone: (724) 549 - 1317

Email: zmorchesky@clevelandbrothers.com

[Signature] _____

MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION



Plan Approval Description

This Plan Approval authorizes the construction and temporary operation of the herein identified sources and controls associated with an industrial engine rebuilding facility located in Cambria Township, Cambria County.

Mainly lean burn natural gas and landfill gas fired spark ignition reciprocating engines will be rebuilt at the facility. A limited number of rich burn and duel-fuel engines may be rebuilt at the facility. This may be as many as 20 engines per year.



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 Prohibition of Air Pollution
- #014 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



SECTION A. Table of Contents

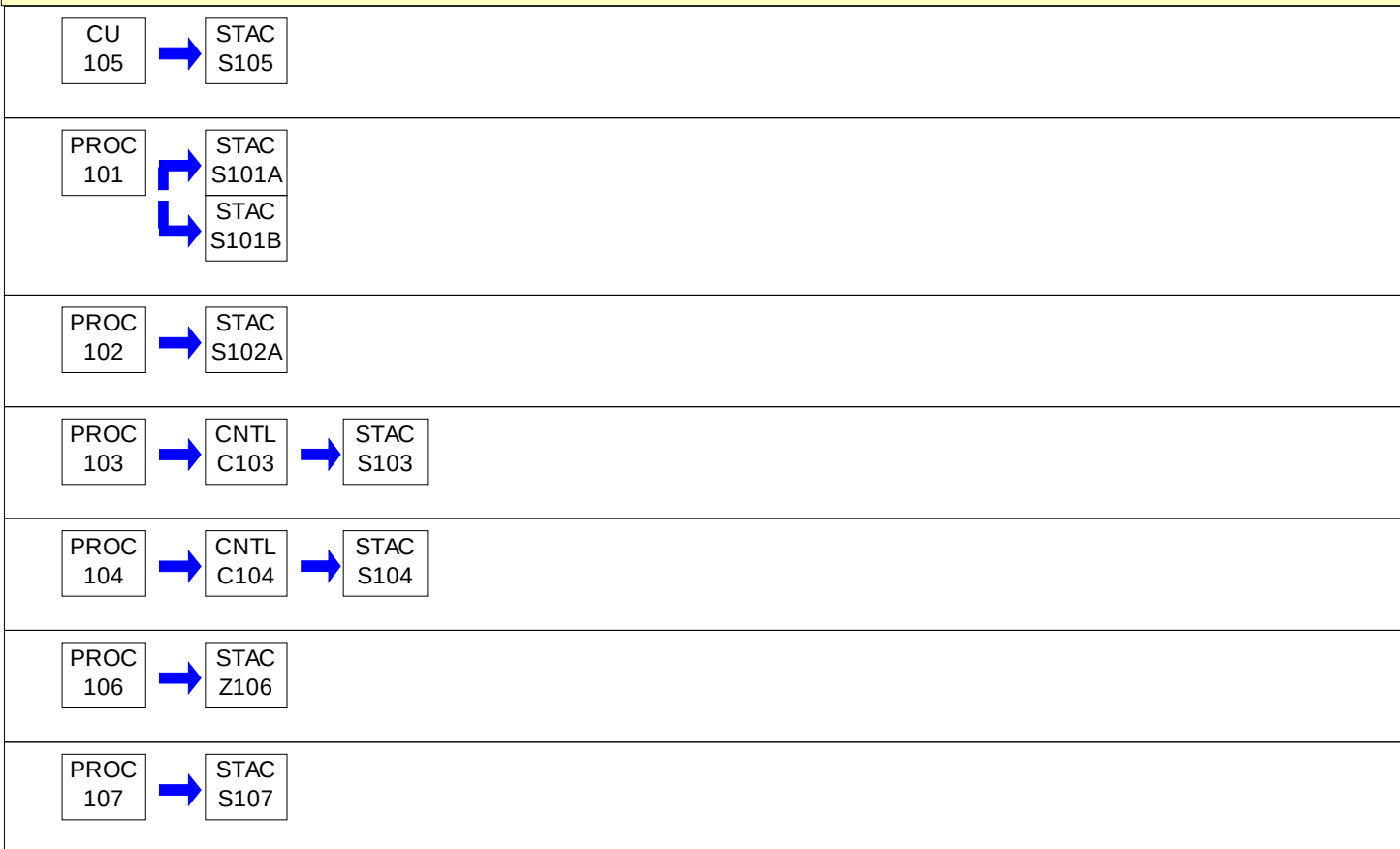
F-III: Monitoring Requirements
F-IV: Recordkeeping Requirements
F-V: Reporting Requirements
F-VI: Work Practice Standards
F-VII: Additional Requirements

Section G. Emission Restriction Summary

Section H. Miscellaneous

**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
105	NATURAL GAS COMBUSTION UNITS/HEATERS (22.37 MMBTU/HR TOTAL)	22.370 MMBTU/HR	
		22.370 MCF/HR	Natural Gas
101	ENGINE TEST CELL 1 (8,000-BHP)	21.000 MMBTU/HR	Natural Gas
102	ENGINE TEST CELL 2 (4,500-BHP)	11.000 MMBTU/HR	Natural Gas
103	PAINT BOOTH/SURFACE COATING OPERATIONS	5.000 Lbs/HR	
104	ARCSPRAY THERMAL SPRAY SYSTEM	2.000 Sq Ft/HR	THERMAL SPRAY COATING
106	NATURAL GAS FUELED CLEANING UNITS (7.46 MMBTU/HR TOTAL)	7.450 MCF/HR	Natural Gas
107	CATERPILLAR EMERGENCY GENERATOR (500KW)	8.600 MMBTU/HR	Natural Gas
C103	PAINTBOOTH DRY PANEL FILTERS		
C104	ARCSPRAY DUST COLLECTOR		
S101A	ENGINE TEST CELL 1 (8,000-BHP) STACK 1		
S101B	ENGINE TEST CELL 1 (8,000-BHP) STACK 2		
S102A	ENGINE TEST CELL 2 (4,500-BHP) STACK 1		
S103	PAINT BOOTH STACK		
S104	ARCSPRAY DUST COLLECTOR STACK		
S105	NATURAL GAS COMBUSTION UNIT/HEATER STACKS		
S107	CATERPILLAR EMERGENCY GENERATOR STACK		
Z106	CLEANING COMBUSTION FUGITIVE EMISSIONS		

PERMIT MAPS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Plan Approval Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Plan Approval Requirements**

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

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

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

(a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.

