

STATEMENT OF BASIS

Georgia-Pacific Wood Products LLC
Frisco City, Monroe County, Alabama
Facility No. 106-S010

This draft Title V Major Source Operating Permit (MSOP) renewal 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 to Rocky Creek Lumber Company (RCLC) on August 23, 2017, and will expire on October 7, 2022. The renewal application was due by April 7, 2022, and was received on February 25, 2022. With the receipt of an addendum on March 25, 2022, the application was determined to be complete. Since the current MSOP was issued, the facility had the following modifications:

- **Planer Mill Pneumatic Transfer System (EU 005):** Air Permit X008 was issued on October 4, 2017, for the replacement of an existing cyclone and baghouse with a high efficiency cyclone to control emissions from the pneumatic conveyance of shaving at the planer mill. The facility's Title V MSOP was modified on December 12, 2018, to incorporate the conditions of Air Permit X008.
- **Continuous Dry Kilns (EU 003 and EU 004):** On April 12, 2018, the Air Division approved the usage of sawdust in lieu of bark firing in the Wood-Fired Continuous Dry Kilns through a non-permitting action. As a result of this change in fuel, a misting system, which was utilized on the planer inlet to control ash deposited on the dried lumber, was subsequently decommissioned as it was no longer needed.
- **Shaker Screen Replacement:** On September 10, 2018, the Air Division approved the replacement of an existing shaker screen (FS-008) with a new shaker screen through a non-permitting action.
- **Sawdust Transfer System:** After the facility began firing sawdust as fuel in the continuous kilns, the facility installed a sawdust fuel surge bin that pneumatically conveys sawdust to a Fuel Silo with Cyclone (EP-CYCL-2). Air Permit X009 was issued to the facility on May 28, 2019, for the construction of the system. Temporary Authorization to Operate the unit was issued on May 20, 2021. The conditions of Air Permit X009 would be incorporated into the renewal of the facility's Title V MSOP as EU 008.

Facility Operations

Georgia Pacific Wood Products LLC owns and operates a lumber production facility in Frisco City, Alabama (the "Rocky Creek Plant"). The significant sources of air pollutants at this facility are two direct-fired batch lumber dry kilns with 21 MMBtu/hr natural gas-fired burners, two continuous dry kilns with 29 MMBtu/hr wood-fired burners, a planer mill with a pneumatic wood residue transfer system equipped with a cyclone, a sawdust transfer system equipped with a cyclone, and a 221.8 HP diesel-fired emergency fire pump engine. Insignificant emission

sources at this facility include green wood handling, diesel and gasoline fuel storage, and various other processes.

Green End Operations

“Green end operations” refer to the initial portion of the manufacturing process in which logs are received, stored, handled, and processed to create rough cut green lumber for the lumber manufacturing process. Wood residuals including bark, sawdust, and chips are generated throughout the green end. These byproducts are conveyed, handled, and shipped off-site. A portion of the sawdust generated is used as fuel in the lumber drying kilns. Mechanical and pneumatic conveyance systems are used to collect wood residual material throughout the green end operations.

The incoming logs to the Rocky Creek Plant are unloaded in the log storage and handling area and then proceed through the Ring Debarker (FS-001). Loose bark residuals from the debarker are sent to the Bark Hog (FS-014). From here, the bark is conveyed to the Bark Truck Bin (FS-015). Bark in the bark truck bin is sold and transferred off-site via Bark Truck Loading (FS-016).

The debarked logs proceed into the sawmill building and are cut to length by Six (6) Cut-to-Size Saws (FS-002). Cut logs travel via the log crossover deck to the Optimil (FS-003)(optimizer). The optimizer determines the best product to produce from the log based on predetermined parameters. The log is cut vertically, forming the piece known as the “cant”. The cant proceeds to the Edger (FS-004) where it is cut horizontally to produce individual timbers or dimensional lumber and trimmed to length by the Green Trim Saw (FS-005). Green lumber continues on to the sorter/stacker where lumber is manually stacked and stored prior drying. Green chips and sawdust from the sawmill building are sent to either Chipper 1 (FS-006) or Chipper 2 (FS-007). All chips and sawdust are mechanically transferred from the chippers to the Shaker Screen (FS-008). Sawdust separated by the shaker screen is mechanically conveyed to either the Green Sawdust Fuel Surge Bin (FS-027) and then pneumatically conveyed to the concrete Sawdust Silo with Cyclone (EP-CYCL-2), or to the Green Sawdust Bin (FS-009) and transferred off-site via Green Sawdust Truck Loading (FS-011). Green wood chips separated by the shaker screen are mechanically conveyed to the Green Wood Chip Bin (FS-010) and transferred off-site via Green Wood Chip Truck Loading (FS-012) or the Green Wood Chip Rail Car Loading (FS-013).

Lumber Drying Kilns

The rough lumber produced by the sawmill is dried in one of four lumber drying kilns. The first set are Batch Natural Gas Direct-Fired Dry Kilns #1 and #2 (EU 001 and EU 002) each with a 21 MMBtu/hr gas-fired burner. The second set are Wood-Fired Continuous Kilns #3 and #4 (EU 003 and EU 004) each with a 29 MMBtu/hr sawdust-fired burner. In the batch operation, two tracks of stacked lumber are pre-staged and loaded into the kiln in a batch mode. When the drying process is complete, the dried lumber is pushed out of the kiln and a new cold charge is pushed in. All of the heat in the dry charge, and most of the heat within the kiln, is lost in the batch exchange process. In the continuous kiln system, a pusher system on each end conveys a continuous feed of lumber on one track into the kiln and on a second track in the opposite direction out of the kiln. The heat from the dried lumber coming out of the kiln preheats the green lumber entering the kiln on the second track. The operation is continuous and does not

shut down except for unplanned malfunction events or planned maintenance outages. Whether operating in batch or continuous mode, products of combustion and wood drying emissions of PM, VOC, and HAP result from operation of the lumber kilns as the organic content of the wood is heated and volatilized and from natural gas and wood fuel combustion.

