

**ENGINEERING ANALYSIS
WELLBORN CABINETS (OXFORD FACILITY)
OXFORD, ALABAMA**

On March 7, 2025, Wellborn Cabinets submitted an application for an air permit for a new facility in Oxford, Alabama. This facility is currently unpermitted and will be on a greenfield site.

Wellborn Cabinets intends to install and operate various woodworking tools for the manufacture of cabinet components. Emissions from these tools will be routed to two baghouses for control.

EMISSION LIMITS

Wellborn Cabinets has conservatively estimated that the potential uncontrolled particulate matter (PM) emissions from this process would be 2,190 tons per year. However, due to the presence of controls, their effectiveness at controlling the type of dust being produced, and other operational constraints, the Department believes that Wellborn will be able to stay under the 100 tons per year threshold for major sources with respect to Title V. Wellborn's oxford facility will be given a synthetic minor operating permit (SMOP) limiting their potential emissions to less than 95 tons per year of PM.

Wellborn Cabinets' potential emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAP) are detailed in the table below and are based on 8,760 hours of operation per year.

Pollutant	Pounds per Hour	Tons per Year
VOC	0.345	1.51
HAP	0	0

Wellborn Cabinets' Oxford facility is not expected to be a significant source for any criteria pollutant other than PM.

The potential emissions of regulated pollutants from the proposed addition will not exceed PSD major source thresholds.

In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.

MONITORING

Wellborn will be required to operate its baghouses whenever the facility is running and perform daily visible emissions checks on said baghouses. If visible emissions are observed, Wellborn must take corrective action to minimize those emissions within 24 hours. The baghouses must be cleaned and inspected for proper operation at least annually and whenever visible emissions are observed.

RECORDKEEPING AND REPORTING

Wellborn will be required to maintain a logbook of its daily visible observations and will submit these observations to the Department within 15 days of the end of every calendar quarter. This report shall also include an estimate of the PM, PM₁₀, and PM_{2.5} emitted from the baghouses during the previous 12 months. This estimate shall be calculated using the same emission factors and control efficiencies contained within the application alongside actual production data, or stack testing data, if any performance testing is deemed necessary. The data used to generate this report shall be retained at the facility for five years.

APPLICABLE REGULATIONS

No National Emission Standards for Hazardous Air Pollutants, nor any New Source Performance Standards are applicable to the process at Wellborn.

ENFORCEMENT

During the process of inspecting the proposed facility location it was discovered that Wellborn Cabinets had begun construction of the site before the issuance of a permit. For this violation Wellborn received a notice of violation (NOV) which required that they respond to several questions asked within the NOV. The Department was satisfied with Wellborn's response and determined that no further action was necessary.

RECOMMENDATIONS

I recommend that, pending a 15-day public notice, receipt of permitting fees, and a satisfactory greenfield inspection, Synthetic Minor Operating Permit Number 301-0095-X001 be sent to Wellborn in Oxford for the new woodworking equipment and baghouses.

Christopher T. Nuckels
Chemical Branch
Air Division

April 3, 2025
Date