(b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(c) The permittee fails to submit a report required by this plan approval.

(d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

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

(a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

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

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

Regional Air Program Manager

PA Department of Environmental Protection

(At the address given on the plan approval transmittal letter or otherwise notified)

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

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

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

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

**SECTION B. General Plan Approval Requirements**

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

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

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

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

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

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

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

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

**SECTION C. Site Level Plan Approval Requirements****I. RESTRICTIONS.****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 act.

002 [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 §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.

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

(a) Limitations are as follows:

(1) If control of malodorous air contaminants is required under subsection (b), emissions shall be incinerated at a minimum of 1200F for at least 0.3 seconds prior to their emission into the outdoor atmosphere.

(2) Techniques other than incineration may be used to control malodorous air contaminants if such techniques are equivalent to or better than the required incineration in terms of control of the odor emissions and are approved in writing by the Department.

(b) 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.

(c) The prohibition in subsection (b) does not apply to odor emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

004 [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:

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

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

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).
- (4) [Not applicable.]

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

Pursuant to 25 Pa. Code §123.1(a), no person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.

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

(2) Grading, paving and maintenance of roads and streets.

(3) 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.

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) [Not applicable.]

(8) [Not applicable.]

(9) Sources and classes of sources other than those identified in paragraphs (1)—(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

- (i) The emissions are of minor significance with respect to causing air pollution.
- (ii) The emissions are not preventing or interfering with the attainment or maintenance of an ambient air quality standard.

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

Pursuant to 25 Pa. Code §123.13(c)(1)(i), the permittee may not permit the emission into the outdoor atmosphere of particulate matter from any process at the facility with effluent gas volume less than 150,000 dry standard cubic feet per minute (dscfm) in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dscf.

II. TESTING REQUIREMENTS.**# 008 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

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

If, at any time, the Department has cause to believe that air contaminant emissions from the sources listed in this plan approval may be in excess of the limitations specified in, or established pursuant to this plan approval or the permittee's operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

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

A facility-wide inspection shall be conducted at a minimum of once each operating day. The facility-wide inspection shall be conducted for the presence of the following:

- (a) Visible stack emissions;
- (b) Fugitive emissions; and
- (c) Potentially objectionable odors at the property line.

These observations are to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code §§123.1 or 123.2, and malodors prohibited under 25 Pa. Code §123.31.

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

Observations for visible stack emissions, except as specified elsewhere in this Plan Approval, shall be conducted during daylight hours and all observations shall be conducted while sources are in operation. If any visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent, the permittee shall take corrective action. Records of each inspection, except as specified elsewhere in this Plan Approval, shall be maintained in a log and at the minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

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

The permittee shall maintain the following comprehensive and accurate records:

- (1) Facility-wide emissions for NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, HCHO, Ni, and total HAPs per consecutive 12-month rolling period.
- (2) Facility-wide natural gas usage per consecutive 12-month rolling period.
- (3) Results of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.
- (4) Results of any visible emissions observations to demonstrate compliance with 25 Pa. Code §123.41.
- (5) Copies of the manufacturers' specifications and recommended maintenance schedule (or site-specific developed maintenance schedule) for each air contamination source and air cleaning device.
- (6) All maintenance performed on each air contamination source and air cleaning device.
- (7) Records of each engine performance test.
- (8) Records of total runtime and number of engine tests conducted on each test cell/dynamometer per consecutive 12-month rolling period.
- (9) Manufacturer documentation for paint booth and ArcSpray system filters that adequately demonstrate conformance with the required performance specifications.
- (10) Manufacturer specifications for ArcSpray wire.
- (11) For each coating, thinner, solvent, and detergent utilized, a safety data sheet (SDS), material safety data sheet (MSDS), certified product data sheet, or equivalent document that indicates VOC and HAP content.
- (12) EPA Method 9 Certifications for each visible emissions observer.
- (13) Records of adequate training for each engine test cell/dynamometer operator and paint gun operator.
- (14) Calibration records for the engine test cell/dynamometer portable emissions analyzer.
- (15) Total hours of engine testing time on each test cell/dynamometer per consecutive 12-month rolling period.
- (16) Total consumption, in gallons, of detergent, mineral spirits, primer, and top coat, per consecutive 12-month rolling period.
- (17) Total consumption, in pounds, of ArcSpray wire per consecutive 12-month rolling period.

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

All logs and required records shall be maintained on site, or at an alternative location acceptable to the Department, for a minimum of five (5) years and shall be made available to the Department upon request.

013 [25 Pa. Code §135.5]**Recordkeeping**

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with § § 135.3 and 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

V. REPORTING REQUIREMENTS.**# 014 [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. A

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

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 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,
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.

VI. WORK PRACTICE REQUIREMENTS.**# 015 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) 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.
- (4) Clearing of land.
- (5) Stockpiling of materials.

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

(6) Open burning operations.

(7) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.

(8) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations).

(9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(i) the emissions are of minor significance with respect to causing air pollution; and

(ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

(b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.

(c) A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

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

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

(3) Paving and maintenance of roadways.

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

(d) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

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

Pursuant to §123.1(c), a person responsible for any source specified in §123.1(a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

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

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

(3) Paving and maintenance of roadways.

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

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

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

The permittee shall construct, operate, and maintain all air contamination sources and air cleaning devices authorized under this Plan Approval in accordance with the manufacturer's specifications and recommended maintenance schedules, or site-specific specifications developed in accordance with good engineering practice and prior operating experience. Additionally, the owner/operator may not cause or permit the operation of an air contamination source in a manner inconsistent with good operating practices.

018 [25 Pa. Code §129.77.]**Control of emissions from the use or application of adhesives, sealants, primers and solvents.**

(a) This section applies to the owner or operator of a facility that uses or applies one or more of the following at the facility on or after January 1, 2012:

- (1) An adhesive, sealant, adhesive primer or sealant primer subject to the VOC content limits in Table V.
- (2) An adhesive or sealant product applied to the listed substrate subject to the VOC content limits in Table VI.
- (3) A surface preparation solvent or cleanup solvent.

