

Statement of Basis
Abbeville Fiber, LLC
Abbeville, Henry County, Alabama
Facility/Permit No. 606-S008

This draft significant modification of a Title V Major Source Operating Permit (MSOP) is issued under the provisions of ADEM Admin. Code chap. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit. The current MSOP was issued on November 24, 2020 and will expire on November 23, 2025.

Abbeville Fiber (AF) produces southern pine dimensional lumber. The significant sources of air pollutants at this facility are a debarker, bark hog with storage bin, chipper with storage bin, sawmill, two (2) sawdust storage bins, two 55 MMBF/yr continuous lumber drying kilns (CDK), and a planer mill with cyclone and shavings storage bin. Insignificant sources of emissions are fueling of rolling stock, diesel fuel storage tanks, a parts washer, and welding.

Proposed Modification

On October 22, 2019, ACES Consulting Group submitted, on behalf of Abbeville Fiber, LLC (AF), an application to construct a new continuous dry kiln (CDK-2). Air Permit No. X006 was issued on February 18, 2020, for the following unit:]

X006: 55,000 MBF/yr Continuous Lumber Dry Kiln (CDK-2) with 18 MMBtu/hr
Natural Gas Burner

On December 29, 2021, AF submitted a request for a modification to incorporate the conditions of Air Permit No. X006 into the existing Title V MSOP.

Title V

This facility is currently considered a major source for Title V as the emissions of VOC are greater than 100 TPY. This facility would remain a major source under Title V regulations as the potential emissions of volatile organic compounds (248.72 TPY) and methanol (14.76 TPY) would exceed the 100 TPY criteria and 10 TPY hazardous air pollutant major source thresholds.

PSD

The facility is located in Henry County which is currently classified as an attainment area for all criteria pollutants. AF is not one of the 28 Major Source categories listed in ADEM Admin. Code r. 335-3-14-.04(2)(a)(1); therefore, the major source threshold of concern is 250 TPY for criteria pollutants. When X006 was constructed, AF requested a facility wide lumber production limit of 104 MMBF/yr to ensure the facility remained a minor source for PSD (*Based on a WPP1 VOC emission factor of 4.8 lb/MBF*). This limit would be incorporated into the current Title V MSOP.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

Lumber dry kilns at major sources of HAP are affected sources under the *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Plywood and Composite Wood Products*, 40 CFR Part 63, Subpart DDDD [adopted by reference at ADEM Admin. Code r. 335-3-11-.06(81)], the “PCWP MACT”. The PCWP MACT requires facilities which are major sources of HAP and utilize lumber dry kilns to submit an Initial Notification within 120 days after initial startup. No other monitoring or work practice standards are required for dry kilns. The facility stated that the construction application served as the initial notification for CDK-2.

State Regulations

Particulate Matter

Fuel Burning Equipment

The CDK would not be subject to ADEM Admin. Code r. 335-3-4-.03(1), because the kiln would be direct fired, and therefore, not considered “fuel burning equipment”.

Process Industries – General

The kiln would be subject to the State particulate matter emission standards for process industries as provided in ADEM Admin. Code r. 334-3-4-.04(1). The regulation prohibits utilization of the weight of fuel being burned in the process rate calculation if the unit burns only natural gas. Utilizing the weight of the lumber being dried in the kiln, the PM allowable for the kiln would be grossly exaggerated (19.3 lb/hr) compared to the expected emissions (0.24 lb/hr). Therefore, the potential emissions of PM for the kiln would be calculated utilizing emission factors for the burning of natural gas.

Visible Emissions

The kiln would be subject to the State visible emission standards of ADEM Admin. Code r. 335-3-4-.01(1), which states that no air emission source may emit particulate of an opacity greater than 20% (as measured by a six-minute average) more than once during any 60-minute period and at no time shall emit particulate of an opacity greater than 40% (as measured by a six-minute average).

Sulfur Dioxide

The CDK would be subject to the State sulfur dioxide emission standard of 4.0 lb/MMBtu of heat input [ADEM Admin. Code r. 335-3-5-.01(1)(b)]. However, the potential emissions using an emission factor for SO₂ would be used for applicability purposes under the Title V and PSD regulations.

Emission Testing and Monitoring

I recommend that no emissions testing be required for the kiln at this time because it is expected that the kiln would be able to comply with the applicable standards, testing on continuous kilns is not easily conducted, and there are no emission control devices. If emission problems are observed in the future from this source, testing may be required at that time.

To ensure that the production limit for the kilns is not exceeded, AF would be required to calculate kiln production on a monthly and 12-month rolling total basis, to be updated within ten (10) days of the end of each calendar month.

