

**STATEMENT OF BASIS  
NUCOR BUILDINGS GROUP  
FACILITY NUMBER 601-0019  
EUFAULA, ALABAMA**

On May 4, 2021, the above existing facility submitted a Major Source Operating Permit (MSOP) renewal application for their existing metal building manufacturing operation. Currently, this facility is operating under a Title V MSOP that expires on November 5, 2021. The only significant change in the proposed permit is the name of the facility was changed from American Building Company to Nucor Buildings Group. Ownership did not change.

The facility is located in Barbour County. Barbour County is currently listed in attainment with all National Ambient Air Quality Standards (NAAQS). There are no current or ongoing enforcement actions against this facility necessitating additional requirements to achieve compliance with permit conditions.

**Operations**

This facility is an existing metal prefabricated building manufacturer with a SIC code of 3448 and is allowed to operate 8760 hours per year. The metal buildings are composed of primary and secondary steel frame components, roof and wall panels and various other ancillary components. Each of these types of components is manufactured in a production line located in a specific section of the facility. There are four main manufacturing processes: 1. Rigid Frame Coating, 2. End wall Coating, 3. Purlin Roll Forming, and 4. Panel Production.

**Rigid frame coating (RF-7):** The fabricated metal beams and associated components are coated with red or gray primer using hand held airless spray guns. A small amount of touchup painting is done as needed on pre-coated components. A local exhaust system that includes particulate filters exhausts the bay to four stacks designated EP-3, EP-4, EP-5 and EP-6 on the building roof. Beams and parts are allowed to dry at room temperature in the same bay where the coatings are applied.

**End wall coating (EW-6):** The fabricated metal beams and associated components are coated (primer) manually using an airless spray gun. A small amount of touchup painting is done as needed on pre-coated components. A local exhaust system that includes particulate filters exhausts the bay to two stacks designated on the building roof. Beams and parts are allowed to dry at room temperature in the same bay where the coatings are applied.

**Purlin Roll Forming (PRLN 2):** The plant purchases pre-coated steel coils, which are roll formed and cut to length to make the purlins. Nucor no longer paints on this line.

**Panel production PNL 2, 3, 4, and 5:** The sheet metal panel forming operations is where pre-painted metal coil is formed into roof, liner and wall panels in areas. Coil is automatically fed into equipment in which it is cut to length by shears, and formed by roll forming mills or a small air operated press. Coil is lubricated during the forming processes using a vanishing oil, which evaporates completely during the process. Sealant is applied to certain panel joints in the standing seam line.

**Expected Emissions**

VOCs are the major pollutants at this facility. The PM-10, VOC and HAP emissions are from the application of coatings (red and gray primer) and the cleanup solvent (721 Solvent Blend) in the production lines. This facility currently limits total VOC (including organic HAPs) emissions from all sources in the plant to 230 tons in any twelve-month period. No other criteria air pollutants are emitted in sufficient quantities, actually or potentially, to exceed the major source threshold. The following table is a summary of the expected actual and potential air emissions.

Pollutant	Potential (tpy)	Actual (tpy)
VOC	230	36
PM	3	1
CO2e	2716	124
Total HAPs	7	1
PM	3	1

**Emissions Standards**

Nucor has limited their emissions of VOCs and PM to 230 tons per year to prevent a PSD review. Nucor will not be subject to 40 CFR 60 subpart TT New Source Performance Standards for metal coil coating. Nucor will not be subject to the NSPS as metal coil is used as a raw material in the facility, only “discrete parts” (panels, rafters, etc.) fabricated from uncoated coil are coated with primer at the facility and, therefore, does not meet the definition of metal coil coating. Nucor will not be subject to 40 CFR 63 subpart M NESHAPS for Surface Coating of Miscellaneous Metal Parts or 40 CFR 63 subpart SSSS NESHAPS for Metal Coil Surface Coating because potential emissions of HAPs do not exceed the 25 tons per for all HAPs and 10 tons per year of any single HAP.

The welding and machining at this facility will be subject to the National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 subpart XXXXXX because the welding rod and steel used at this facility contains chromium, manganese, and nickel. This NESHAP will not apply to the coating operations because the paints do not contain any of the targeted HAPs. This NESHAP will require Nucor to minimize air emissions from welding and machining.

### **Monitoring**

Nucor is required to submit quarterly reports by the fifteenth day of the month following the end of the calendar quarter. The quarterly report will include the amount of VOCs and HAPs emitted per calendar month and the rolling twelve-month totals of VOCs and HAPs emitted in units of pounds and tons. Nucor will also be required to maintain on site records that include the type and quantity of VOC containing material as well as a complete inventories of VOC and HAP containing materials used in the plant's manufacturing processes.

CAM will not be applicable, as Nucor has no pollution control devices. Subpart XXXXXX will require this facility to monitor the visual emissions from welding and machining.