(b) On or after January 1, 2012, an owner or operator of a facility may not use or apply at the facility an adhesive, sealant, adhesive primer or sealant primer that exceeds the applicable VOC content limit in Table V or VI, except as provided elsewhere in this section.

(c) On or after January 1, 2012, an owner or operator of a facility may not use or apply at the facility a surface preparation or cleanup solvent that exceeds the applicable VOC content limit or composite partial vapor pressure requirements of this section, except as provided elsewhere in this section.

(d) The VOC content limits in Table VI for adhesives or sealants applied to particular substrates apply as follows:

- (1) If an owner or operator of a facility uses or applies at the facility an adhesive or sealant subject to a specific VOC content limit in Table V, the specific limit is applicable rather than the adhesive-to-substrate limit in Table VI.
- (2) If an owner or operator of a facility uses or applies at the facility an adhesive to bond dissimilar substrates together, the applicable substrate category with the highest VOC content limit is the limit for this use.

(e) An owner or operator of a facility subject to this section using or applying a surface preparation solvent or cleanup solvent at the facility may not:

- (1) Except as provided in paragraph (2) for single-ply roof membrane, use materials containing VOCs for surface preparation, unless the VOC content of the surface preparation solvent is less than 70 grams per liter of material or 0.6 pound of VOC per gallon of material.
- (2) Use materials containing VOCs for surface preparation or cleanup when applying single-ply roof membrane, unless the composite partial vapor pressure, excluding water and exempt compounds, of the surface preparation solvent or cleanup solvent is less than or equal to 45 mm mercury at 20° C.
- (3) Except as provided in subsection (f), use cleanup solvent materials containing VOCs for the removal of adhesives, sealants, adhesive primers or sealant primers from surfaces, other than from the parts of spray application equipment, unless the composite partial vapor pressure of the solvent is less than or equal to 45 mm mercury at 20° C.

(f) Removal of an adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment shall be performed by one or more of the following methods:

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

- (1) Using an enclosed cleaning system, or an equivalent cleaning system as determined by the test method identified in subsection (z).
- (2) Using a solvent with a VOC content less than or equal to 70 grams of VOC per liter of material or 0.6 pound of VOC per gallon of material.
- (3) Soaking parts containing dried adhesive in a solvent if the composite partial vapor pressure of the solvent, excluding water and exempt compounds, is less than or equal to 9.5 mm mercury at 20° C and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container.
- (g) An owner or operator of a facility using or applying at the facility an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent or cleanup solvent subject to the VOC content limits of this section may comply with the requirements of this section through the use of add-on air pollution control equipment if the following requirements are met:
 - (1) The VOC emissions from the use of all noncomplying as applied adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents and cleanup solvents subject to this section are reduced by an overall efficiency of at least 85%, by weight.
 - (i) The capture efficiency of the system shall be determined in accordance with subsection (y)(1).
 - (ii) The control efficiency of the system shall be determined in accordance with subsection (y)(2).
 - (2) The combustion temperature is continuously monitored and recorded daily if a thermal incinerator is operated.
 - (3) Inlet and exhaust gas temperatures are continuously monitored and recorded daily if a catalytic incinerator is operated.
 - (4) Control device efficiency is monitored continuously and recorded daily if a carbon absorber or control device other than a thermal or catalytic incinerator is operated.
 - (5) Operation records sufficient to demonstrate compliance with the requirements of this section are maintained in accordance with subsections (o), (p) and (q).
 - (6) The following information is also recorded and maintained:
 - (i) Daily records of the volume used each day of each noncomplying as applied adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent and cleanup solvent.
 - (ii) Daily records of the hours of operation of the add-on air pollution control equipment.
 - (iii) Records of all maintenance performed on the add-on air pollution control equipment, including the date and type of maintenance.
 - (7) The control equipment is approved, in writing, by the Department in an operating permit.
 - (8) The owner or operator of a facility that intends to comply with this section using add-on air pollution control equipment may apply to the Department for an extension to the compliance date specified in subsections (a) and (c).
 - (i) The Department will approve the extension request if the request meets the requirements in subparagraph (ii).
 - (ii) The extension request must:
 - (A) Be received, in writing, by January 1, 2012.
 - (B) Include the date by which a permit application or request for plan approval will be submitted.

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

(C) Demonstrate to the Department's satisfaction that an extension is necessary.

(iii) An extension will be automatically revoked if the recipient fails to comply with its terms by the dates specified in it.

(h) An owner or operator of a facility subject to this section shall store or dispose of all absorbent materials, including cloth or paper, which are moistened with adhesives, sealants, primers, surface preparation solvents or cleanup solvents subject to this section, in nonabsorbent containers at the facility that are kept closed except when placing materials in or removing materials from the container.

(i) An owner or operator of a facility subject to this section may not solicit, require or specify the use or application of an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent or cleanup solvent if the use or application would result in a violation of this section, unless the emissions are controlled through the use of add-on air pollution control equipment as specified in subsection (g). The prohibition of this subsection applies to all written or oral contracts created on or after January 1, 2012, under which an adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent or cleanup solvent subject to this section is to be used or applied at a facility in this Commonwealth.

(j) An owner or operator of a facility subject to this section who uses or applies an adhesive, sealant, adhesive primer or sealant primer subject to this section may not add solvent to the adhesive, sealant, adhesive primer or sealant primer in an amount in excess of the manufacturer's recommendation for application, if this addition causes the adhesive, sealant, adhesive primer or sealant primer to exceed the applicable VOC content limit listed in Table V or VI, unless the emissions are controlled through the use of add-on air pollution control equipment as specified in subsection (g).

(k) This section does not apply to the use or application of the following compounds or products:

(1) Adhesives, sealants, adhesive primers or sealant primers being tested or evaluated in a research and development, quality assurance or analytical laboratory, if records are maintained as required in subsections (p) and (q).

(2) Adhesives, sealants, adhesive primers or sealant primers that are subject to § 129.73 (relating to aerospace manufacturing and rework) or Chapter 130, Subchapter B or C (relating to consumer products; and architectural and industrial maintenance coatings).

(3) Adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and less exempt compounds, as applied.

(4) Cyanoacrylate adhesives.

(5) Adhesives, sealants, adhesive primers or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of 16 fluid ounces or less, or a net weight of 1 pound or less, except plastic cement welding adhesives and contact adhesives.

(6) Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of 1 gallon or less.

