

STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: January 15, 2019

Permit Number

Date Amended: May 2, 2019

975063

Date Expires: January 15, 2021

Facility ID: 54-0047

Issued To:

ABB Installation Products Inc.

Installation Address

260 Dennis Street

Athens

Installation Description

Electroplating Machine zinc coating and chromium conversion

(2) Wet Packed-Bed Scrubbers

Emission Source Reference No.

54-0047-16

40 CFR 63 Subpart WWWWWW

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Comprehensive Rules and Regulations (Tenn. Comp. R. & Regs.).

General Conditions

G1. The application that was utilized in the preparation of this permit is dated September 21, 2018 and is signed by Shane Sparks, the Plant Manager for the permitted facility. If this person terminates their employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

(conditions continued on next page)


TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

G2. Visible and Fugitive Emissions

- A. Visible emissions from this facility shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period, and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

Tenn. Comp. R. & Regs. 1200-03-05-.01(1) and 1200-03-05-.03(6)

- B. 1) No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:
- (a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
 - (b) Application of asphalt, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;
 - (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

2) No person shall cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Tenn. Comp. R. & Regs. 1200-03-20. Fugitive emissions from this source shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

Tenn. Comp. R. & Regs. 1200-03-08-.01(1) and 1200-03-08-.01(2)

- C. Visible emissions from roads and parking areas shall not exhibit greater than ten percent (10%) opacity utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982 and August 24, 1984.

Tenn. Comp. R. & Regs. 1200-03-08-.03

G3. Reserved

G4. Routine Maintenance Requirements

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than two (2) years. The date each maintenance and repair activity began shall be entered in the log no later than thirty (30) days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than thirty (30) days from activity completion.

G5. General Recordkeeping Requirements

A. The following recordkeeping requirements shall apply to this facility:

- 1) For monthly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than thirty (30) days from the end of the month for which the data is required.
- 2) For weekly recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven (7) days from the end of the week for which the data is required.
- 3) For daily recordkeeping, all data, including the results of all calculations, must be entered into the log no later than seven (7) days from the end of the day for which the data is required.
- 4) All maintenance activities required by **Condition G4** (including any ongoing maintenance that has not been completed) shall be entered in the maintenance log no later than thirty (30) days following the start of the maintenance.

B. Logs and records specified in this permit shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative and shall be retained for a period of not less than two (2) years unless otherwise noted. Logs and records contained in this permit are based on a recommended format. Any logs that have an alternative format may be utilized provided such logs contain the same or equivalent information that is required. Computer-generated logs are also acceptable.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

G6. Other State and Federal Regulations

This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, all applicable provisions of the Tennessee Air Pollution Control Comprehensive Rules and Regulations, federal regulations published under 40 CFR 61 and 40 CFR 63 for sources of hazardous air pollutants, and federal regulations published under 40 CFR 60, New Source Performance Standards.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

G7. Startup, Shutdown, and Malfunction Requirements

A. The facility must take all reasonable measures to keep emissions to a minimum during source startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Tenn. Comp. R. & Regs. 1200-03-20-.02(1)

B. **Monitoring Systems:** Due allowance for failure to monitor shall be made during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Technical Secretary, that the malfunction was unavoidable and is being repaired as expeditiously as practicable, and that a log of all such malfunctions is being kept by the owner or operator, including the time the malfunction began, when it was detected, what was wrong, what was done to correct the malfunction, and when the malfunction was corrected. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Tenn. Comp. R. & Regs. 1200-03-10-.02(e)

G8. Excursions

All excursions from indicated parameter limits or ranges shall be recorded in a permanent suitable format and retained at the source location for a period of not less than two (2) years.

The record of excursions shall include, at a minimum, the time the excursion was discovered, the corrective action taken, and the time that the process was back within the normal operating range.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

“Excursion” shall mean a departure from an indicator range established for monitoring, consistent with any averaging period specified for averaging the results of the monitoring.

G9. Application and Agreement Letters

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application referenced in Condition G1, and any documented agreements made with the Technical Secretary.