Planer Mill

Following the kilns, dried lumber is planed and trimmed in the planer mill. As the kiln-dried lumber passes via the transfer trains to the planer mill building, carryover ash that deposits on the wood in Kiln 3 and Kiln 4 falls to the ground. Ash is manually collected and transferred to an Ash Hopper (FS-025) and then to a Roll-Off Bin (FS-026) which is transferred off-site. Once inside the planer mill building, the planer mill includes a planer, grading station, dry trim saw, a sorting stacker, “strapper” packaging/logo stenciling, and a HOLTEC saw. Shavings generated from the planer and sawdust from the dry trim saw are collected by the Planer Mill Pneumatic Transfer System with Cyclone (Emission Unit No. 005, EP-CYCL-1). Planer shavings and sawdust collected by the cyclone are conveyed into the Planer Shavings Bin (FS-021) then transferred off-site via the Planer Shavings Truck Loading (FS-022) operation. Following the planer, lumber is cataloged and sorted at the grading station. Finally, after the lumber has been packaged, the finished lumber pack is stenciled with the Georgia-Pacific logo, Stenciling (FS-020). If the lengths of the finished stack need to be reduced, that stack will be sent to the HOLTEC Saw (FS-024) to be cut. The finished, stenciled lumber is then sent to temporary storage and shipped off-site.

Applicability: Federal Regulations

Title V

This facility is considered a major source under Title V regulations because the potential emissions for volatile organic compounds (VOC), carbon monoxide (CO), and particulate matter (PM) exceed the 100 TPY major source thresholds. It is also a major source of Hazardous Air Pollutants (HAP) because the total HAP potential emissions are greater than 25 TPY (40.25 TPY) although the potential of each individual HAP is less than 10 TPY. The facility has requested the following changes to the existing Title V permit:

1. Change the ignition fuels for the burners on the Continuous Dry Kilns (EU 003 and EU 004) to include lighter fluid (petroleum distillates);
2. Incorporate the conditions of Air Permit X019, Pneumatic Sawdust Transfer System with Cyclone into the Title V MSOP;
3. Include Green Sawdust Fuel Storage Bin (FS-027) as an insignificant activity as the unit would have only fugitive emissions that would be less than 5 tons per year.

Prevention of Significant Deterioration (PSD)

This facility is located in an attainment area for all criteria pollutants and is considered a major source for PSD as the facility-wide potential emissions of VOC and PM are greater than the 250 TPY. The facility operations are not one of the listed 28 major source categories. As an existing major source under the PSD program, physical changes or changes in the method of operation at the plant must be evaluated to determine if they are a "major modification" as defined under ADEM Admin. Code r. 335-3-14-.04(2)(b). On April 19, 2019, the Rocky Creek Plant submitted a construction permit for installation of the sawdust transfer system, which constitutes

a physical change. In the construction permit application for the sawdust transfer system, the plant requested an hourly limit of 0.4 lb/ hr for emissions of filterable PM to avoid the project being a "major modification" under the PSD program. As such, ADEM issued a construction permit on May 28, 2019, with the requested limit. This limit would be incorporated into the Title V MSOP renewal.

NSPS

Emergency Fire Pump Engine

40 CFR 60, Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) applies to owners/operators of stationary fire pump engines that are manufactured after July 1, 2006 [§60.4200(a)(2)(ii)]. Since the fire pump engine at G-P was constructed/manufactured in July 2009, it is subject to Subpart III. Owners and operators of 2009 model year fire pump engines with a power rating of 300 – 600 HP and a displacement of less than 30 liters per cylinder must comply with the applicable emission standards outlined in Table 4 to Subpart III of Part 60 (Non Methane Hydrocarbons + NO_x ≤ 3.0 g/HP-hr, CO ≤ 2.6 g/HP-hr, and PM ≤ 0.15 g/HP-hr). Table 3 to Subpart III requires that, in lieu of testing, a fire pump engine manufactured in 2009 must be certified by the manufacturer that it meets the standards in Table 4. G-P included certification from the manufacturer in the application which indicates the fire pump engine meets the requirements of Subpart III. §60.4206 requires that fire pump engines be operated and maintained according to manufacturer approved procedures over the entire life of the engine. §60.4207(b) requires that diesel-fired CI ICE utilize fuel with a sulfur content of ≤15 ppm and a Cetane index ≥40 or aromatic content ≤35% by volume. The engine must be equipped with a non-resettable hour meter and must be operated only during emergency situations, with the exceptions of 100 hours per year for maintenance checks and readiness testing, and 50 hours per year for non-emergency situations (not to exceed a combined total of 100 hours during any calendar year).

Organic Storage Tanks

NSPS Subpart Kb (*Standards for Performance for Volatile Organic Storage Tanks*) regulates storage vessels with a capacity greater than 75 cubic meters (M³) that are used to store volatile liquids for which construction, reconstruction or modification commenced after July 23, 1984. G-P operates two 2,000-gallon diesel storage tanks and one 1,000-gallon gasoline storage tank. The facility does not utilize any volatile organic liquid storage tanks with a capacity greater than 75 M³. Therefore, NSPS Subpart Kb does not apply to this facility.

MACT

PCWP MACT

This facility is a major source for HAP and its lumber dry kilns are affected sources under 40 CFR 63, Subpart DDDD, *National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products* (the "Plywood MACT") promulgated on July 30, 2004. The facility submitted an initial notification on November 30, 2004, as well as in the applications for the continuous dry kilns when they were installed as required by the MACT. The MACT does not require any additional controls

or work practices for lumber dry kilns. Therefore, the facility is currently in compliance with all conditions of the Plywood MACT.