(l) This section does not apply to the use of adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents or cleanup solvents in the following operations:

(1) Tire repair operations, if the label of the adhesive states, "For tire repair only."

(2) The assembly, repair and manufacture of aerospace components or undersea-based weapons systems.

(3) The manufacture of medical equipment.

(4) Plaque laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed prior to July 1, 1992. An owner or operator claiming an exemption under this paragraph shall record and maintain operational records sufficient to demonstrate compliance with this exemption, in accordance with subsections (o) and (q).

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

(m) This section does not apply if the total VOC emissions from all adhesives, sealants, adhesive primers and sealant primers used or applied at the facility are less than 200 pounds or an equivalent volume, per calendar year. An owner or operator of a facility claiming exemption under this subsection shall record and maintain operational records sufficient to demonstrate compliance with this exemption, in accordance with subsections (o) and (q).

(n) This section does not apply to the use or application of a noncomplying adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent or cleanup solvent if the total volume of noncomplying adhesives, sealants, primers, surface preparation and cleanup solvents used or applied facility-wide does not exceed 55 gallons per calendar year. An owner or operator of a facility claiming exemption under this subsection shall record and maintain operational records sufficient to demonstrate compliance with this exemption, in accordance with subsections (o) and (q).

(o) Except as provided in subsection (p), each owner or operator subject to this section shall maintain records demonstrating compliance with this section, including the following information:

(1) A list of each adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent and cleanup solvent product in use and in storage.

(2) A data sheet or material list which provides the product name, manufacturer identification and use or material application for each product included on the list required under paragraph (1).

(3) The VOC content of each product on the list required under paragraph (1), as supplied.

(4) Catalysts, reducers or other components used and the mix ratio.

(5) The VOC content or vapor pressure of each product on the list required by paragraph (1), as applied, if solvent or other VOC is added to the product before application.

(6) The volume purchased or produced of each product on the list required under paragraph (1).

(7) The monthly volume used or applied as part of a manufacturing process at the facility of each product on the list required under paragraph (1).

(p) For an adhesive, sealant, adhesive primer and sealant primer product subject to the laboratory testing exemption of subsection (k)(1), the person conducting the testing shall make and maintain records of all products used, including the following information:

(1) The product name.

(2) The product category of the material or type of application.

(3) The VOC content of the material.

(q) Records made to determine compliance with this section shall be:

(1) Maintained onsite for 5 years from the date the record is created.

(2) Made available to the Department upon receipt of a written request.

(r) Except as otherwise provided in this section, the VOC and solids content of nonaerosol adhesives (including one-part moisture cure urethane adhesives and silicone adhesives), sealants, adhesive primers, sealant primers, surface preparation solvents and cleanup solvents shall be determined using one of the following:

(1) EPA Reference Method 24, Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, found at 40 CFR 60, Subpart D, Appendix A, including updates and revisions.

(2) SCAQMD Method 304, Determination of Volatile Organic Compounds (VOC) in Various Materials, SCAQMD, 21865

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

Copley Drive, Diamond Bar, CA 91765 USA, including updates and revisions.

(s) The weight volatile matter content and weight solids content for one-part or multiple part reactive adhesives, except one-part moisture cure urethane adhesives and silicone adhesives, shall be determined using the EPA Reference Method, Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives, found at 40 CFR 63, Subpart PPPP, Appendix A, including updates and revisions.

(t) The identity and concentration of exempt organic compounds shall be determined using one of the following:

(1) ASTM D4457, Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959 USA including updates and revisions.

(2) SCAQMD Method 303, Determination of Exempt Compounds, SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765 USA, including updates and revisions.

(u) The VOC content of a plastic cement welding adhesive or primer shall be determined using SCAQMD Method 316A, Determination of Volatile Organic Compounds (VOC) in Materials Used for Pipes and Fittings, SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765 USA, including updates and revisions.

(v) To determine if a diluent is a reactive diluent, the percentage of the reactive organic compound that becomes an integral part of the finished material shall be determined using SCAQMD Method 316A, Determination of Volatile Organic Compounds (VOC) in Materials Used for Pipes and Fittings, SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765 USA, including updates and revisions.

(w) The composite partial vapor pressure of organic compounds in cleaning materials shall be determined by the following procedure:

(1) Quantifying the amount of each compound in the blend using gas chromatographic analysis, using the following methods:

(i) ASTM E260, Standard Practice for Packed Column Gas Chromatography, ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959 USA, for organic content, including updates and revisions.

(ii) ASTM D3792, Standard Test Method for Water Content of Coatings by Direct Injection Into a Gas Chromatograph, ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959 USA, for water content, including updates and revisions.

(2) Calculating the composite partial vapor pressure using the following equation:

(The equation formula does not copy. Please see original text for exact formula)

n

$\text{SIGMA } (W_i)(V_{Pi})/MW_i$

i=1

PPc =

kn

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

$$Ww/MWw + \text{SIGMA } We/MWe + \text{SIGMA } Wi/MWi$$

$$e=1i=1$$

Where:

PPc = VOC composite partial vapor pressure at 20° C, in mm mercury.

Wi = Weight of the *i*th VOC compound, in grams, as determined by ASTM E260.

Ww = Weight of water, in grams, as determined by ASTM D3792.

We = Weight of the *e*th exempt compound, in grams, as determined by ASTM E260.

MWi = Molecular weight of the *i*th VOC compound, in grams per g-mole, as given in chemical reference literature.

MWw = Molecular weight of water, in grams per g-mole (18 grams per g-mole).

MWe = Molecular weight of the *e*th exempt compound, in grams per g-mole, as given in chemical reference literature.

V_{Pi} = Vapor pressure of the *i*th VOC compound at 20° C, in mm mercury, as determined by subsection (x).

(x) The vapor pressure of each single component compound shall be determined from one or more of the following:

(1) ASTM D2879, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, ASTM International, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959 USA, including updates and revisions.

(2) The most recent edition of one or more of the following sources:

- (i) Vapour Pressures of Pure Substances, Boublik, Elsevier Scientific Publishing Company, New York.
- (ii) Perry's Chemical Engineers Handbook, Green and Perry, McGraw-Hill Book Company.
- (iii) CRC Handbook of Chemistry and Physics, CRC Press.
- (iv) Lange's Handbook of Chemistry, McGraw-Hill Book Company.
- (v) Additional sources approved by the SCAQMD or other California air districts.