Recordkeeping and Reporting

Recordkeeping

AF is required to maintain records of its actions taken to comply with proper maintenance and operating practices. Records of monthly and 12-month rolling lumber production are also required. These records are maintained on-site in a permanent form readily available for inspection.

Reporting

AF is required to submit Semiannual Monitoring Reports for the processes, which include a certification that all emission monitoring and proper maintenance and operating practices were accomplished as required during the reporting period, and if not, describe the date and reason any required action was not accomplished.

Public Notice

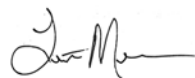
The significant modification of the Title V MSOP would require a 30-day public comment period and a 45-day EPA review period.

Environmental Justice

ADEM utilized the EJSCREEN screening tool to perform an analysis of the area. The analysis has been included as an attachment in Appendix A.

Recommendation

I recommend that the changes noted above be incorporated into the facility's existing Title V MSOP pending the resolution of any comments received during the 30-day public comment period and the EPA 45-day review.



Lester Meredith
Chemical Branch
Air Division

January 6, 2022

Date

VLM/vlm

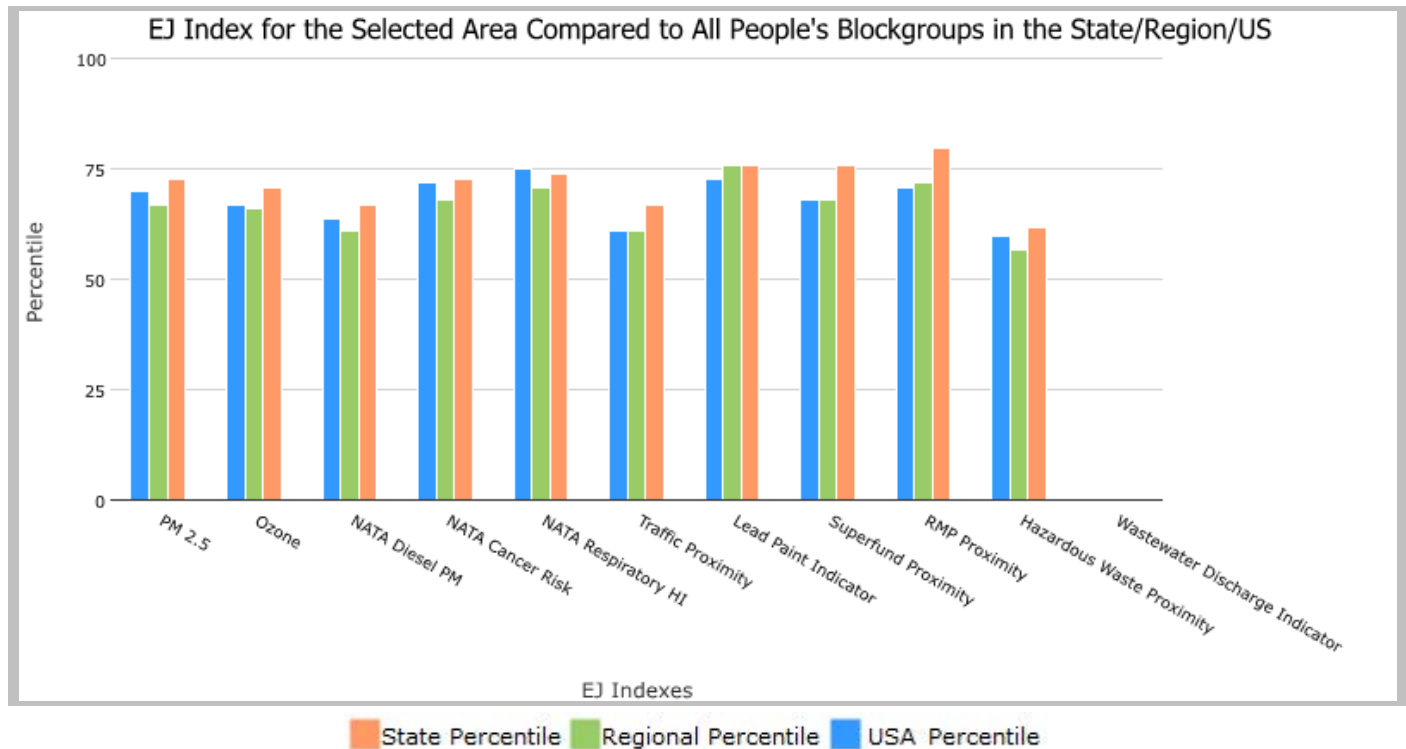
Appendix A
EJ Screen

1 mile Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 204

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	73	67	70
EJ Index for Ozone	71	66	67
EJ Index for NATA* Diesel PM	67	61	64
EJ Index for NATA* Air Toxics Cancer Risk	73	68	72
EJ Index for NATA* Respiratory Hazard Index	74	71	75
EJ Index for Traffic Proximity and Volume	67	61	61
EJ Index for Lead Paint Indicator	76	76	73
EJ Index for Superfund Proximity	76	68	68
EJ Index for RMP Proximity	80	72	71