RICE MACT

The fire pump engine is an affected source under 40 CFR 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. 40 CFR §63.6590(6) stipulates “a new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions” must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart III. The requirements of Subpart III for the fire pump engine are discussed in the NSPS section of this Statement of Basis.

Applicability State Regulations

Particulate Matter

The lumber dry kilns, planer mill, and sawdust pneumatic systems are each subject to the particulate matter (as TSP) emission limitations of ADEM Admin. Code r. 335-3-4-.04 for Process Industries-General. The allowable emission rate for each process is calculated using one of the following process weight equations:

$$E = 3.59P^{0.62} \text{ (P < 30 tons per hour) OR}$$

$$E = 17.31P^{0.16} \text{ (P } \geq \text{ 30 tons per hour)}$$

where E = Emissions in pounds per hour

P = Process weight per hour in tons per hour

In addition to the above limitations, ADEM Admin. Code r. 335-3-4-.01(1) sets forth a visible emissions standard which states that each stationary source at the facility shall not emit particulate of an opacity greater than twenty percent (20%), as determined by a six-minute average, more than once during any 60-minute period. In addition, no source shall emit particulate of a six-minute average opacity greater than forty percent (40%).

Sulfur Oxides (SO_x)

The dry kilns are subject to the sulfur oxides (as SO₂) emission limitation of ADEM Admin. Code r. 335-3-5-.01(b), which limits the kilns to 4 lb/MMBtu heat input. However, the potential emissions of SO₂ would be determined by emission factors as the expected emissions would be much less than the regulatory allowable.

Emission Testing and Monitoring

Lumber Dry Kilns

The lumber in the kilns is dried with direct heat from the burners. Emissions from the kilns are primarily condensed water vapor and VOC driven off from the drying lumber. Due to the nature of the emissions from the kilns, monitoring of the SIP visible emissions standard is not considered practical. EU 001 and EU 002 are restricted to burn only natural gas. EU 003 and EU 004 are restricted to burn untreated wood and utilize propane, butane or lighter fluid to ignite

the wood on startup. The expected emissions of particulate matter and sulfur oxides from the burning of natural gas and wood are much less than the respective SIP allowable. Therefore, no testing or monitoring would be required for these pollutants.

Pneumatic Systems

The pneumatic systems for the planer mill and sawdust transfer system are each controlled by a high efficiency cyclone. The facility would be required to observe the cyclones for greater than normal emissions at least once per week during daylight hours. Whenever greater than normal emissions are observed, the facility shall initiate action as soon as practicable (but no longer than 24 hours from the time of observation) to correct the problem and return the system to its normal operating parameters. In addition, the facility shall inspect the cyclones at least annually or whenever visible emissions are observed to be greater than normal, and clean or maintenance the cyclones within 24 hours of the inspection. No testing of the pneumatic systems would be required as the expected emissions would be less than the applicable limits.

Compliance Assurance Monitoring (CAM)

None of the processes at the facility would be subject to CAM. Although the pneumatic systems utilize cyclones to control particulate emissions, the pre and post-controlled emissions from the processes are less than the 100 TPY CAM threshold and the control devices are an inherent part of the process.

Recordkeeping and Reporting Requirements

For the monitoring performed in accordance with the Emission Monitoring Section for EU 005 and 008, the facility shall maintain records in a permanent form on-site and available for inspection for at least five (5) years from the date of generation of each record. These records shall include:

- The date, time, and results of the daily observation for greater than normal visible emissions from the cyclone;
- The date(s), time, nature, and results of any corrective action taken when greater than normal visible emissions were observed from the cyclone;
- The date(s) and time the cyclone was inspected for proper operation and, if the results of the inspection indicated that cleaning or emissions-related maintenance was needed, the date(s) and nature of the cleaning/maintenance performed.

The facility would be required to include the following information (as applicable) in the Semiannual Monitoring Report required by General Permit Proviso No. 21:

EU 001 – EU 004

- Whether any fuel other than natural gas was burned in the burners for EU 001 and EU 002
- Whether any other fuel other than untreated wood was burned in the burners for EU 003 and EU 004, except propane or butane used during startup, during the reporting period.

EU 005 and EU 008

- A statement as to whether all emission observations were completed as required during the reporting period, and if not, the date(s) and reasons(s) why the monitoring was not performed;
- A statement as to whether the annual inspection of the cyclone was accomplished during the reporting period, and if so, the date and results of the inspections;
- The date(s), nature, and results of any corrective action taken when (1) a deviation from an emission monitoring parameter was observed or (2) an inspection of the cyclone indicated that cleaning or emission-related maintenance was needed.

Environmental Justice Screen

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

Public Participation

The renewal of this Title V MSOP would require a 30-day public comment period and a 45-day EPA review period.

Recommendation

Based on the above analysis, I recommend that Georgia-Pacific Wood Products LLC's existing Major Source Operating Permit (Facility/Permit No. 106-S010) be renewed to include the requirements noted pending a 30-day public notice period and a 45-day EPA review period.