(y) If air pollution control equipment is used to meet the requirements of this section, the owner or operator shall make both of the following determinations:

(1) The measurement of capture efficiency shall be conducted and reported in accordance with the EPA Technical Document "Guidelines for Determining Capture Efficiency, issued January 9, 1995.

(2) The control efficiency shall be determined in accordance with one of the following:

(i) EPA Reference Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, found at 40 CFR 60, Subpart D, Appendix A, including updates and revisions.

(ii) EPA Reference Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, found at 40 CFR 60, Subpart D, Appendix A, including updates and revisions.

(iii) EPA Reference Method 25B, Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer, found at 40 CFR 60, Subpart D, Appendix A, including updates and revisions.

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

(iv) CARB Method 100, Procedures for Continuous Gaseous Emission Stack Sampling, California Air Resources Board, 1001 "I" Street, Post Office Box 2815, Sacramento, CA 95812 USA, including updates and revisions.

(z) The active and passive solvent losses from the use of an enclosed spray gun cleaning system or equivalent cleaning system, as listed in subsection (f)(1), shall be determined using the SCAQMD method, General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems, dated October 3, 1989, SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765 USA, including updates and revisions.

(1) The test solvent for this determination shall be a lacquer thinner with a minimum vapor pressure of 105 mm of mercury at 20° C.

(2) The minimum test temperature shall be 15° C.

(aa) Another test method may be used to determine the VOC or solids content of a product if the request for approval of the test method meets the following requirements:

(1) The request is submitted to the Department in writing.

(2) The request demonstrates that the test method provides results that accurately determine the concentration of VOCs in the product or its emissions.

(3) The Department approves the request in writing.

(bb) For adhesive, sealant, adhesive primer or sealant primer products that do not contain reactive diluents, grams of VOC per liter of product thinned to the manufacturer's recommendation, less water and exempt compounds, shall be calculated according to the following equation:

(The equation formula does not copy. Please see original text for exact formula)

Grams of VOC per liter of product, as applied = $W_s - W_w - W_e$ $V_m - V_w - V_e$

Where:

W_s = weight of volatile compounds, in grams.

W_w = weight of water, in grams.

W_e = weight of exempt compounds, in grams.

V_m = volume of material, in liters.

V_w = volume of water, in liters.

V_e = volume of exempt compounds, in liters.

(cc) For adhesive, sealant, adhesive primer or sealant primer products that contain reactive diluents, the VOC content of the product is determined after curing. The grams of VOC per liter of product thinned to the manufacturer's recommendation, less water and exempt compounds, shall be calculated according to the following equation:

(The equation formula does not copy. Please see original text for exact formula)

Grams of VOC per liter of product, as applied = $W_{rs} - W_{rw} - W_{re}$
 $V_{rm} - V_{rw} - V_{re}$

Where:

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

Wrs = weight of volatile compounds not consumed during curing, in grams.

Wrw = weight of water not consumed during curing, in grams.

Wre = weight of exempt compounds not consumed during curing, in grams.

Vrm = volume of material not consumed during curing, in liters.

Vrw = volume of water not consumed during curing, in liters.

Vre = volume of exempt compounds not consumed during curing, in liters.

(dd) For low-solids adhesive, sealant, adhesive primer or sealant primer products, grams of VOC per liter of product thinned to the manufacturer's recommendation, including the volume of water and exempt compounds, shall be calculated according to the following equation:

(The equation formula does not copy. Please see original text for exact formula)

Grams of VOC per liter of product, as applied = $\frac{Ws - Ww - We}{Vm}$

Where:

Ws = weight of volatile compounds, in grams.

Ww = weight of water, in grams.

We = weight of exempt compounds, in grams.

Vm = volume of material, in liters.

(ee) Percent VOC by weight shall be calculated according to the following equation:

(The equation formula does not copy. Please see original text for exact formula)

% VOC by weight = $\left[\frac{Ww}{W}\right] \times 100$

Where:

Ww = weight of VOCs, in grams.

W = weight of material, in grams.

(ff) To convert from grams per liter (g/l) to pounds per gallon (lb/gal), multiply the result (VOC content) by 8.345×10^{-3} (lb/gal/g/l).

Table V. VOC Content Limits for Adhesives, Sealants, Adhesive Primers and Sealant Primers, As Applied

Adhesive, sealant, adhesive primer or sealant primer category

VOC content limit (pounds VOC per gallon, less water and exempt compounds)* VOC content limit (grams VOC per liter, less water and exempt compounds)*

Adhesives

ABS welding 3.3 400

Ceramic tile installation 1.1 130

Computer diskette jacket manufacturing 7.1 850

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

Contact bond 2.1 250
 Cove base installation 1.3 150
 CPVC welding 4.1 490
 Indoor floor covering installation 1.3 150
 Metal to urethane/rubber molding or casting 7.1 850
 Multipurpose construction 1.7 200
 Nonmembrane roof installation/repair 2.5 300
 Outdoor floor covering installation 2.1 250
 Perimeter bonded sheet vinyl flooring installation 5.5 660
 Plastic cement welding, other than ABS, CPVC or PVC welding 4.3 510
 PVC welding 4.3 510
 Sheet rubber installation 7.1 850
 Single-ply roof membrane installation/ repair 2.1 250
 Structural glazing 0.8 100
 Thin metal laminating 6.5 780
 Tire retread 0.8 100
 Waterproof resorcinol glue 1.4 170
 Sealants
 Architectural 2.1 250
 Marine deck 6.3 760
 Nonmembrane roof installation/repair 2.5 300
 Roadway 2.1 250
 Single-ply roof membrane 3.8 450
 Other 3.5 420
 Adhesive Primers
 Automotive glass 5.8 700
 Plastic cement welding 5.4 650
 Single-ply roof membrane 2.1 250
 Traffic marking tape 1.3 150
 Other 2.1 250
 Sealant Primers
 Marine deck 6.3 760
 Nonporous architectural 2.1 250
 Porous architectural 6.5 775
 Other 6.3 750

*The VOC content is determined as the weight of VOC per volume of product, less water and exempt compounds, as specified in subsections (bb) and (cc) or as the weight of VOC per volume of product, as specified in subsection (dd).

