



Department Decision

Air Construction Permit No. 2060-0487-Denial

**Marvin W. and Barbara Brown d/b/a
Custom Works Plating and Polishing
18 S. Main Street
Inman, SC 29349**

August 17, 2009

In accordance with the provisions of the amended appeal process for the South Carolina Department of Health and Environmental Control (DHEC or Department) decisions in 2006 Act No. 387, Section 44-1-60(D), and the 1976 Code of Laws of South Carolina, as amended, a Department Decision has been made to deny Air Quality Construction Permit Application No. 2060-0487 to the above-named permittee.

DHEC's decision to deny this permit application has been made after consideration and a complete review of the following: the air permit application, applicable state and federal air quality regulations, actions taken by Marvin W. and Barbara Brown d/b/a Custom Works Plating and Polishing, inspection reports, court actions and all other pertinent information.

The Department's Bureau of Air Quality received, on May 18, 2009, an air permit application from Marvin W. and Barbara Brown d/b/a Custom Works Plating and Polishing (Custom Works) to relocate to 4511 S. Pine Street, Spartanburg, and to permit the plating operations. The processes that Custom Works proposes to construct and operate are subject to both state and federal air regulations.

The Department has reviewed Custom Works' ongoing activities at various locations and found the following.

1. Custom Works began operation in 1995 in Lyman, S.C. (511 Inman Road, Lyman, SC).
2. On January 29, 2000, SC DHEC was notified of a fire and chromic acid chemical spill at the Lyman facility. The Department conducted an inspection of the facility, then determined and informed Custom Works that its operations were subject to federal and state regulations, including National Emission Standards for Hazardous Air Pollutants (NESHAP),¹ Subpart N, National Emission Standards For Chromium Emissions From Hard And Decorative Chromium Electroplating And Chromium Anodizing Tanks. No records of NESHAP compliance were available at the site for inspection, as is required by 40 CFR 63.346 and Subpart A-General Provisions.
3. The Department notified Custom Works on February 15, 2000, that Custom Works was operating without a permit in contravention of the S.C. and federal air regulations.
4. On June 13, 2000, a “Notice of Violation and Enforcement Conference” (Notice) was issued to Custom Works. The Notice included an air permit application package for Custom Works to complete and submit to the Department.
5. The enforcement conference was held on July 06, 2000. The Department determined to issue a “No Further Action” letter to Custom Works based upon a representation that Custom Works had contacted and was working with DHEC’s Small Business Assistance Program (SBAP) to obtain assistance either in completing the necessary permit application forms or seeking an exemption. The “No Further Action” letter was issued January 22, 2001.
6. On January 08, 2001, Custom Works was issued a warning letter for hazardous waste reporting violations. These deficiencies had not been corrected by a February 07, 2001 follow-up review.
7. On June 27, 2001, Custom Works submitted a request to the Department to exempt the process from obtaining an air permit. This request was denied on October 05, 2001.
8. From October, 2001 to March, 2002, DHEC’s Small Business Environmental Assistance Program (SBEAP), formerly SBAP, worked with Custom Works to assemble a complete application package. SBEAP reviewed drafts of Custom Works’ application, assisted with emission calculations and supplied a list of SC registered Professional Engineers (PEs) to Custom Works. A SC PE signature is required for an air application to be determined administratively complete. The Department notified Custom Works through a letter in March, 2001, that additional information was needed to further process an application, including the SC PE stamp and signature. As no complete application was submitted, no air permit was processed.
9. The Department inspected Custom Works on November 18, 2005. Custom Works was then operating at 117 High Street in Duncan, SC. Custom Works had moved to that location in March, 2002. The inspection revealed that the facility was operating without the proper air construction and operating permits. It is unknown when the Lyman operation actually shut down; however, records indicate it was no longer operable in November, 2005.

