

Engineering Analysis  
Steelfab, Inc.  
Facility Number 308-0026

On March 5, 2021, the Department received an application from Steelfab to install a new shot blast machine at their existing facility in Roanoke. Steelfab fabricates and paints structural steel beams. This facility has a Synthetic Minor Operating Permit to limit the Volatile Organic Compounds and Hazardous Air Pollutants that evaporate when the steel is painted. Steelfab currently has one shot blast machine. A permit has not been issued for the existing shot blast machine.

**Emissions:**

The Synthetic Minor Source Operating Permit (SMOP) currently held by Steelfab limits air emissions to 95 tons of VOC and 23 tons of HAP in any twelve month period. The current SMOP does not limit the air emissions of Particulate Matter (PM) from this facility. The proposed SMOP would limit PM emissions to those allowed by ADEM Code R. 335-3-4-.04. Uncontrolled PM emissions from both shot blast lines are estimated to be 102 tons per year.

**NSPS:**

There are no New Source Performance Standards that currently apply to this facility.

**MACT/NESHAPs:**

This facility is subject to 40 CFR 63 subpart XXXXXX, the National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories. This area source NESHAP has not been adopted by ADEM

**PSD:**

This facility is a minor source for the Prevention of Significant Deterioration, and will remain a minor source.

**State Regulations:**

PM emissions allowed by ADEM Code R. 335-3-4-.04 are 7.7 pounds per hour based on 6800 pounds per hour of steel processed.

**Class I/Air Toxics/112g:**

Roanoke is more than 50 kilometers from any class I area. A significant impact would not be expected on any Class I area as a result of the proposed or existing air sources. Air toxics were not modeled and are not expected to change. Steelfab is on a large site. Section 112(g) does not apply to this facility because is not a significant source of any Hazardous Air Pollutants.

**Title V:**

This facility is not a significant source under Title V of the Clean Air Act.

**Recommendations:**

I recommend issuing the draft permit to limit the particulate emissions from this facility following fee payment and the required public comment period. The proposed operation should be capable of meeting all applicable state and federal air regulations.



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