Table VI. VOC Content Limits for Adhesive or Sealant Products Applied to Particular Substrates, As Applied

Adhesive or Sealant Products

Applied to the Listed

Substrate VOC content limit (pounds VOC per gallon, less water and exempt compounds)* VOC content limit (grams VOC per liter, less water and exempt compounds)*

Fiberglass 1.7 200
 Flexible vinyl 2.1 250
 Metal 0.3 30
 Porous material 1.0 120
 Rubber 2.1 250
 Other substrates 2.1 250

*The VOC content is determined as the weight of VOC per volume of product, less water and exempt compounds, as specified in subsections (bb) and (cc) or as the weight of VOC per volume of product, as specified in subsection (dd).

Source

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

The provisions of this § 129.77 adopted December 24, 2010, effective December 25, 2010, 40 Pa.B. 7340.

Cross References

This section cited in 25 Pa. Code § 121.1 (relating to definitions); 25 Pa. Code § 129.51 (relating to general); and 25 Pa. Code § 130.703 (relating to exemptions and exceptions).

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

Air contamination sources and air cleaning devices authorized for construction and/or operation under this plan approval include the following:

- One (1) 4,500-bhp (maximum) engine test cell/dynamometer
- One (1) 8,000-bhp (maximum) engine test cell/dynamometer
- One (1) 36,000 CFM heated paint booth with high efficiency filters
- One (1) 3.96 MMBtu/hr natural gas-fired paint booth heater
- Surface coating operations using low-VOC/low-HAP, water-based primer and water-based enamel topcoat with dry filtration particulate control
- Two (2) Stingray Cabinet Washers each fitted with one (1) 0.4 MMBtu/hr natural gas-fired heater
- One (1) immersion tank fitted with one (1) 2.0 MMBtu/hr natural gas-fired heater
- Two (2) block washers each fitted with one (1) 2.0 MMBtu/hr natural gas-fired heater
- One (1) Praxair/TAFA ArcSpray welding system housed in an acoustical enclosure and controlled by a Donaldson/Torit Downflow Evolution 1,000 CFM cartridge filtration system
- Pre-wash operations using heated pressure washing equipment fueled with natural gas rated at 0.658 MMBtu/hr.
- One (1) Caterpillar 500 kw Tier 2 Emergency Generator.

Previously installed air contamination sources include the following:

- One (1) natural gas-fired office boiler (~0.84 MMBtu/hr)
- One (1) natural gas-fired water heater (~3.5 MMBtu/hr)
- Eight (8) natural gas-fired roof-top HVAC units (~6.373 MMBtu/hr, combined)
- Eight (8) natural gas-fired unit heaters (~0.240 MMBtu/hr, combined)

020 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Upon determination by the permittee that the air contamination sources and air cleaning devices covered by this plan approval are in compliance with all conditions of the plan approval, the permittee shall contact the Department's technical reviewer and schedule the Initial Operating Permit Inspection.

021 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Upon completion of the Initial Operating Permit Inspection and determination by the Department that the permittee is in compliance with all conditions of the plan approval, the permittee shall submit an application for State Only Operating Permit (SOOP) for the Facility within 120 days to incorporate the conditions of this plan approval.

022 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall submit requests to extend the temporary operation periods under this Plan Approval at least 15 days prior to the expiration date of any authorized period of temporary operation.

023 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Any changes in coating, thinner, solvent, detergent, or suppliers thereof shall be evaluated prior to use to determine the effect on total VOC and HAP emissions from the facility. Any increase in VOC or HAP emissions as a result of such

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

changes must receive prior written authorization from the Department via Request for Determination or Plan Approval, unless otherwise authorized by permit condition.

024 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The use of any adhesives, sealants, adhesive primers or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of greater than 16 fluid ounces, or a net weight of greater than 1 pound must be, prior to use, approved in writing by the Department.

025 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The use of cold cleaning machines that use two (2) gallons or more of solvents containing greater than 5% VOC content by weight must be, prior to use, approved in writing by the Department. Such equipment is subject to the requirements of 25 Pa. Code §129.63 related to Degreasing Operations.

026 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Parts washer detergent shall be limited to a non-VOC detergent and diluted as specified by the manufacturer.

027 [25 Pa. Code §129.14]**Open burning operations**

- (a) Air basins. No person may permit the open burning of material in an air basin.
- (b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:
 - (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
 - (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
 - (3) The emissions interfere with the reasonable enjoyment of life or property.
 - (4) The emissions cause damage to vegetation or property.
 - (5) The emissions are or may be deleterious to human or animal health.
- (c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:
 - (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
 - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
 - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
 - (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
 - (5) 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 such structure.
 - (6) A fire set solely for recreational or ceremonial purposes.
 - (7) A fire set solely for cooking food.



SECTION C. Site Level Plan Approval Requirements

(d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:

(1) As used in this subsection the following terms shall have the following meanings:

Air curtain destructor -- A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes -- Trees, shrubs, and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

(2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:

(i) Air curtain destructors shall be used when burning clearing and grubbing wastes.

(ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction modification, reactivation and operation of sources).

(iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.

(iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.

(3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:

(i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.

(ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.

(4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

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: 105

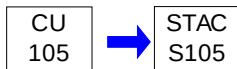
Source Name: NATURAL GAS COMBUSTION UNITS/HEATERS (22.37 MMBTU/HR TOTAL)

Source Capacity/Throughput:

22.370 MMBTU/HR

22.370 MCF/HR

Natural Gas

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

This source shall use only natural gas as a fuel.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

Equipment making up this source includes the following:

- a) one (1) natural gas-fueled office boiler (0.84 MMBtu/hr).
- b) one (1) natural gas-fired water heater (3.5 MMBtu/hr).
- c) eight (8) natural gas-fired roof-top HVAC units (6.373 MMBtu/hr combined).
- d) eight (8) natural gas-fired unit heaters (0.24 MMBtu/hr combined).