Tenn. Comp. R. & Regs. 1200-03-09-.01(1)(d)

G10. Permit Transference

A. This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location.

Tenn. Comp. R. & Regs. 1200-03-09-.03(6)(b)

B. In the event an ownership change occurs at this facility, written notification of the ownership change requesting a permit amendment must be submitted to the Technical Secretary no later than thirty (30) days after the change occurs. This notification must include an agreement to abide by the terms of the permit, Division 1200-03 and Division 0400-30 of the Tennessee Comprehensive Rules and Regulations, the Tennessee Air Quality Act, and any documented agreements made by the previous owner to the Technical Secretary.

Tenn. Comp. R. & Regs. 1200-03-09-.03(6)(a)

G11. Operating Permit Application Submittal

The permittee shall apply for an operating permit within thirty (30) days of initial start-up of this new or modified emission source. If construction of the source cannot be completed and an operating permit application cannot be filed with the Technical Secretary by the expiration date of this permit, a permit extension request must be submitted in writing at least thirty (30) days prior to the permit expiration date unless a different time frame is approved by the Technical Secretary.

Tenn. Comp. R. & Regs. 1200-03-09-.02(1) and 1200-03-09-.02(3)

G12. Temporary Operating Permit

A. This permit shall serve as a temporary operating permit from the date of issuance to the receipt of a standard operating permit, provided that an operating permit application is filed in a timely manner as required by condition G11.

Tenn. Comp. R. & Regs. 1200-03-09-.02(2)

- B. Operation of each air contaminant source shall be in accordance with the provisions and stipulations set forth in the operating permit, all provisions of the Tennessee Division of Air Pollution Control Comprehensive Rules and Regulations, and all provisions of the Tennessee Air Quality Act.

Tenn. Comp. R. & Regs. 1200-03-09-.02(6)

G13. Fees

This source shall comply with the requirements for payment of applicable annual emission fees to the Tennessee Division of Air Pollution Control based on the Administrative Fees Schedule detailed in Tenn. Comp. R. & Regs. 1200-03-26 of the Tennessee Air Pollution Control Regulations.

Tenn. Comp. R. & Regs. 1200-03-26-.02

G14. Reserved

G15. Startup Certification

The completed startup certification in Appendix 1 shall be submitted to the Permitting Program at the address listed below or via e-mail, no later than thirty (30) days after each air contaminant source is started-up.

Tennessee Dept. of Environment & Conservation
Division of Air Pollution Control
Permitting Program
William R. Snodgrass TN Tower, 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243

Adobe Portable Document Format (PDF)
or Copy to: Air.Pollution.Control@TN.gov

Tenn. Comp. R. & Regs. 1200-03-09-.02(3)(b)

Source 54-0047-01: Jessup Plater Electroplating Machine Non-Cyanide Alkaline Zinc Plating; 2 Wet Packed-Bed Scrubbers

S1-1. Input Limitation(s)

- A. The maximum processing rate for this source shall not exceed 10,800 pounds per hour (lbs/hr), on a monthly average basis.

Tenn. Comp. R. & Regs. 1200-03-.01(1)(d) and either the agreement letter dated January 2, 2019

Compliance Method: Compliance with this rate shall be demonstrated by maintaining a log of the material input rate in a form that readily shows compliance with this condition (see example below). Monthly data must be entered in the monthly log no later than thirty (30) days from the end of the month for which the data is required. This log must be maintained at the source location and kept available for inspection by the Technical Secretary or representative. The log must be retained for a period of not less than two (2) years.

Month/Year	Pounds Processed (lbs/month)	Hours of Operation	Pounds per hour (lbs/hr)	Comments
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Total				

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

S1-2. Reserved

S1-3. Reserved

S1-4. Emission Limitations

Particulate matter (PM) emitted from this source shall not exceed 0.0075 pounds per hour (lbs/hr) and .0327 tons per year (tons/yr).