Lester Meredith
Chemical Branch
Air Division

April 7, 2022
Date

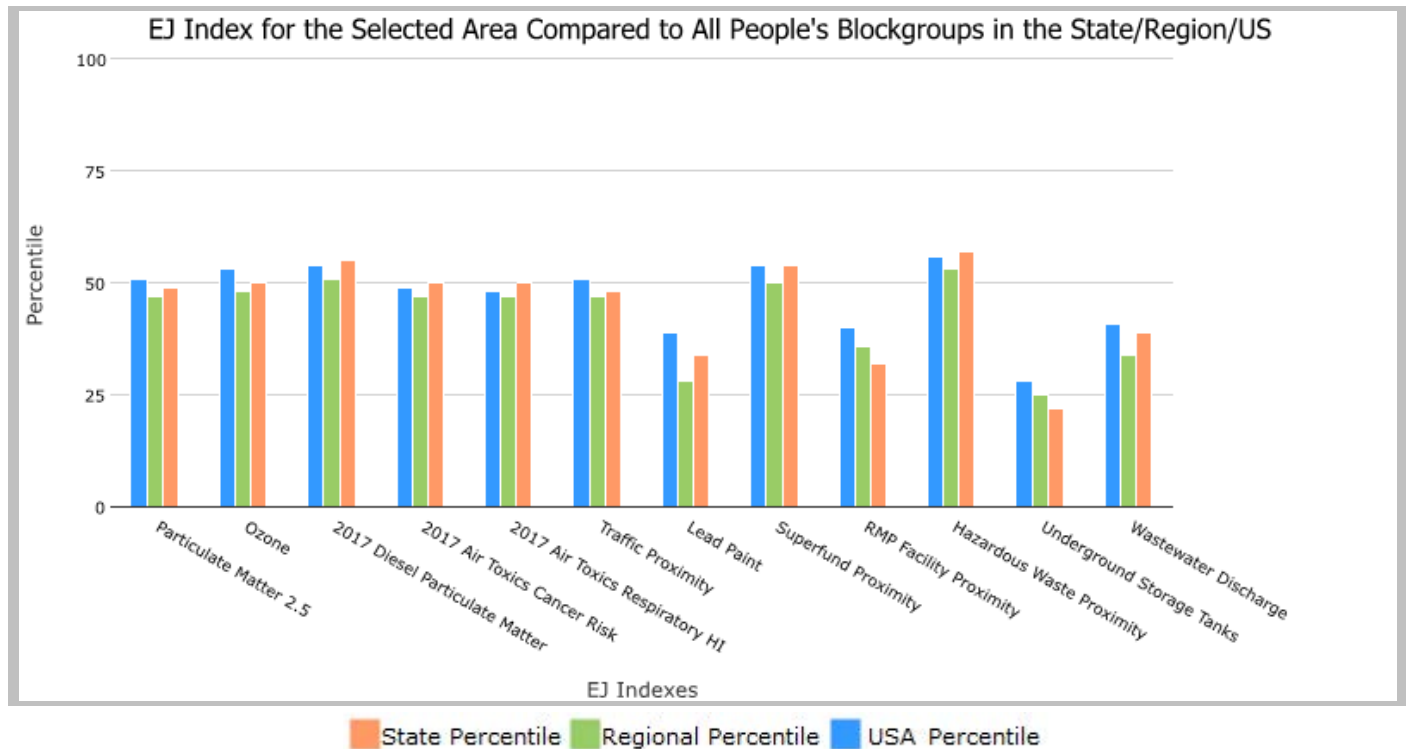
Appendix A
EJ Screen

1 mile Ring Centered at 31.492030,-87.370142, ALABAMA, EPA Region 4

Approximate Population: 247

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	49	47	51
EJ Index for Ozone	50	48	53
EJ Index for 2017 Diesel Particulate Matter*	55	51	54
EJ Index for 2017 Air Toxics Cancer Risk*	50	47	49
EJ Index for 2017 Air Toxics Respiratory HI*	50	47	48
EJ Index for Traffic Proximity	48	47	51
EJ Index for Lead Paint	34	28	39
EJ Index for Superfund Proximity	54	50	54
EJ Index for RMP Facility Proximity	32	36	40
EJ Index for Hazardous Waste Proximity	57	53	56
EJ Index for Underground Storage Tanks	22	25	28
EJ Index for Wastewater Discharge	39	34	41