### **Permitting Fees**

Title V major sources are subject to annual operating fees which are based on the actual emission rate of pollutants for the previous year.

### **Affected States Notification**

Notification of the proposal of this major source operating permit will be sent to all affected states bordering Alabama.

### **Environmental Justice (EJ)**

ADEM utilized EJSCREEN screening tool to perform an analysis of the area. A copy of this report is attached.

### **Recommendations**

Based on the above analysis, I recommend that Nucor be issued a renewal Major Source Operating Permit for their metal building fabrication operations with the attached provisos. The permit will consist of four units: (1) Rigid Frame Coating, (2) End Wall Coating, (3) Panel Production, and (4) Welding and Machining. The proposed monitoring is sufficient to demonstrate compliance status with applicable rules and regulations.



Hal Brock  
Chemical Branch  
Air Division

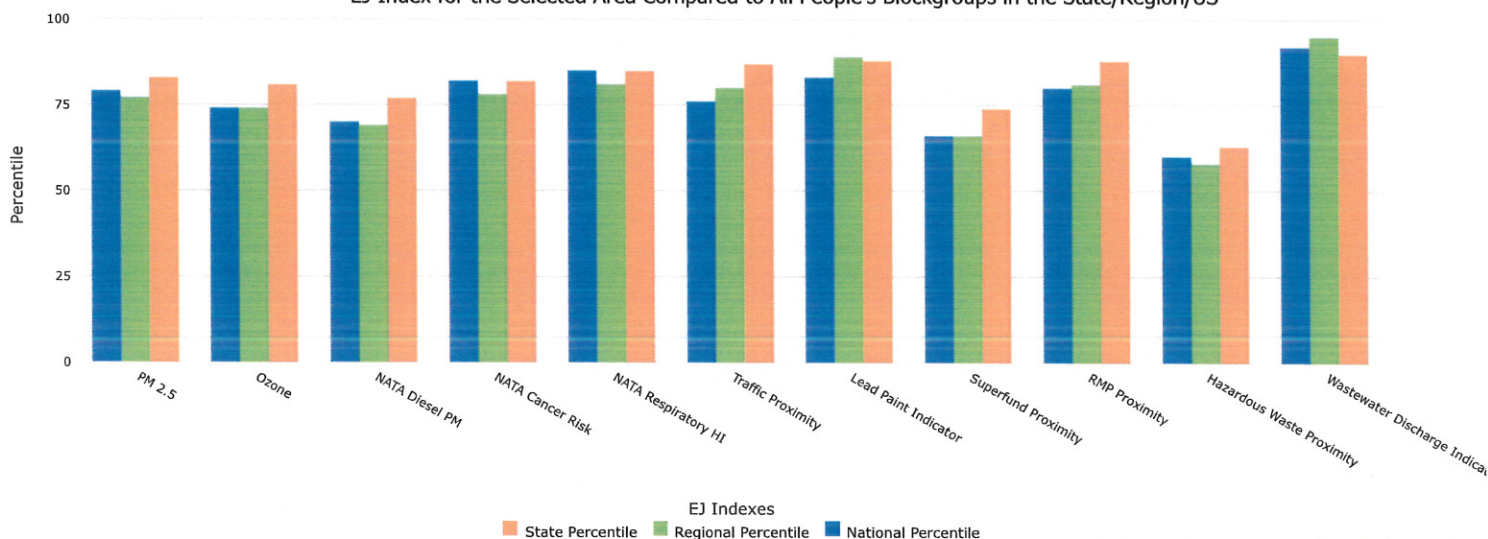
September 20, 2021  
Date



**EJSCREEN Report (Version 2020)**  
**3 miles Ring Centered at 31.857002,-85.149364**  
**ALABAMA, EPA Region 4**  
**Approximate Population: 8,221**  
**Input Area (sq. miles): 28.27**

