



**STATEMENT OF BASIS**  
**Page 1 of 3**  
BAQ Air Permitting Division

<b>Company Name:</b>	AVX Corporation	<b>Permit Writer:</b>	Wanda Parnell
<b>Permit Number:</b>	CM-1340-0002	<b>Date:</b>	February 7, 2019

**DATE APPLICATION RECEIVED:** October 5, 2018

**FACILITY DESCRIPTION**

AVX Corporation (AVX) manufactures electronic capacitor chips for various clients in the electronics industry. The process involves electrode ink and ceramic raw material processing, chip buildup, green chip processing, QA/QC, and ancillary support.

**PROJECT DESCRIPTION**

AVX is planning for the relocation of a Single Layer Capacitor (SLC) operation from the Jacksonville, FL facility to operations at the Myrtle Beach, SC facility. In an application package received on October 5, 2018, the following activities were addressed in detail.

- The relocated SLC JAX operation is a small, resistive capacitor manufacturing process consisting of two main steps, Wet Bench (fume hood) followed by Electroplating. This Wet Bench step has a potential emission rate of 0.5 TPY VOC and has been deemed exempt from construction permitting; see SC DHEC BAQ letter dated 01/07/2019.
- The facility suggests the operating permit include the following changes made since the last permit modification:
  - (1) Remove the RMM Department (Unit ID 014). This process and the associated fabric filters have been decommissioned and are no longer in operation;
  - (2) Reduce the number of mixing Machines from 35 to 8 and milling Machines from 18 to 5 (Unit ID 015), CMAP Machines (buildup) from 18 to 4 (Unit ID 017), Dry Dicing Machines from 4 to 2 (Unit ID 018), Plating Lines from 2 to 1, Termination Ovens from 5 to 4 (Unit ID 019);
  - (3) Correct the number of Soldering Stations from 5 to 6 (Unit ID 021); and
  - (4) Add the new SLC JAX Non-lead Electroplating Line (Equipment ID SLCJAXE) under Unit ID 020. This portion of the SLC operation is subject to the applicable requirements of 40 CFR 63 Subpart WWWW and is therefore, not exempt from construction permitting.
- The facility has notified the BAQ of the following updates to the facility-maintained Exempt Sources List:
  - (1) Removed the RMM Department (Unit ID 014);
  - (2) Removed the three (3) Bead mill Mixers (Unit ID 015);
  - (3) Removed the Screen Room and three (3) Screen Wash Stations (Unit ID 016);
  - (4) Reduced the number of Ovens from 30 to 15, Low Temperature Ovens from 11 to 5, Low Temperature Chip Dryers from 2 to 1, and Firing Kilns from 20 to 9 (Unit ID 018);
  - (5) Increased the Labeling Lasers from 4 to 5 and removed the Copper Plating System (Unit ID 019);
  - (6) Added the Non-lead SBE Plating Line and Thin Film Hybrid Circuit Process equipment (Unit ID 020) from the April 2016 application to the Exempt Sources list;
  - (7) Added the Wet Bench (Equipment ID SLCJAXWB) process under Unit ID 020. This process is part of the SLC operation, which was relocated from the Jacksonville, FL facility;
  - (8) Removed 565 kW diesel-fired emergency engine (Unit ID 021); and
  - (9) Added the Conway SLC and Dipguard equipment from the April 2016 application.



**STATEMENT OF BASIS**  
**Page 2 of 3**  
 BAQ Air Permitting Division

<b>Company Name:</b>	AVX Corporation	<b>Permit Writer:</b>	Wanda Parnell
<b>Permit Number:</b>	CM-1340-0002	<b>Date:</b>	February 7, 2019

- The facility has discovered that the Spouted Bed Electroplating (SBE) line installed at the Thin Film Process (Equipment ID TFSBE, Unit ID 020) contains a nickel/gold electroplating solution. Installation of this TFSBE plating line was communicated to SC DHEC in February 2016 and, at that time, was thought to be a solution of gold only. Updated rates for the addition of nickel emissions from this line and other nickel emission sources facility-wide (Unit ID 019 Metallization SBE lines, Unit ID 020 Thin Film SBE line, Unit ID 020 Thin Film Hybrid Circuit Process electroplating, and the new Unit ID 020 SLC JAX electroplating) have been provided.

Note that most of the removed equipment is no longer on site. One mixing machine (Unit ID 015) has been decommissioned in place. This project will update the Conditional Major Operating Permit and modeling attachment, accordingly.

**OPERATING PERMIT STATUS**

This facility operates under a Conditional Major Operating Permit issued on August 18, 2015, effective on October 1, 2015, expires on September 30, 2025. The facility is a potential major source for VOC emissions; however, a federally enforceable emission limitation of less than 100 TPY VOC for Title V avoidance was established on August 18, 2015.

REGULATORY APPLICABILITY REVIEW	
Regulations	Comments/Periodic Monitoring Requirements
Standard No. 4	(Applicable) The SLC JAX process has opacity limit (including any fugitives) of 20% and particulate matter (PM) allowable emission rates (based on a process weight rate in tons per hour) imposed by this standard. See Standard No. 4 table below.
40 CFR 63 and 61-62.63	This facility is an area source of HAP emissions (PTE is less than 10 TPY single HAP or less than 25 TPY total HAP).  (Applicable) The SLC JAX electroplating (Equipment ID SLCJAXE) has the potential to emit Nickel, which is a federal HAP. Therefore, Subpart A General Provisions and Subpart WWWW NESHAP: Area Source for Plating and Polishing Operations are applicable to the electroplating portion of the process. The facility is currently maintaining compliance with this rule, as it is also applicable to other electroplating HAP sources at the facility. This compliance program will be expanded to include the new SLC JAX electroplating.
There are no other changes in the current regulatory applicability as a result of this project.	

Standard No. 4 Allowable					
Process	Process Weight Rate (tons/hr)	PM Allowable (lb/hr)	Uncontrolled Emissions PM (lb/hr)	Controlled Emissions PM (lb/hr)	Monitoring
SLC JAX	0.9	0.955	3.89E-03	3.89E-03	None required



**STATEMENT OF BASIS**  
**Page 3 of 3**  
BAQ Air Permitting Division

<b>Company Name:</b>	AVX Corporation	<b>Permit Writer:</b>	Wanda Parnell
<b>Permit Number:</b>	CM-1340-0002	<b>Date:</b>	February 7, 2019

<b>AMBIENT AIR STANDARDS REVIEW</b>	
<b>Regulations</b>	<b>Comments/Periodic Monitoring Requirements</b>
Standard No. 2	This facility has demonstrated compliance through modeling. See Modeling Summary dated 11/16/2018.
Standard No. 8 (state only)	This facility has demonstrated compliance through modeling for all TAP. See Modeling Summary dated 11/16/2018.

**PUBLIC NOTICE**  
A public notice was not required for this revision.

**SUMMARY AND CONCLUSIONS**  
It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.