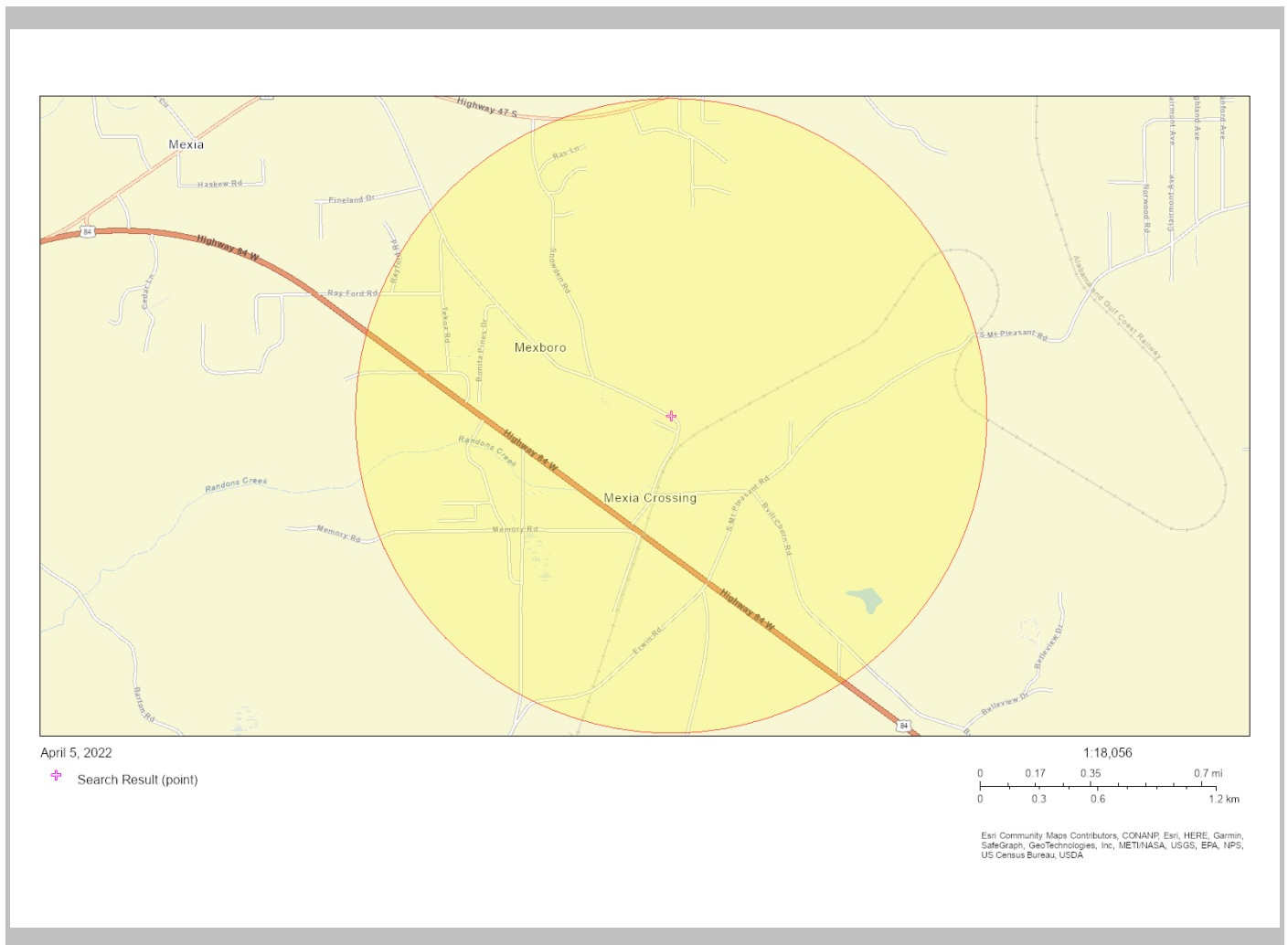


This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective 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 31.492030,-87.370142, ALABAMA, EPA Region 4

Approximate Population: 247

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 2.0)

1 mile Ring Centered at 31.492030,-87.370142, ALABAMA, EPA Region 4

Approximate Population: 247

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
Pollution and Sources							
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.65	8.9	33	8.18	69	8.74	51
Ozone (ppb)	35	39.1	7	37.9	30	42.6	12
2017 Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.0765	0.216	4	0.261	<50th	0.295	<50th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	30	34	55	31	80-90th	29	80-90th
2017 Air Toxics Respiratory HI*	0.4	0.47	38	0.4	70-80th	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	18	230	21	430	16	710	12
Lead Paint (% Pre-1960 Housing)	0.18	0.18	66	0.15	72	0.28	51
Superfund Proximity (site count/km distance)	0.015	0.054	16	0.083	22	0.13	11
RMP Facility Proximity (facility count/km distance)	0.42	0.41	73	0.6	62	0.75	55
Hazardous Waste Proximity (facility count/km distance)	0.03	0.83	3	0.62	3	2.2	3
Underground Storage Tanks (count/km ²)	2.3	1.7	76	3.5	64	3.9	61
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00018	0.42	40	0.45	47	12	35
Socioeconomic Indicators							
Demographic Index	28%	36%	44	37%	41	36%	46
People of Color	27%	34%	51	39%	43	40%	44
Low Income	29%	37%	37	35%	42	31%	52
Unemployment Rate	0%	6%	12	6%	11	5%	11
Linguistically Isolated	0%	1%	70	3%	51	5%	45
Less Than High School Education	8%	14%	33	13%	40	12%	47
Under Age 5	0%	6%	5	6%	5	6%	4
Over Age 64	25%	17%	87	17%	84	16%	86

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

For additional information, see: www.epa.gov/environmentaljustice

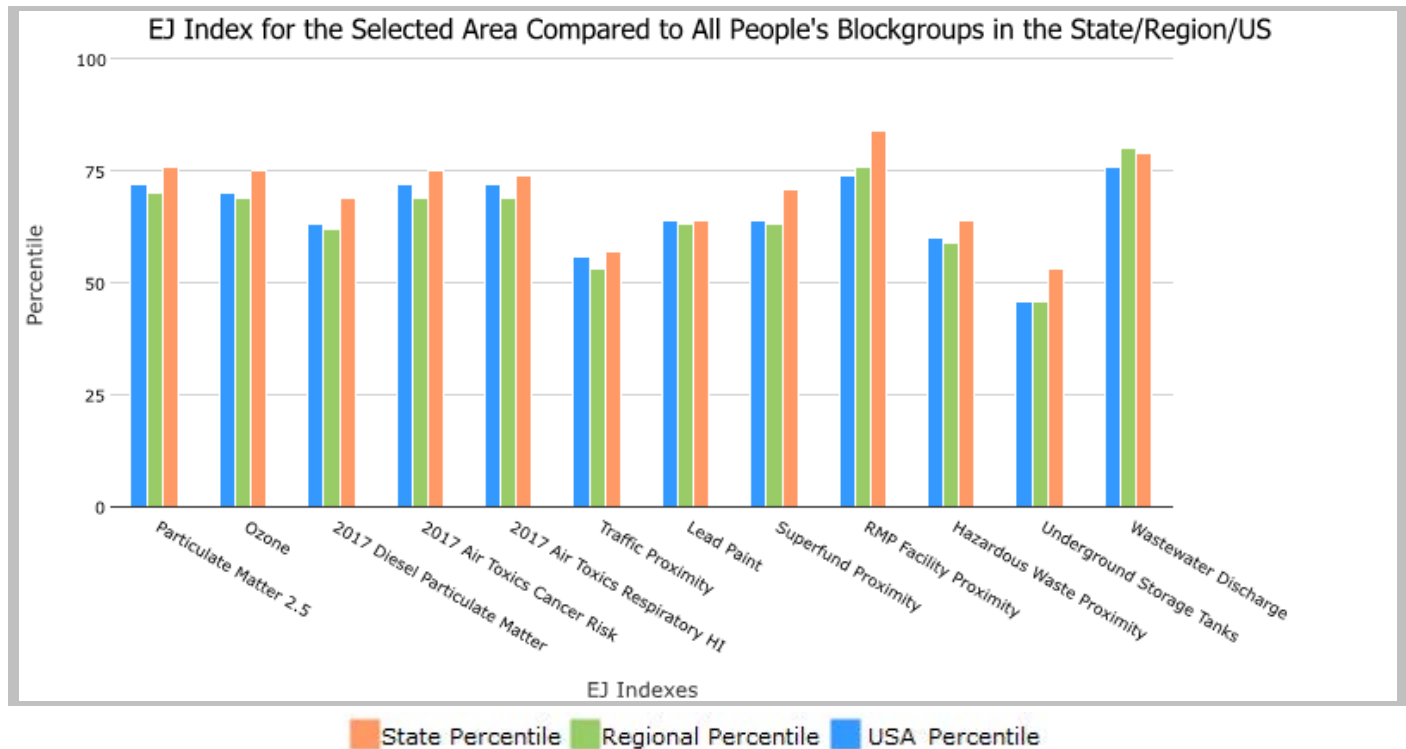
EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools 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 31.492030,-87.370142, ALABAMA, EPA Region 4