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

Source ID: 101

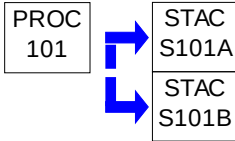
Source Name: ENGINE TEST CELL 1 (8,000-BHP)

Source Capacity/Throughput:

21.000 MMBTU/HR

Natural Gas

Conditions for this source occur in the following groups: TEST CELLS/DYNAMOMETERS

**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: 102

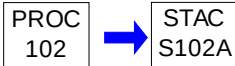
Source Name: ENGINE TEST CELL 2 (4,500-BHP)

Source Capacity/Throughput:

11.000 MMBTU/HR

Natural Gas

Conditions for this source occur in the following groups: TEST CELLS/DYNAMOMETERS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

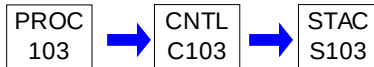
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 103

Source Name: PAINT BOOTH/SURFACE COATING OPERATIONS

Source Capacity/Throughput:

5.000 Lbs/HR

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

The "Material VOC" of the applied primer and top coating shall not exceed 0.23 lb/gallon and 1.13 lb/gallon, respectively. Compliance with these limitations shall be demonstrated by manufacturer documentation for each coating.

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

Emissions from surface coating operations (including all coatings and cleanup solvents) shall not exceed 2.4 TPY VOC and 0.3 TPY Total HAPs in any consecutive 12-month rolling period.

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

VOC emissions from the use of solvent based paint shall not exceed 0.50 tons in any twelve (12) month rolling period.

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

The permittee shall limit VOC emissions from the use of acetone, xylene and pre-wash paint thinners to less than 0.370 tons per rolling twelve (12) month period.

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

Surface coating material consumption shall not exceed 500 gal/yr of primer and 1,800 gal/yr of top coat.

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

Up to forty (40) engines may be processed using solvent based paint on a twelve (12) month rolling basis.

Control Device Efficiency Restriction(s).**# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The paint booth shall be operated at all times with dry particulate exhaust filters having no less than 98% particulate control efficiency as demonstrated by the manufacturer.

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).

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

Pursuant to 25 Pa. Code §129.52(e), the owner or operator of a facility or source claiming that the facility or source is exempt from the VOC control provisions of 25 Pa. Code Chapter 129 shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control requirements of 25 Pa. Code Chapter 129.

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

The VOC content of the as-applied coating(s), expressed in units of weight of VOC per volume of coating solids, shall be calculated as follows:

$$\text{VOC} = (\text{Wo}) * (\text{Dc}) / \text{Vn}$$

Where:

VOC = VOC content in lb VOC / gal of coating solids

Wo = Weight percent of VOC ($\text{Wv} - \text{Ww} - \text{Wex}$)

Wv = Weight percent of total volatiles (100% - weight percent solids)

Ww = Weight percent of water

Wex = Weight percent of exempt solvent(s)

Dc = Density of coating, lb / gal, at 25 degrees Celcius

Vn = Volume percent of solids of the as applied coating

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

The permittee shall keep the following records:

- a) Daily records of all coatings and solvents used.
- b) The permittee shall use daily records to calculate monthly numbers for the number of engines processed using solvent based coatings and VOC emission totals from the use of these coatings.
- c) Records from the current month will be combined with the previous eleven (11) months to arrive at a 12 month rolling total for facility VOC emissions, VOC emissions from the use of solvent based coatings and the number of engines processed using solvent based coatings.
- d) Use of mineral spirits for paint gun and general clean up will be tracked daily. A monthly total will be calculated at the end of each month. Monthly totals will be added with those from the previous eleven (11) months to form a twelve (12) month rolling total.

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

For coating-related activities, the owner/operator shall:

- a) Store all VOC-containing coatings, thinners, solvents or coating-related waste materials in closed containers.
- b) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, solvents or coating-related waste materials are kept closed at all times, except when depositing or removing these coatings, thinners or waste materials.

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

c) Minimize spills of VOC-containing coatings, thinners, solvents or coating-related waste materials and clean up spills immediately.

d) With the exception of the flow-coat drip trough, convey VOC-containing coatings, thinners, solvents or coating-related waste materials from one location to another in closed containers or pipes.

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

For cleaning materials, the owner/operator shall:

- (a) Store all VOC cleaning materials, solvents, and used shop towels in closed containers.
- (b) Ensure that mixing vessels and storage containers used for VOC-containing cleaning materials and solvents are kept closed at all times except when depositing or removing these materials.
- (c) Minimize spills of VOC-containing cleaning materials and solvents and clean up spills immediately.
- (d) Convey VOC-containing cleaning materials and solvents from one location to another in closed containers or pipes.
- (e) Minimize VOC emissions from cleaning of application, storage, mixing or conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- (f) Utilize non-HAP containing clean up solvents.

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

Paint booth filters shall be replaced per the filter manufacturer's recommended intervals or as needed in the event based on physical condition or when static pressure differential of the paint booth manometer exceeds 1.0" water column (W.C.) when in operation. Paint booth static pressure and filter condition shall be inspected on each work day prior to commencing surface coating operations.

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

Surface coating operations shall be conducted as follows:

1. Using air Graco G40 assisted airless paint guns with minimum rated transfer efficiency of 75%.
2. When using non-water based paints, a Binks 2100 HVLP spray gun will be used to apply coatings.
3. By individuals properly trained to operate the specified paint guns.
4. In accordance with good operating and air pollution control practices.

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

Only non-HAP containing mineral spirits (medium aliphatic petroleum naphtha, CAS 64742-88-7) shall be used for paint gun cleaning and general cleanup associated with surface coating operations. Mineral spirits consumption per consecutive 12-month rolling period shall not exceed 300 gallons.

VII. ADDITIONAL REQUIREMENTS.

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

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

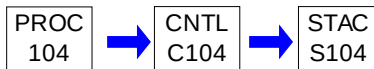
Source ID: 104

Source Name: ARCSpray THERMAL SPRAY SYSTEM

Source Capacity/Throughput:

2.000 Sq Ft/HR

THERMAL SPRAY COATING

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

(c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

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

The ArcSpray system wire consumption shall not exceed 2,000 pounds per consecutive twelve (12) month rolling period.

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

The ArcSpray system wire feed rate shall not at any time exceed 40 lb/hr or 10 lb/hr/100A (10 pounds of wire per hour per 100A of arc current).

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

The ArcSpray dust collection system shall be operated at all times with filters having no less than 99.97% particulate control efficiency for particles 0.3 micron (μm or micrometer) in diameter as demonstrated by the manufacturer.

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

Daily wire use shall be recorded. Within fifteen (15) days from the end of the month, daily totals shall be combined to form a

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

monthly total. The monthly total will be combined with the previous eleven (11) months to form a twelve (12) month rolling total.