¹ NESHAP, Subpart N, became effective, Jan. 25, 1995. 60 FR 4963

10. On December 15, 2005, the Department issued Custom Works a “Notice of Violation/Notice of Enforcement Conference” for failing to obtain department-issued air permits prior to installing and operating sources of air contaminants. An enforcement conference was held in Spartanburg on January 12, 2006. On February 06, 2006, the Department mailed Custom Works an initial Consent Order addressing the violations, followed by repeated attempts to explain and resolve the enforcement action.
11. Finally, on December 1, 2006, Department Consent Order (CO) 06-079-A was executed, with Barbara Brown signing as the owner for Custom Works. The CO required Custom Works to: 1) submit an application for a construction permit to the Department within 30 days of issuance of the order (by January 01, 2007); 2) henceforth apply for and obtain required permits prior to installing, operating or modifying sources of air pollutants; 3) maintain compliance with all regulatory recordkeeping and reporting requirements; and 4) remit a \$5,000.00 civil penalty.
12. From September 25, 2006, through March 01, 2007, the Department called Custom Works 21 times. Four of those times they spoke with a Custom Works representative; the remainder of the calls were not returned.
13. The Department did not receive the permit application, nor was the penalty paid, despite an extension to February 26, 2007, granted to Custom Works following Barbara Brown’s assertion that she had contacted a consultant. Custom Works continued to operate in violation of applicable regulations.
14. On May 14, 2007, the Department’s Office of General Counsel sent Custom Works a letter demanding compliance or the Department would proceed with legal action. Custom Works continued to operate in violation of applicable regulations.
15. On July 30, 2007, the Department filed a summons and complaint in the Circuit Court for Spartanburg County and served the summons and complaint on Custom Works. After the owners failed to file an answer to the Summons and Complaint within 30 days, as required by the South Carolina Rules of Civil Procedure, the Department filed a Motion for Default Judgment.
16. At a March 06, 2008, motions hearing, Judge Hayes ordered Custom Works to submit a complete air construction permit application to the Department within 30 days and ruled that a hearing on the \$5,000 civil penalty would take place at a later date.
17. On April 09, 2008, the Department, after a delay in service of the Judge’s order, granted Custom Works an extension until April 28, 2008, to submit the complete application. Additionally, a Department Regional representative observed signs for “Custom Works Plating” in a storefront in downtown Inman indicating another possible relocation of the Brown’s operations.
18. On April 25, 2008, Custom Works contacted DHEC’s SBEAP, and requested a list of SC registered Professional Engineers and a copy of the air construction permit application package Custom Works had sent to SBEAP in 2001. The SBEAP supplied Custom Works with the requested information.

19. Also, on April 25, 2008, Department Regional inspectors visited both the 117 High Street, Duncan location and the 511 Inman Road, Lyman location. At the 117 High Street, Duncan location, the operation was closed and all equipment had been moved, but the Department noted concerns of potential contamination of the property. At the 511 Inman Road, Lyman location, DHEC Regional hazardous waste inspectors observed drums in front of a storage building behind the residence. Several drums containing unknown contents were observed, as well as stains on the asphalt and soil. A warning letter was issued to Custom Works requesting a Waste Determination and proper disposal to be completed on all containers, and spillage to be cleaned up by June 3, 2008.
20. On May 01, 2008, Department Regional inspectors inspected Custom Works' new location at 18 South Main Street in Inman, S.C. The inspectors determined that Custom Works had installed equipment for decorative chrome plating, metal finishing, and powder coating processes. The plating tanks were electrically wired, but not in operation. The inspection indicated that Custom Works was again in violation of South Carolina Air Pollution Control Regulations for installing sources of air contaminants without obtaining Department-issued air permits. The Department informed Custom Works it was again in violation and needed proper air construction and operating permits.
21. On May 27, 2008, the Department and on May 28, 2008, the Environmental Protection Agency responded to several complaints and one Emergency Response call regarding material being dumped/spilled on the roadway in Lyman, S.C. It was later determined that the hazardous constituent of the material spilled on 13 miles of roadway was hexavalent chromium.
22. On May 28, 2008, Marvin W. (Billy) and Barbara, owners of Custom Works, were arrested and indicted for the intentional dumping of this material. An Order for Bond Reduction was set, with conditions. One of the conditions of Barbara Brown's bond stipulates that she is to have "no contact with hazardous waste."
23. On October 28, 2008, the City of Inman granted Custom Works a business license to perform powder coating and polishing only, and no chroming or re-chroming services.
24. On March 16, 2009, Inman City Council held a special meeting and a hearing to consider whether to revoke Custom Works' business license. During the hearing, Custom Works' owner Barbara Brown stated that she was conducting chrome electroplating at her home. Custom Works has no air permit to construct and operate such a process. The City Council voted to revoke Custom Works' business license for reasons including the presence and storage of chemicals and equipment for chrome plating located at the Custom Works' premises at 18 South Main Street, Inman, S.C.
25. On April 6, 2009, Custom Works contacted the Department Regional office to inquire about transportation requirements for a vat of chrome plating solution prior to moving to the new location on Pine St, Spartanburg. On April 10, 2009, the Department gave Custom Works two options to address the removal of the material: 1- provide verification, with bill of lading, that someone has purchased the material, or 2- if the material is unmarketable, determine it is hazardous waste and make arrangements for disposal using a permitted hazardous waste transporter. No response has been submitted to date.