EJ Index for Hazardous Waste Proximity	62	57	60
EJ Index for Wastewater Discharge Indicator	N/A	N/A	N/A



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.

1 mile Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 204

Input Area (sq. miles): 3.14



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2020)



1 mile Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 204

Input Area (sq. miles): 3.14

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.35	9.31	58	8.57	84	8.55	76
Ozone (ppb)	34.2	38	7	38	23	42.9	8
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.153	0.346	8	0.417	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	43	43	48	36	80-90th	32	90-95th
NATA* Respiratory Hazard Index	0.74	0.65	80	0.52	95-100th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	16	220	27	350	19	750	14
Lead Paint Indicator (% Pre-1960 Housing)	0.14	0.18	58	0.15	66	0.28	45
Superfund Proximity (site count/km distance)	0.034	0.054	55	0.083	48	0.13	31
RMP Proximity (facility count/km distance)	0.43	0.41	74	0.6	63	0.74	56
Hazardous Waste Proximity (facility count/km distance)	0.036	0.82	2	0.91	2	5	3
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	N/A	1.2	N/A	0.65	N/A	9.4	N/A
Demographic Indicators							
Demographic Index	51%	36%	76	37%	73	36%	74
People of Color Population	51%	34%	75	39%	68	39%	67
Low Income Population	50%	38%	74	36%	75	33%	80
Linguistically Isolated Population	0%	1%	71	3%	51	4%	45
Population With Less Than High School Education	21%	14%	76	13%	80	13%	81
Population Under 5 years of age	4%	6%	37	6%	37	6%	35
Population over 64 years of age	33%	16%	97	17%	93	15%	95

* 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

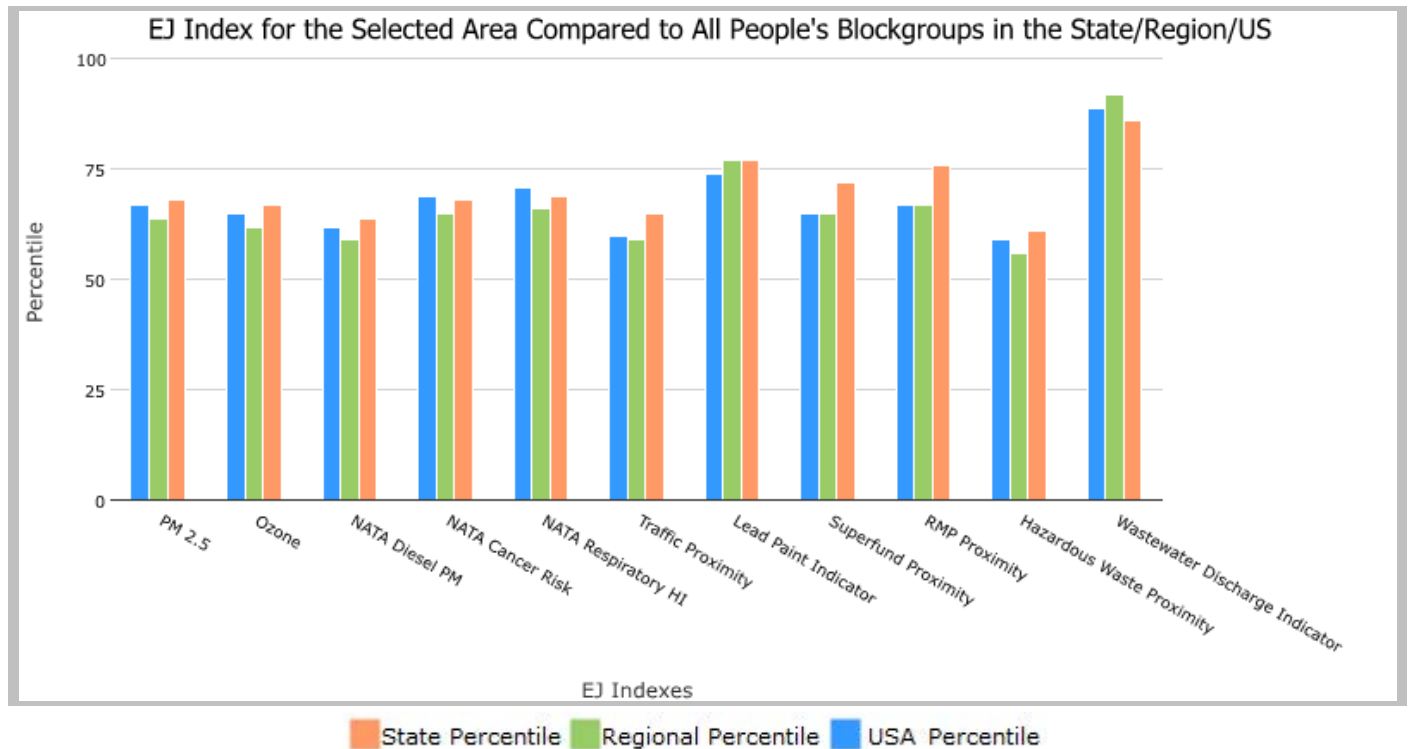
EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools 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.

