



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: August 31, 2020

Effective Date: August 23, 2026

Revision Date: August 21, 2026

Expiration Date: February 23, 2027

Revision Type: Extension

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

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

Plan Approval No. 09-0262

Federal Tax Id - Plant Code: 23-0951065-1

Owner Information

Name: PENN ENG & MFG CORP

Mailing Address: PO BOX 1000
5190 OLD EASTON HWY
DANBORO, PA 18916-1000

Plant Information

Plant: PENN ENGR MFG CORP/DANBORO

Location: 09 Bucks County 09939 Plumstead Township

SIC Code: 3452 Manufacturing - Bolts, Nuts, Rivets, And Washers

Responsible Official

Name: JASON HERTZ

Title: PLANT MANAGER

Phone: (703) 507 - 3351

Email: jhertz@pemnet.com

Plan Approval Contact Person

Name: AMANDA YELNER

Title: EH&S SPECIALIST

Phone: (215) 766 - 8853 Ext.1179

Email: ayelner@pemnet.com

[Signature] _____

JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



Plan Approval Description

This Plan Approval is for the installation of an automated barrel plating system designated as source ID 102 (Electrolytic and electroless plating process) and a packed-bed scrubber designated as source ID C102 (Packed bed scrubber). The plating system is an acid zinc system and will be used to plate various metal parts and fasteners with zinc, and will also allow the facility to apply various trivalent chromium passivates or chromate conversion coatings to the electroplated zinc deposits. Emissions of PM, HNO₃, and HAPs are controlled by the packed bed scrubber (source ID C102) prior to exhausting to atmosphere.



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

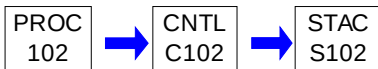
F-III: Monitoring Requirements
F-IV: Recordkeeping Requirements
F-V: Reporting Requirements
F-VI: Work Practice Standards
F-VII: Additional Requirements

Section G. Emission Restriction Summary

Section H. Miscellaneous

**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
102	ELECTROLYTIC AND ELECTROLESS PLATING PROCESS	N/A	
C102	PACKED BED SCRUBBER	N/A	
S102	SCRUBBER EXHAUST STACK		

PERMIT MAPS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Plan Approval Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Plan Approval Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

Regional Air Program Manager

PA Department of Environmental Protection

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

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

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

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

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

**SECTION B. General Plan Approval Requirements**

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

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

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

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

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

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

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

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

**SECTION C. Site Level Plan Approval Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

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

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

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;
- (c) use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets;
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (1) the emissions are of minor significance with respect to causing air pollution; and
 - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

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

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

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

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

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

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

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

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

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

- (a) When the presence of uncombined water is the only reason for failure to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

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

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

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

The total emission of HAPs shall be less than 10 tons/year for any single HAP and less than 25 tons/year for any combination of HAPs.

[If the facility exceeds these limits the facility will be subject to the requirements of 40 CFR Part 63 Subpart CCC].

008 [25 Pa. Code §129.14]**Open burning operations**

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

- (a) a fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer;
- (b) any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department;
- (c) a fire set for the prevention and control of disease or pests, when approved by the Department;
- (d) a fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation;
- (e) a fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure;
- (f) a fire set solely for recreational or ceremonial purposes; or
- (g) a fire set solely for cooking food.

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

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

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

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

The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining whether a malfunction has occurred or determining compliance with any applicable regulation

III. MONITORING REQUIREMENTS.**# 011 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (a) a device approved by the Department and maintained to provide accurate opacity measurements; or
- (b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

**SECTION C. Site Level Plan Approval Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

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

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

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

The permittee shall maintain sufficient records and perform calculations on a monthly and on a 12-month rolling basis to demonstrate compliance with the HAP limit for the entire site.

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 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; and
- (6) Corrective actions or preventative measures taken.

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

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

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

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

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

- (a) use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land;
- (b) application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts;
- (c) paving and maintenance of roadways; and
- (d) prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

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

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

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

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

VII. ADDITIONAL REQUIREMENTS.

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

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

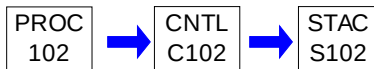
**SECTION D. Source Level Plan Approval Requirements**

Source ID: 102

Source Name: ELECTROLYTIC AND ELECTROLESS PLATING PROCESS

Source Capacity/Throughput:

N/A

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

No person may permit the emission of particulate matter into the outdoor atmosphere from this process in a manner such that the concentration of filterable particulate matter in the effluent gas exceeds 0.02 grain/DSCF.

[Compliance with this streamlined permit condition demonstrates compliance with the particulate matter emission limitation in 25 Pa. Code §123.13(c)(1)(i)].