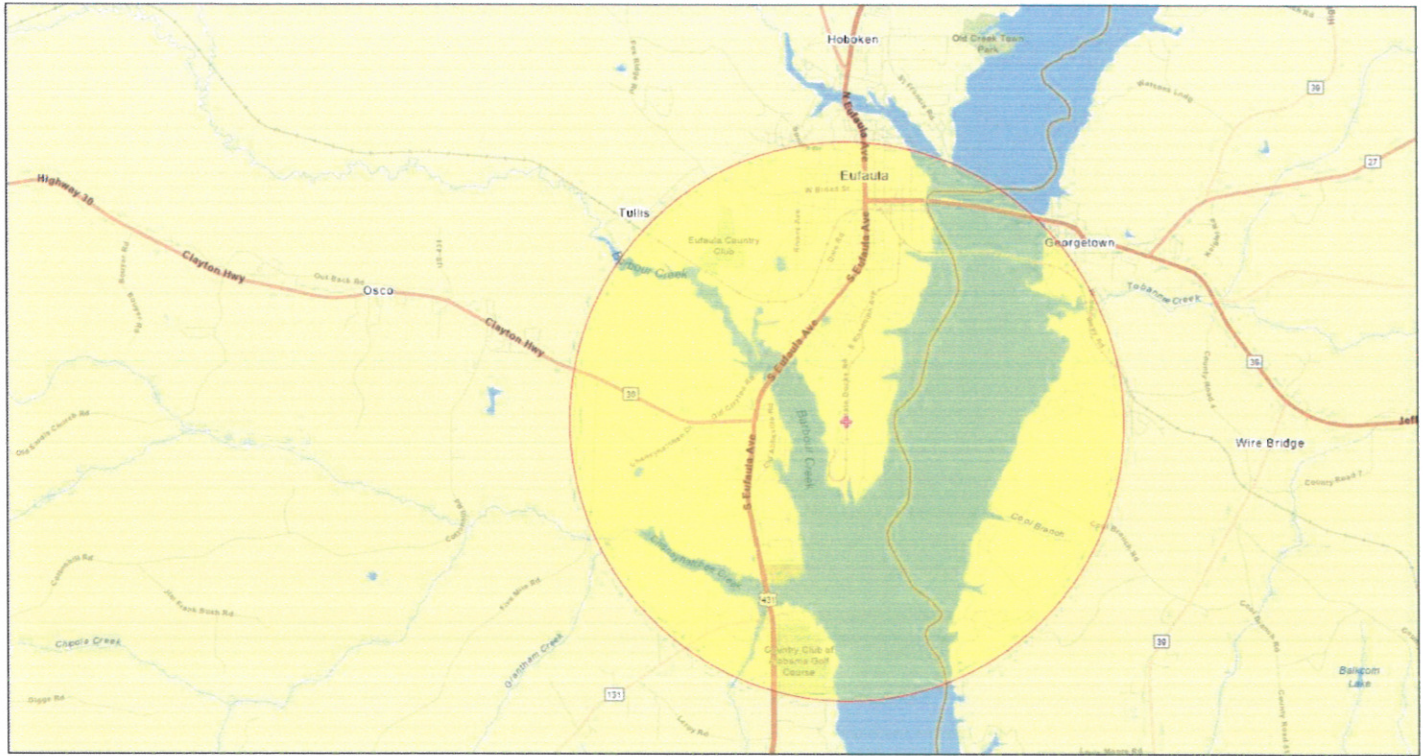
Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
<b>EJ Indexes</b>			
EJ Index for Particulate Matter (PM 2.5)	83	77	79
EJ Index for Ozone	81	74	74
EJ Index for NATA* Diesel PM	77	69	70
EJ Index for NATA* Air Toxics Cancer Risk	82	78	82
EJ Index for NATA* Respiratory Hazard Index	85	81	85
EJ Index for Traffic Proximity and Volume	87	80	76
EJ Index for Lead Paint Indicator	88	89	83
EJ Index for Superfund Proximity	74	66	66
EJ Index for RMP Proximity	88	81	80
EJ Index for Hazardous Waste Proximity	63	58	60
EJ Index for Wastewater Discharge Indicator	90	95	92

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



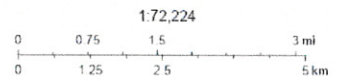
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.





September 16, 2021

📍 Search Result (point)



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

**Sites reporting to EPA**

Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	9.69	9.31	69	8.57	92	8.55	86
Ozone (ppb)	35.1	38	12	38	31	42.9	11
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	0.206	0.346	27	0.417	<50th	0.478	<50th
NATA* Air Toxics Cancer Risk (risk per MM)	46	43	62	36	90-95th	32	95-100th
NATA* Respiratory Hazard Index	0.8	0.65	91	0.52	95-100th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	240	220	77	350	66	750	52
Lead Paint Indicator (% pre-1960s housing)	0.24	0.18	75	0.15	79	0.28	56
Superfund Proximity (site count/km distance)	0.015	0.054	17	0.083	22	0.13	12
RMP Proximity (facility count/km distance)	0.62	0.41	81	0.6	71	0.74	65
Hazardous Waste Proximity (facility count/km distance)	0.028	0.82	0	0.91	1	5	1
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.011	1.2	78	0.65	86	9.4	79
<b>Demographic Indicators</b>							
Demographic Index	60%	36%	83	37%	82	36%	82
People of Color Population	63%	34%	81	39%	77	39%	75
Low Income Population	57%	38%	81	36%	82	33%	85
Linguistically Isolated Population	1%	1%	73	3%	53	4%	47
Population with Less Than High School Education	24%	14%	82	13%	85	13%	84
Population under Age 5	5%	6%	47	6%	48	6%	46
Population over Age 64	17%	16%	58	17%	62	15%	65

\*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice) (<http://www.epa.gov/environmentaljustice>)

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.