Approximate Population: 4,779

Input Area (sq. miles): 28.27

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	76	70	72
EJ Index for Ozone	75	69	70
EJ Index for 2017 Diesel Particulate Matter*	69	62	63
EJ Index for 2017 Air Toxics Cancer Risk*	75	69	72
EJ Index for 2017 Air Toxics Respiratory HI*	74	69	72
EJ Index for Traffic Proximity	57	53	56
EJ Index for Lead Paint	64	63	64
EJ Index for Superfund Proximity	71	63	64
EJ Index for RMP Facility Proximity	84	76	74
EJ Index for Hazardous Waste Proximity	64	59	60
EJ Index for Underground Storage Tanks	53	46	46
EJ Index for Wastewater Discharge	79	80	76

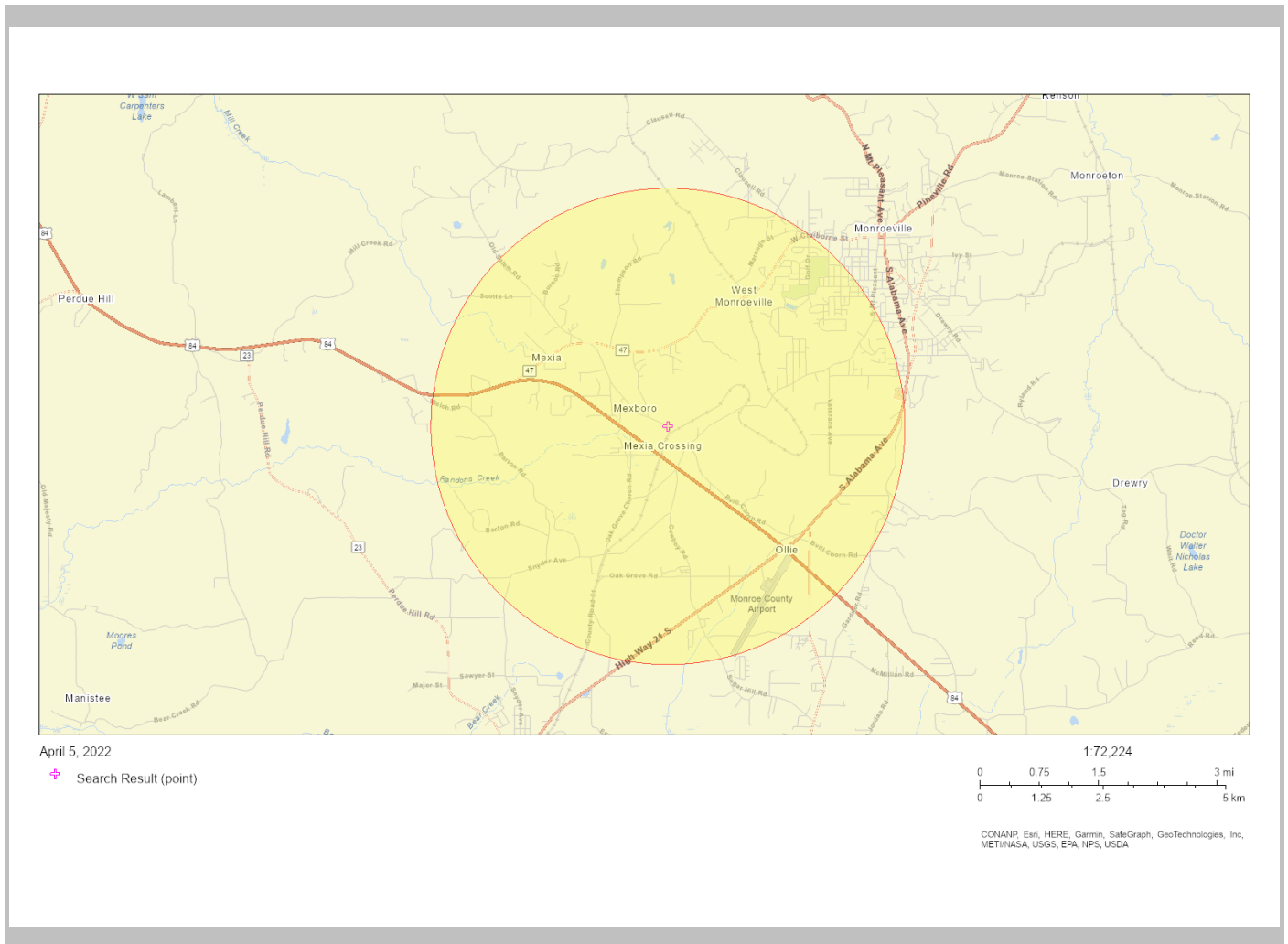


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Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.0)