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

(a) The permittee shall perform a stack test using the Department-approved procedures, to show compliance with the emission limits set for the source. The Source testing shall be performed within 180 days after startup of the source and/or control device. Source testing shall be performed for the following pollutants: filterable PM, HCl, HNO₃, HF, Chromium (elemental), Cobalt, Phosphorus, and zinc in gr/dscf and lbs/hr. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

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

(c) The stack test shall, at a minimum, test for filterable PM, HCl, HNO₃, HF, Chromium (elemental), Cobalt, Phosphorus, and zinc. Tests shall be conducted in accordance with the provisions of EPA method 5 (or equivalent) for filterable PM, EPA method 26A (or equivalent) for HCl, HNO₃ and HF, and EPA method 29 (or equivalent) for elemental Chromium, Cobalt, Phosphorus, and zinc, or other Department approved methodology and 25 Pa. Code Chapter 139.

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

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

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

[The Department reserves the right to include emission limits on other pollutants based on the stack test result upon incorporation into Operating Permit].

[If evidence is provided to the Department showing that the emissions of chromium (elemental), cobalt, phosphorus, and zinc, are below detection or non-existent, the Department may revise the testing requirement for these pollutants].

**SECTION D. Source Level Plan Approval Requirements****# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

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

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

1. Test Date(s)

- a. For protocols, provide the proposed date on which testing will commence or "TBD"
- b. For reports, provide the first and last day of testing

2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF Id under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

3. Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

4. Testing Requirements (all that apply)

- a. Plan approval number(s)
- b. Operating permit number
- c. Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)
- d. Special purpose(s) (Consent Order, RFD, RACT II, Tier II, etc.)

(c) Mail all paper submissions to both the PSIMS Administrator and the Air Quality Program Manager for the Southeast Regional Office. Mailing addresses are provided below.

Central Office
Pennsylvania Department of Environmental Protection
Attn: PSIMS Administrator
P.O. Box 8468
Harrisburg, PA 17105-8468

Southeast Region
Pennsylvania Department of Environmental Protection
Attn: Air Quality Program Manager
2 East Main Street
Norristown, PA 19401

(d) Eliminate shading, color ink for data emphasis, small font size, and color saturation as the scanning to create an electronic file is done in black and white. Shading and color emphasis do not scan well and make the electronic copies difficult to read.

(e) Email all electronic submissions to both the PSIMS Administrator in Central Office and the Air Quality Program Manager for the Southeast Regional Office. Email addresses are provided below.

Central Office
RA-EPstacktesting@pa.gov

Southeast Region
RA-EPSEstacktesting@pa.gov

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

(f) The Department limits emails to 15 MB and PSIMS has a file size limitation of 100 MB for electronic files. Submit just one electronic file (convert any Microsoft Word or Excel files to an Adobe PDF format and combine them with the report or protocol), unless the submission contains CONFIDENTIAL information.

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

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

The permittee shall monitor the following information on a daily basis when operating:

- (a) Start and end times;
- (b) Elapsed time;
- (c) Total loads per day.

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

The permittee shall maintain records of the following information on a daily basis when operating:

- (a) Start and end times;
- (b) Elapsed time;
- (c) Total loads per day.

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

The permittee shall keep records of all inspections and maintenance performed on this source in accordance with condition #014(a)(6) and (12).

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11506]**Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my compliance dates?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall prepare, no later than January 31 of the year immediately following the reporting period, according to 40 CFR § 63.11509(c)(7), an annual compliance certification and keep it in a readily-accessible location for inspector review, according to 40 CFR § 63.11508(d)(2).

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11509]**Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my notification, reporting, and recordkeeping requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall keep the following records, according to 40 CFR § 63.11509(e)(1) - (3) and (f):

- (a) A copy of any Initial Notification and Notification of Compliance Status that the permittee has submitted and all documentation supporting those notifications.
- (b) The records required to show continuous compliance with each management practice and equipment standard, as applicable.

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

(c) The permittee shall keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee shall keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1) of the General Provisions to part 63. The permittee may keep the records offsite for the remaining 3 years.

V. REPORTING REQUIREMENTS.**# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11509]****Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my notification, reporting, and recordkeeping requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall state in the annual certification that the applicable management practices, as practicable, have been implemented, according to 40 CFR § 63.11509(c)(6).

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11509]**Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my notification, reporting, and recordkeeping requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

(a) The permittee shall submit an Initial Notification prior to commencing operation of the source, in accordance to 63.11509(a).