3 miles Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 2,450

Input Area (sq. miles): 28.27

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	68	64	67
EJ Index for Ozone	67	62	65
EJ Index for NATA* Diesel PM	64	59	62
EJ Index for NATA* Air Toxics Cancer Risk	68	65	69
EJ Index for NATA* Respiratory Hazard Index	69	66	71
EJ Index for Traffic Proximity and Volume	65	59	60
EJ Index for Lead Paint Indicator	77	77	74
EJ Index for Superfund Proximity	72	65	65
EJ Index for RMP Proximity	76	67	67
EJ Index for Hazardous Waste Proximity	61	56	59
EJ Index for Wastewater Discharge Indicator	86	92	89



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.

3 miles Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 2,450

Input Area (sq. miles): 28.27



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2020)



3 miles Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 2,450

Input Area (sq. miles): 28.27

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.35	9.31	59	8.57	84	8.55	76
Ozone (ppb)	34.2	38	7	38	23	42.9	8
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.151	0.346	8	0.417	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	43	43	48	36	80-90th	32	90-95th
NATA* Respiratory Hazard Index	0.74	0.65	80	0.52	95-100th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	9.5	220	21	350	15	750	11
Lead Paint Indicator (% Pre-1960 Housing)	0.26	0.18	77	0.15	81	0.28	59
Superfund Proximity (site count/km distance)	0.034	0.054	55	0.083	47	0.13	30
RMP Proximity (facility count/km distance)	0.31	0.41	69	0.6	57	0.74	50
Hazardous Waste Proximity (facility count/km distance)	0.036	0.82	2	0.91	2	5	3
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.011	1.2	79	0.65	87	9.4	80
Demographic Indicators							
Demographic Index	45%	36%	71	37%	67	36%	69
People of Color Population	48%	34%	73	39%	66	39%	65
Low Income Population	41%	38%	58	36%	61	33%	69
Linguistically Isolated Population	0%	1%	71	3%	51	4%	45
Population With Less Than High School Education	23%	14%	79	13%	83	13%	83
Population Under 5 years of age	4%	6%	30	6%	30	6%	28
Population over 64 years of age	26%	16%	91	17%	87	15%	90