3 miles Ring Centered at 31.492030,-87.370142, ALABAMA, EPA Region 4

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2017 Air Toxics Respiratory HI*	0.4	0.47	40	0.4	70-80th	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	6	230	11	430	7	710	5
Lead Paint (% Pre-1960 Housing)	0.11	0.18	50	0.15	60	0.28	41
Superfund Proximity (site count/km distance)	0.015	0.054	16	0.083	22	0.13	11
RMP Facility Proximity (facility count/km distance)	0.49	0.41	76	0.6	66	0.75	59
Hazardous Waste Proximity (facility count/km distance)	0.031	0.83	3	0.62	3	2.2	3
Underground Storage Tanks (count/km ²)	0.92	1.7	59	3.5	47	3.9	44
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00035	0.42	46	0.45	53	12	40
Socioeconomic Indicators							
Demographic Index	46%	36%	73	37%	69	36%	70
People of Color	43%	34%	70	39%	61	40%	60
Low Income	49%	37%	73	35%	76	31%	80
Unemployment Rate	13%	6%	87	6%	90	5%	91
Linguistically Isolated	0%	1%	70	3%	51	5%	45
Less Than High School Education	9%	14%	38	13%	45	12%	51
Under Age 5	6%	6%	58	6%	59	6%	57
Over Age 64	17%	17%	56	17%	59	16%	62

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

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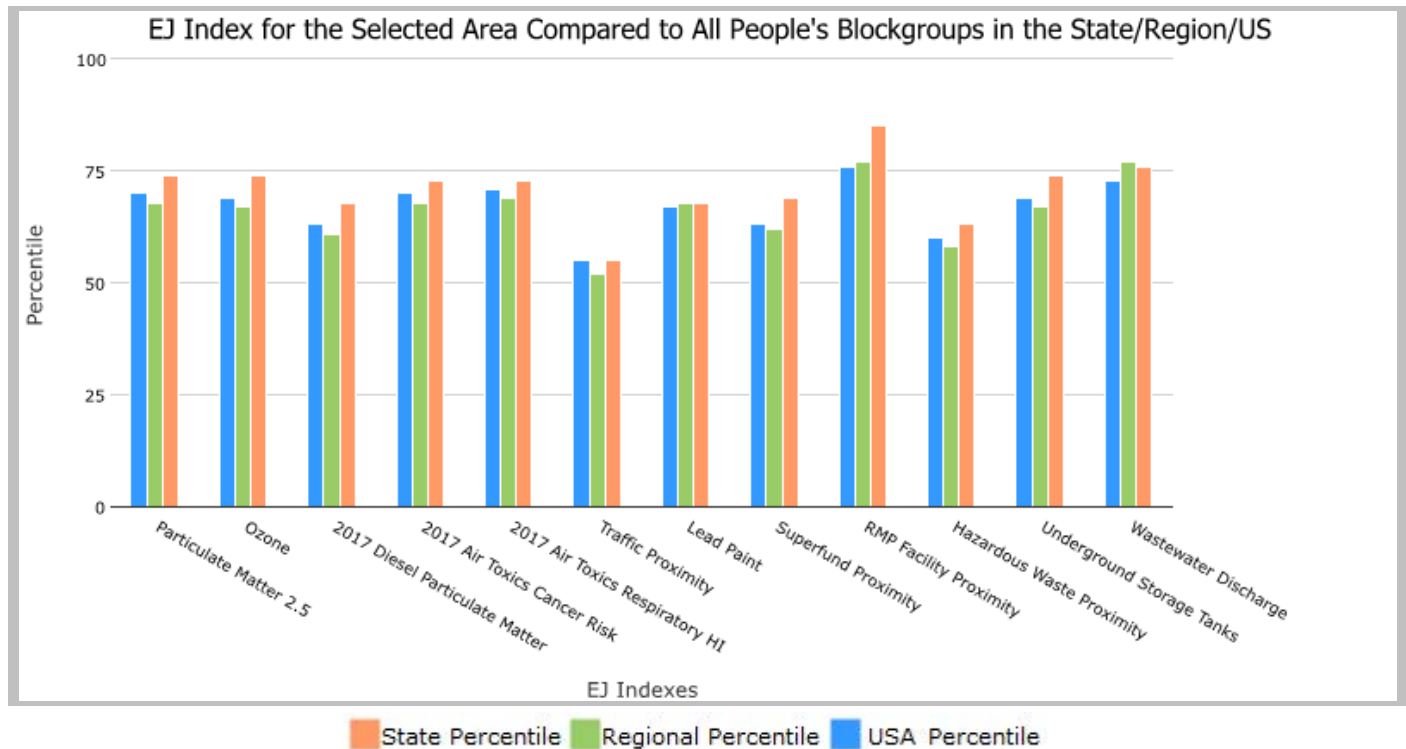
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5 miles Ring Centered at 31.492030,-87.370142, ALABAMA, EPA Region 4

Approximate Population: 11,567

Input Area (sq. miles): 78.53

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	74	68	70
EJ Index for Ozone	74	67	69
EJ Index for 2017 Diesel Particulate Matter*	68	61	63
EJ Index for 2017 Air Toxics Cancer Risk*	73	68	70
EJ Index for 2017 Air Toxics Respiratory HI*	73	69	71
EJ Index for Traffic Proximity	55	52	55
EJ Index for Lead Paint	68	68	67
EJ Index for Superfund Proximity	69	62	63
EJ Index for RMP Facility Proximity	85	77	76
EJ Index for Hazardous Waste Proximity	63	58	60
EJ Index for Underground Storage Tanks	74	67	69
EJ Index for Wastewater Discharge	76	77	73