26. On May 18, 2009, the Department received an air construction permit application for construction and operation of a decorative chromium electroplating, and nickel and copper plating processes at a fourth location.
27. On June 4, 2009, Department Regional inspectors met with Custom Works at the 18 S. Main Street, Inman location. Custom Works stated that they had not operated in this location due to lack of issued permits, but evidence of plating residue was visible on the floor between vats of plating solution. Custom Works was reminded that a response was needed to address disposal of the chrome tank contents.
28. From February, 2000 to present, at least nine inspections, visits or reviews were conducted by Department Regional Hazardous Waste or Air Quality Inspectors at the 511 Inman Road, Lyman address. From March, 2002 to present, at least nine inspections, compliance assistance visits or reviews were conducted by Department Regional Hazardous Waste or Air Quality Inspectors at the 117 High Street, Duncan address. From May, 2008 to present, at least fifteen inspections, compliance assistance visits or reviews were conducted by Department Regional Hazardous Waste or Air Quality Inspectors at the 18 S. Main Street, Inman address. These actions by the Department were all attempts to compel Custom Works' compliance with the applicable laws and regulations.
29. To date, no compliance certification or modeling has ever been received, even though the record shows that the Browns have operated Custom Works at various locations over an extended period. The Department has received no notifications or reports from Custom Works that would demonstrate compliance with applicable regulatory standards. Additionally, no records have been available on site to demonstrate compliance with applicable regulatory standards for this process type.

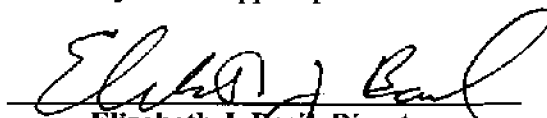
In summary, Marvin W. and Barbara Brown d/b/a Custom Works have operated a decorative chromium electroplating process from three separate South Carolina locations: 511 Inman Road in Lyman, 117 High Street in Duncan, and 18 South Main Street in Inman. The Browns are currently seeking to operate at a fourth location. Starting in January, 2000, the Department notified Custom Works repeatedly that air construction and operating permits were required for this process and that construction and operation without such air permits is a violation of state and federal regulations. Department notifications have included, Notices of Violation, Consent Orders, demand letters, and a complaint in Circuit Court. No air construction permit application was received until May 18, 2009. The air construction permit application does not address compliance with S.C. R. 61-62.5, Standard No. 2 Ambient Air Quality Standards, Standard No. 7 Prevention of Significant Deterioration (minor source modeling analysis) or Standard No. 8 Toxic Air Pollutants.

Federal EPA and state regulations establish standards for processes that emit hazardous air pollutants in order to reduce the public health risk associated with the hazardous air pollutant. Chromium electroplating and anodizing tanks are significant emitters of chromic acid, the principal ingredient in chromium electroplating. Chromic acid is a hexavalent chromium compound. Hexavalent chromium has been classified as a known human carcinogen by both the International Agency for Research on Cancer and the National Toxicology Program. 40 CFR 63 (NESHAP) Subpart N was established to regulate hexavalent chromium compounds in the hard chromium electroplating, decorative chromium electroplating, or chromium anodizing processes. Subpart N sections for decorative electroplating require monitoring, recordkeeping, and reporting to reduce

emissions, and so a facility can demonstrate they are in continuous compliance with the standard. This includes the following requirements:

- Notice of Compliance Status to the Department from the facility to state they are meeting operational standards or have conducted a source test demonstrating compliance with the emission limit.
- Semiannual summary reports to the Department to document the ongoing compliance status of the operations or to report exceedances, and on-site annual summary reports to document ongoing compliance.
- Recordkeeping: Inspection and maintenance records for monitoring equipment; records of occurrence, duration, and cause of each malfunction of process and monitoring equipment; records of monitoring data; records of the date and time that fume suppressants are added to the bath; total process operating time.
- Operation and Maintenance Plan: Prepare an operation and maintenance plan (O&M Plan) that specifies the O&M criteria for the process and monitoring equipment. The O&M Plan shall include a checklist to document the O&M of the equipment. The O&M Plan shall specify procedures to ensure equipment or process malfunctions due to poor maintenance do not occur; include a systematic procedure for identifying malfunctions of process and monitoring equipment; and include a procedure for implementing corrective actions to address malfunctions. Decorative electroplating facilities are required to follow the monitoring equipment manufacturer's recommendations for O&M.
- Compliance monitoring: Frequent measurements must be taken to demonstrate the control option is functioning properly.

The Browns d/b/a Custom Works have a record of long-standing noncompliance including, operations in violation of both state and federal regulations, repeated construction and operation without air permits, violation of a signed Consent Order, and ignoring a March 6, 2008 Circuit Court order. Therefore, based upon this history of noncompliance and repeated unpermitted activity and submission of an incomplete permit application, it is the Department's determination that Marvin W. and Barbara Brown d/b/a Custom Works have demonstrated that they are unable and unwilling to comply with State and Federal air regulations and the South Carolina's Pollution Control Act. In accordance with Title 48 of the SC Code of Laws, Section 48-1-50, and in order to protect the public health and the environment the Department is denying the request by Marvin W. and Barbara Brown d/b/a Custom Works to construct and operate the electroplating and polishing process, which includes pretreatment, alkaline and acid dip tanks, copper and nickel plating tanks, decorative chrome plating tank and any other support processes.


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