* 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

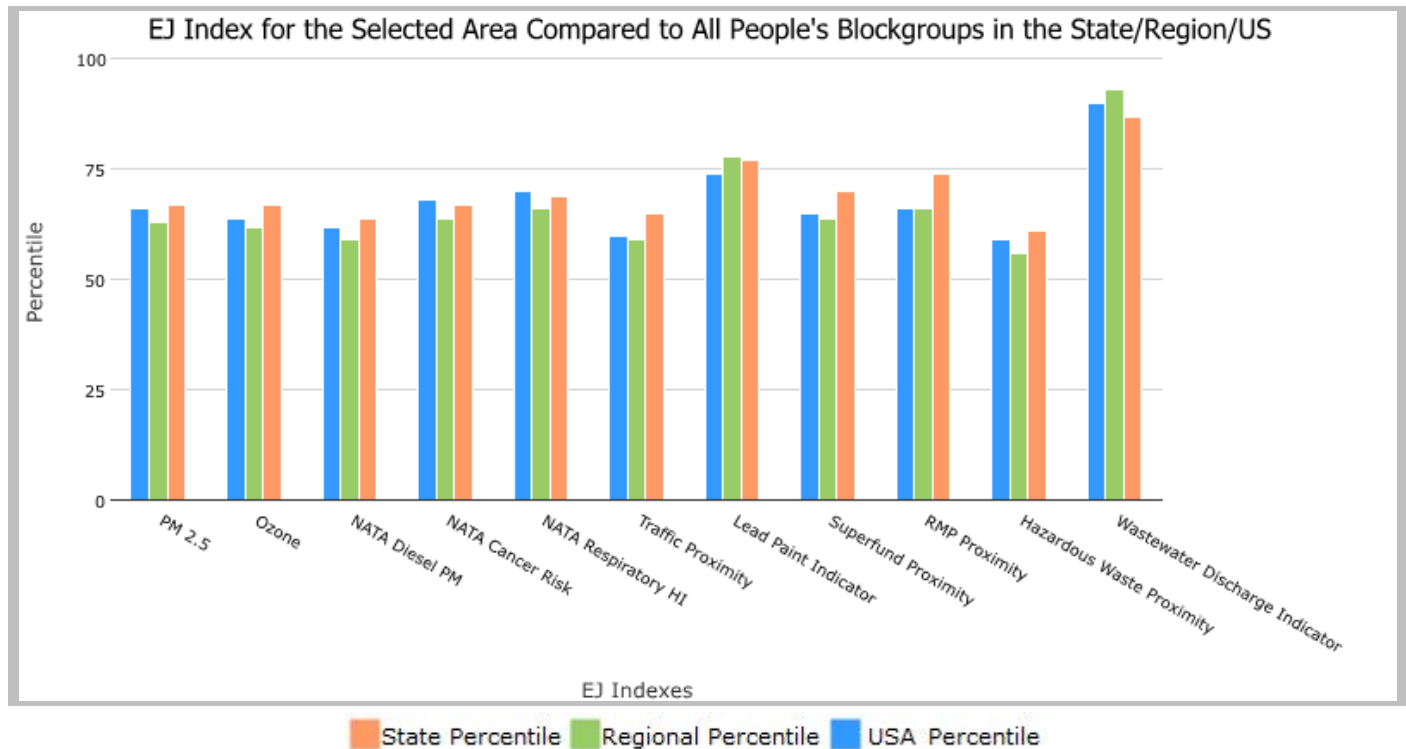
EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools 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.

5 miles Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 3,677

Input Area (sq. miles): 78.53

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	67	63	66
EJ Index for Ozone	67	62	64
EJ Index for NATA* Diesel PM	64	59	62
EJ Index for NATA* Air Toxics Cancer Risk	67	64	68
EJ Index for NATA* Respiratory Hazard Index	69	66	70
EJ Index for Traffic Proximity and Volume	65	59	60
EJ Index for Lead Paint Indicator	77	78	74
EJ Index for Superfund Proximity	70	64	65
EJ Index for RMP Proximity	74	66	66
EJ Index for Hazardous Waste Proximity	61	56	59
EJ Index for Wastewater Discharge Indicator	87	93	90



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.

5 miles Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 3,677

Input Area (sq. miles): 78.53



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2020)



5 miles Ring Centered at 31.552221,-85.286936, ALABAMA, EPA Region 4

Approximate Population: 3,677

Input Area (sq. miles): 78.53

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.35	9.31	58	8.57	84	8.55	76
Ozone (ppb)	34.2	38	7	38	23	42.9	8
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.148	0.346	7	0.417	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	43	43	48	36	80-90th	32	90-95th
NATA* Respiratory Hazard Index	0.74	0.65	80	0.52	95-100th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	9.2	220	21	350	15	750	11
Lead Paint Indicator (% Pre-1960 Housing)	0.27	0.18	79	0.15	82	0.28	60
Superfund Proximity (site count/km distance)	0.036	0.054	57	0.083	49	0.13	31
RMP Proximity (facility count/km distance)	0.27	0.41	66	0.6	53	0.74	47
Hazardous Waste Proximity (facility count/km distance)	0.038	0.82	3	0.91	3	5	3
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.018	1.2	81	0.65	88	9.4	82
Demographic Indicators							
Demographic Index	45%	36%	71	37%	67	36%	69
People of Color Population	48%	34%	73	39%	66	39%	65
Low Income Population	41%	38%	57	36%	60	33%	68
Linguistically Isolated Population	0%	1%	72	3%	52	4%	45
Population With Less Than High School Education	23%	14%	79	13%	83	13%	83
Population Under 5 years of age	4%	6%	34	6%	35	6%	32
Population over 64 years of age	24%	16%	86	17%	83	15%	85

* 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

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.