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

Only Praxair/TAFA BondArc Wire 75B with a composition of 95% nickel (Ni) and 5% aluminum (Al) shall be used in the ArcSpray system.

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

The ArcSpray dust collection system shall be equipped with the specified filters and have an actual exhaust flow rate of no less than 1,000 ACFM at 70°F in order to ensure that the concentration of particulate matter in the effluent gas does not exceed 0.04 grain per dscf per §123.13(c)(1)(i).

VII. ADDITIONAL REQUIREMENTS.

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

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

Source ID: 106

Source Name: NATURAL GAS FUELED CLEANING UNITS (7.46 MMBTU/HR TOTAL)

Source Capacity/Throughput:

7.450 MCF/HR

Natural Gas

PROC
106STAC
Z106**I. RESTRICTIONS.****Fuel Restriction(s).**

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This source shall be fueled using only natural gas.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Equipment making up this source consists of the following:

- a) One (1) Immersion Tank with a natural gas heater rated at 1.0 MMBtu/hr and a 7,150 gallon tank.
- b) Two (2) Stingray Cabinet Washers each equipped with a natural gas heater rated at 0.4 MMBtu/hr.
- c) Two (2) Block Washers each equipped with a 2.0 MMBtu/hr natural gas heater and 3,000 gallon tanks.
- d) One (1) Pre-wash Pressure Washer equipped with a 0.658 MMBtu/hr natural gas heater.

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

Source ID: 107

Source Name: CATERPILLAR EMERGENCY GENERATOR (500KW)

Source Capacity/Throughput:

8.600 MMBTU/HR

Natural Gas

PROC
107STAC
S107**I. RESTRICTIONS.****Fuel Restriction(s).**

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source 107 shall use only natural gas as a fuel.

Operation Hours Restriction(s).

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source 107 shall not exceed 500 hours of operations in a 12 month rolling period.

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.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Monthly records shall be kept of Source 107 hours of operation. Monthly totals shall be combined with totals from the eleven (11) previous months to calculate a twelve (12) month rolling total.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source 107 shall be equipped with a non-resettable hours of operation meter.

VII. ADDITIONAL REQUIREMENTS.

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

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

Group Name: TEST CELLS/DYNAMOMETERS

Group Description: ENGINE TEST CELLS/DYNAMOMETERS

Sources included in this group

ID	Name
101	ENGINE TEST CELL 1 (8,000-BHP)
102	ENGINE TEST CELL 2 (4,500-BHP)

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

Combined test cell/dynamometer engine runtime shall not exceed 1,200 hours per 12-month rolling period. Total runtime shall include all complete and partial test runs.

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

No more than 400 engine performance tests shall be conducted per consecutive 12-month rolling period.

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

Engine exhaust NO_x, CO, and O₂ shall be monitored continuously using a calibrated portable analyzer during each engine test run.

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

During each engine test run, test cell/dynamometer visible stack emissions shall be monitored using the following procedure:

1. Visible emissions observations shall be conducted by appropriately certified individual.
2. Visible emissions observations shall be conducted per the procedures specified in each test method and are to commence when the engine starter has been disengaged and the engine is running under its own power.
3. Each test cell exhaust stack shall be monitored for the presence or absence of visible emissions using EPA Method 22 during the first three (3) minutes of each engine test run. The observer must be prepared to conduct EPA Method 9 observations if necessary.
4. If visible emissions are observed at anytime from a test cell/dynamometer stack while conducting Method 22 observations, the observer must immediately commence visible emissions observations using the procedures established in EPA Method 9.
5. While visible emissions observations are being conducted using EPA Method 9, visible emissions readings shall be taken on each stack at intervals of fifteen (15) seconds and continue for a minimum of six (6) minutes, with additional consecutive periods of three (3) minutes each until no visible stack emissions are observed.

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

Engine exhaust NO_x, CO, and O₂ readings at 100%, 75%, 50%, and 25% shall be documented for each engine test run.

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

1. Records of test cell/dynamometer stack visible emissions observations shall be maintained in a log by calendar month and include the following:
 - a. Name of the observer
 - b. Date
 - c. Time
 - d. Engine Model # and Serial #
 - e. Indication of the presence or absence of visible emissions
 - f. If visible emissions are observed, the color of the emissions, probable cause, and any associated actions to eliminate the visible emissions.
2. For each set of EPA Method 9 test cell/dynamometer stack visible emissions observations conducted, an appropriately completed Visible Emissions Observation Form must be maintained and included with each calendar month log required above and include, at a minimum, the following information:
 - a. Name of the observer
 - b. Date
 - c. Time
 - d. Engine Model # and Serial #
 - e. All additional information required by EPA Method 9

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.**

Engine testing shall be conducted at all times by trained operators and in accordance with good operating and air pollution control practices.

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

On site performance testing shall include lean-burn natural gas fueled, a limited number of rich burn natural gas fueled or landfill gas-fired spark-ignition reciprocating internal combustion engines.

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
103	PAINT BOOTH/SURFACE COATING OPERATIONS		
Emission Limit			Pollutant
0.300	Tons/Yr	source total HAP emissions.	Hazardous Air Pollutants
0.230	Lbs/Gal	for applied primer coatings	VOC
0.370	Tons/Yr	solvent based paint thinners	VOC
1.130	Lbs/Gal	for top coating.	VOC
2.400	Tons/Yr	source total VOC emissions.	VOC
104	ARCSPRAY THERMAL SPRAY SYSTEM		
Emission Limit			Pollutant
0.040	gr/DRY FT3		TSP

Site Emission Restriction Summary

Emission Limit	Pollutant
----------------	-----------

**SECTION H. Miscellaneous.**

- a) The applicant has advised that some companies are insisting on using their own paints on rebuilt engines. This may be up to 40 engines per year. Paint usage will be up to three (3) gallons per engine of top coat and two (2) gallons per engine of primer. All of the coatings used will be compliant coatings and Cleveland Brothers will keep track of each coating used and VOC and HAP emissions. VOC emissions from these coatings are estimated to be less than 0.5 tons per year (tpy). Overall emissions from the painting operation should not change based on the reduction of engines from 600 to 400.
- b) The Cummins 600 kW emergency generator previously permitted will be replaced with a 500kW caterpillar Tier 2 Emergency Generator. Emissions from this generator will decrease because the generator is smaller.



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