Tenn. Comp. R. & Regs. 1200-03-09-.01(1)(b) and agreement letter dated January 2, 2019

Compliance method: Compliance with this limit shall be assured by daily inspection and recordkeeping of scrubbing liquid flow rate (gallons per minute) when this source is in operation. The minimum scrubber liquid flow rate shall be determined according to the requirements below. Upon determination of the minimum flow rate, this parametric monitoring value shall be added to this permit by an amendment. For daily logs, all data shall be recorded in the log within seven (7) days of the end of the day for which the data is required. These records must be retained for a period of not less than five (5) years. An example log has been provided for use after this source has been started up.
Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a).

Month: Year:

Day	scrubbing liquid flow rate (gallons per minute)	Is the source in operation (yes or no)?

For the packed bed scrubber controlling this source, the permittee shall begin to measure and record the scrubber liquid flow rate within sixty (60) days of source start-up. Sixty (60) days of liquid flow rates (gallons per minute) for the scrubber shall be compiled. One reading per day of the scrubber liquid flow rate shall be recorded. Any relevant scrubber conditions/problems/concerns shall be noted when recording the values. This data shall be submitted to the Division at one of the addresses in **condition G15**, along with a proposed minimum liquid flow rate for the scrubber, by no later than thirty (30) days after the sixty (60) days of readings are completed.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

S1-5. Reserved

S1-6. This source shall be operated in compliance with all applicable requirements of 40 CFR Part 63, Subpart WWWW (6W) – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, including, but not limited to, Conditions S1-6A through S1-6E. The permittee shall comply with the applicable General Provisions of 40 CFR 63 that apply to Subpart WWWW, as indicated in the table found in Appendix 2.

A. Pursuant to 40 §CFR 63.11507(g), the permittee of an affected existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAPs, applicable management practices listed in paragraphs (a) through (l) of this condition, must be implemented as practicable.

- (a) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.
- (b) 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.
- (c) Optimize the design of barrels, racks, and parts to minimize drag out 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.
- (d) Use tank covers, if already owned and available at the facility, whenever practicable.
- (e) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).
- (f) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.
- (g) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/di-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing or pre-treated parts to be plated, as practicable.
- (h) Maintain quality control of chemicals all bath ingredient concentrations in the tanks, as practicable.

- (i) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic wash-downs, as practicable.
- (j) Minimize spills and overflow of tanks, as practicable.
- (k) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.
- (l) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

- B.** Pursuant to 40 CFR §63.11508(b), the permittee must be in compliance with the applicable management practices and equipment standards in 40 CFR Part 63 Subpart 6W at all times.

Tenn. Comp. R. & Regs 1200-03-09-.03(8)

- C.** Pursuant to 40 CFR §63.11508(d), in order to demonstrate continuous compliance with the applicable management practices and equipment standards, specified in 40 CFR Part 63 Subpart 6W, the permittee must satisfy the requirements specified in paragraphs (a) through (d) of this condition.

- (a) The air pollution control equipment must be maintained and in operation during the operation of the affected source;
- (b) The permittee must prepare an annual compliance certification according to the requirements specified in §63.11509(c), “Notification, Reporting, and Recordkeeping,” and keep it in a readily-accessible location for inspector review.
- (c) The permittee must demonstrate continuous compliance with the applicable management practices stated in condition S1-6A according to provisions (i) and (ii).
 - (i) The permittee must implement the applicable management practices during all times that the affected tank or process is in operation.
 - (ii) The permittee must state in the annual compliance certification that the applicable management practices have been implemented, as practicable.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

- D.** Pursuant to 40 CFR §63.11509(e), the permittee must keep the records specified in paragraphs (a) through (c) of this condition.
- (a) A copy of any Initial Notification and Notification of Compliance Status that was submitted and all documentation supporting those notifications.
 - (b) The records specified in 40 CFR § 63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of 40 CFR Part 63.
 - (c) The records required to show continuous compliance with each management practice and equipment standard that applies, as specified in 40 CFR §63.11508(d)

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

- E.** Pursuant to 40 CFR §63.10(b)(1), the permittee of an affected source subject to the provisions of 40 CFR Part 63 shall maintain files of all information (including all reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be retained on site. The remaining three (3) years of data may be retained off site.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8) and 1200-03-10-.02(2)(a)