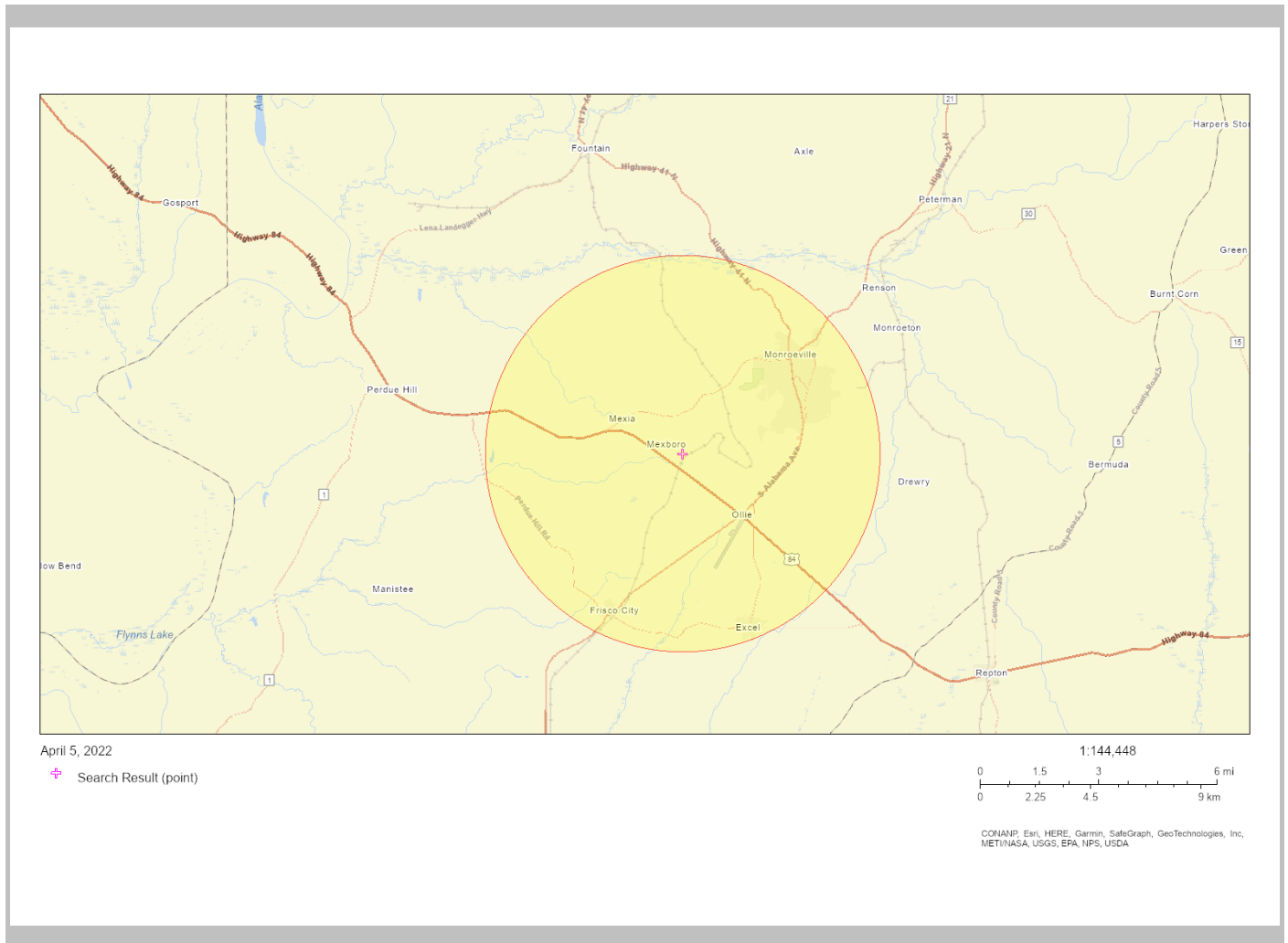


This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective 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 31.492030,-87.370142, ALABAMA, EPA Region 4

Approximate Population: 11,567

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

EJScreen Report (Version 2.0)



5 miles Ring Centered at 31.492030,-87.370142, ALABAMA, EPA Region 4

Approximate Population: 11,567

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
Pollution and Sources							
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.62	8.9	31	8.18	68	8.74	50
Ozone (ppb)	35	39.1	8	37.9	31	42.6	12
2017 Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.0799	0.216	6	0.261	<50th	0.295	<50th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	30	34	55	31	80-90th	29	80-90th
2017 Air Toxics Respiratory HI*	0.42	0.47	48	0.4	80-90th	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	5.4	230	11	430	7	710	5
Lead Paint (% Pre-1960 Housing)	0.12	0.18	55	0.15	63	0.28	43
Superfund Proximity (site count/km distance)	0.015	0.054	16	0.083	22	0.13	11
RMP Facility Proximity (facility count/km distance)	0.58	0.41	80	0.6	69	0.75	63
Hazardous Waste Proximity (facility count/km distance)	0.032	0.83	3	0.62	4	2.2	3
Underground Storage Tanks (count/km ²)	1.2	1.7	65	3.5	52	3.9	49
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00018	0.42	40	0.45	47	12	35
Socioeconomic Indicators							
Demographic Index	47%	36%	74	37%	70	36%	71
People of Color	45%	34%	71	39%	63	40%	62
Low Income	49%	37%	73	35%	76	31%	80
Unemployment Rate	13%	6%	87	6%	89	5%	90
Linguistically Isolated	0%	1%	70	3%	51	5%	45
Less Than High School Education	12%	14%	50	13%	57	12%	62
Under Age 5	5%	6%	48	6%	48	6%	46
Over Age 64	18%	17%	63	17%	65	16%	68

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

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