(b) The Initial Notification must include the following items:

- (i) The name and address of the owner or operator;
- (ii) The address (i.e., physical location) of the affected source;
- (iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
- (iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted;
- (v) A description of the compliance method for each affected source.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11509]**Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my notification, reporting, and recordkeeping requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

(a) The permittee shall submit a Notification of Compliance Status upon initial startup, in accordance to 63.11509(b).

(b) The Notification of Compliance Status must include the following items:

- (i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources;
- (ii) Methods used to comply with the applicable management practices and equipment standards;
- (iii) Description of the capture and emission control systems used to comply with the applicable equipment standards;
- (iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements;

(c) If the facility makes a change to any items in (b)(2)(i), (iii), and (iv) of this section that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change.

**SECTION D. Source Level Plan Approval Requirements****# 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11509]****Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my notification, reporting, and recordkeeping requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall submit an annual compliance certification to the Administrator as follows:

(a) The permittee shall state in the annual compliance certification that the permittee has implemented the applicable management practices of 40 CFR § 63.11507(g), as practicable, according to 40 CFR § 63.11509(c)(6).

(b) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period, according to 40 CFR § 63.11509(c)(7).

(c) The permittee shall report any deviations from the compliance requirements specified in this subpart occurring during the year, along with the corrective action taken, and submit this report to the delegated authority, according to 40 CFR § 63.11509(d).

(d) These reports do not need to be submitted unless a deviation from the requirements of 40 CFR Part 63 Subpart WWWW has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report, according to 40 CFR § 63.11509(c).

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

The permittee shall perform inspections and maintenance in accordance with condition #014(a)(6) and (12) on this source on at least a monthly basis.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11507]**Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my standards and management practices?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

(a) The permittee shall implement the following applicable management practices, as practicable, according to 40 CFR § 63.11507(g).

(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.

(2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

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

- (8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.
- (9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.
- (10) Minimize spills and overflow of tanks, as practicable.
- (11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.
- (12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

(b) The permittee shall implement the applicable management practices during all times that the affected tank or process is in operation, according to 40 CFR § 63.11508(d)(8)(i).

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11508]**Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my compliance requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall always operate and maintain the affected source, including air pollution control equipment, according to 40 CFR § 63.11508(d)(1), as part of demonstrating continuous compliance with the applicable management practices and equipment standards.

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11508]**Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations****What are my compliance requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall implement the applicable management practices during all times that the affected tank or process is in operation, according to 40 CFR § 63.11508(d)(8)(i).

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

This source consists of twenty-two (22) tanks of which fourteen (14) are rinse tanks. Emissions from this line are vented to a Packed Bed Scrubber (source ID C102).

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

The permittee shall ensure that the operation of the electrolytic and electroless plating process (source ID 102) is only performed when the packed bed scrubber (source ID C102) associated with this source is in operation.

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

Source ID: C102

Source Name: PACKED BED SCRUBBER

Source Capacity/Throughput:

N/A

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.**# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall monitor the following on a daily basis, when the process is in operation:

- (a) The pressure drop across the overall packed bed scrubber;
- (b) The PH of the scrubber liquid;
- (c) Scrubber solution flow rate.

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

(a) The permittee shall record the following on a daily basis, when the process is in operation:

- 1. The pressure drop across the overall packed bed scrubber;
- 2. The PH of the scrubber liquid;
- 3. Scrubber solution flow rate.

(b) The permittee shall record all inspections/maintenance performed on this source, any deficiencies, and any corrective action taken.

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

- (a) This source shall be operated and maintained in accordance with manufacturer's specifications;
- (b) The permittee shall vent the exhaust from the Electrolytic and Electroless Plating Process to the packed bed scrubber;
- (c) The permittee shall operate the scrubbers between the differential range of 0.05" - 3" w.g;

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

- (d) The permittee shall maintain pH $\geq$ 5 for the pH scrubber liquid.
- (e) Flow rate shall not exceed 24,000 SCFM for the packed bed scrubber.

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.

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.



SECTION G. Emission Restriction Summary.

Source Id	Source Description
-----------	--------------------

Site Emission Restriction Summary

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

**SECTION H. Miscellaneous.**

AUTH #1310234 (Initial)

List of Miscellaneous sources:

- No. 2 natural gas-fired bake off ovens rated at 240,000 BTU/hr heat input; make: JPW Industrial Ovens and Furnaces; model No. HD496TUL480V30KW.
- Salt Fog cabinet; make: C&W Specialist Equipment; model: CW1002; exhaust from the salt fog cabinet will be treated by the packed bed scrubber (source ID C102).
- Plating line fume hood; make: PSA Laboratories; model: B-604; exhaust from the plating line fume hood will be treated by the packed bed scrubber (source ID C102).



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