Appendix 1: Startup Certification

Start Up Certification – submit one for each source included in this permit

Start Up Certification for Source ____ - ____ - ____

The permittee shall certify the initial start-up date(s) of the new or modified air contaminant source(s) regulated by this permit by submitting

A COPY OF THE FRONT PAGE OF THIS PERMIT,

with the information required in A) and B) of this certification completed, to the Technical Secretary's representatives listed below:

A) DATE OF INITIAL START-UP: ____ / ____ / ____
month day year

B) Anticipated operating rate: ____ percent of maximum rated capacity

For the purpose of complying with this condition, "initial start-up" of the air contaminant source shall be the date the new or modified source began operation for the production of product for sale, use as raw materials, or steam or heat production under the terms of this permit.

The undersigned affirms that this person has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further affirms that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is not an application for an operating permit. At a minimum, the appropriate application form, usually an APC-100, must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be submitted to the Permit Program at the address listed below or via e-mail, no later than thirty (30) days after the air contaminant source is started-up.

TN Dept. of Environment and Conservation
Attn: Permit Program
Division of Air Pollution Control
William R. Snodgrass TN Tower, 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243

or Adobe Portable Document Format (PDF)
Copy to: Air.Pollution.Control@TN.gov

Tenn. Comp. R. & Regs. 1200-03-09-.02(3)(b)

(end of conditions)

Appendix 2: General Provisions for 40 CFR 63 Subpart WWWWWW

You are required to comply with the following General Provisions of the federal National Emission Standards for Hazardous Air Pollutants (NESHAP):

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
63.1	Applicability	Yes	
63.2	Definitions	Yes	
63.3	Units and Abbreviations	Yes	
63.4	Prohibited Activities and Circumvention	Yes	
63.5	Preconstruction Review and Notification Requirements	No	
63.6(a), (b), (c)	Compliance with Standards and Maintenance Requirements—Applicability Compliance Dates	Yes	
63.6(e)	Operation and Maintenance Requirements	No	
63.6(f), (g), (i), (j)	Compliance with Non-opacity Emission Standards	No	
63.7(a), (e), (f), (g), (h)	Performance Testing Requirements	No	
63.8	Monitoring Requirements	No	
63.9	Notification Requirements	No	
63.10	Recordkeeping and Reporting Requirements	Yes	
63.11	Control Device Requirements	No	
63.12	State Authorities and Delegations	Yes	
63.13	Addresses	Yes	
63.14	Incorporations by Reference	Yes	
63.15	Availability of Information and Confidentiality	Yes	
63.16	Performance Track Provisions	No	

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

The permit application gives the location of this source as 35°44'11" Latitude and -84°62'92" Longitude.

AMENDMENT #1: The purpose of this amendment is to fix minor wording and typos. Also, the agreement letter was included as attachment #1.

ATTACHMENT 1

AGREEMENT LETTER

Dated January 2, 2019

Thomas & Betts Corporation
Electrical Division
260 Dennis Street
Athens, Tennessee 37303
(423) 745-8588
Facsimile (423) 745-8545

Thomas & Betts

January 2, 2019

Department of Environment & Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Attn: Mr. Neal Colaric

Mr. Colaric:

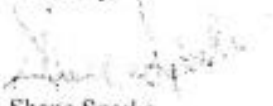
In reference to the permit application #975063, our facility would like to enter into an agreement that our emissions would not be greater than the total PM (particulate matter) calculated on page 14 of the permit. I have attached a copy of page 14 for reference.

The calculations included in the permit application #975063 are from AP-42 Chapter 12.20. The emission factor for particulate matter is 2.46E-06 calculated using the published emission factor for controlled hard chromium electroplating (2.10E-05).

The proposed volume through the electroplater is 15 loads per hour with each load weighing 720 pounds, for a total of 10,800 pounds per hour.

If you have any questions or concerns please contact me at (423)745-6588 or at shane.sparks@us.abb.com.

Sincerely,



Shane Sparks
Plant Manager