

STATEMENT OF BASIS

CER Generation, LLC
Hillabee Power Plant
Alexander City, Alabama
Tallapoosa County
310-0022

This proposed Title V Major Source Operating Permit is issued under the provisions of ADEM Admin. Code r. 335-3-16. The above-referenced applicant has applied to renew the existing Title V Permit, which was originally issued on May 9, 2011. The above-referenced applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents, which were submitted on May 7, 2021, and are on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

CER Generation, LLC was issued its existing Major Source Operating Permit (MSOP) on March 7, 2017, with an expiration date of March 6, 2022. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. Based on this rule, the application for renewal was due to the Department no later than September 6, 2021. No additional information was deemed necessary for processing of this MSOP.

The Hillabee Power Plant is operated by CER Generation and is located in Alexander City, Tallapoosa County, Alabama. This facility generates approximately 707 MW (nominal) of electric power for distribution to the electrical grid. No significant changes have occurred at the facility since the previous Title V renewal permit. The significant sources of air pollutants at this facility are:

- Two (2) 229 MW (nominal) Natural Gas Fired Combined-Cycle Combustion Turbines each consisting of one combustion turbine (CT) and one heat recovery steam generator (HRSG) equipped with a 169 MMBtu/hr (HHV) natural gas fired duct burner and Selective Catalytic Reduction (SCR).
- 11.64 MMBtu/hr Indirect-fired fuel heater (natural gas fired).
- 805 HP Existing Emergency Firewater Pump

Additionally, the applicable requirements of Cross-State Air Pollution Rule (CSAPR) will be included in this renewal.

Facility-Wide Emissions

Pollutant	Potentials (TPY)	2020 Actuals (TPY)
NO _x	223.4	141.3
CO	1198.5	77.2
VOC	159.0	38.8

SO ₂	133.3	11.0
PM	241.5	105.1
HAPs (total)	1.97	
GHG (CO _{2e})	2,664,776	---

Two (2) Combined Cycle Combustion Turbines and Two (2) Heat Recovery Steam Generators with Duct Burners and Selective Catalytic Reduction (SCR)

The combined-cycle combustion turbine units fire only pipeline quality natural gas. The combustion turbines are Siemens Westinghouse Model 501G designs with a nominal electric generation capacity of approximately 229 MW each. The NO_x emissions from the combined cycle combustion turbines are controlled by the use of SCRs installed in each HRSG.

The combined-cycle combustion turbine units were subject to a Prevention of Significant Deterioration (PSD) Review in which BACT was established for NO_x, SO₂, CO, VOC, PM, and Sulfuric Acid Mist. Air Permit No. 310-0022-X001, issued on September 24, 2008, set the original BACT limits for this source. The combined-cycle combustion turbines are also subject to the Federal New Source Performance Standards (NSPS) contained in 40 CFR Part 60, Subpart KKKK. Per Subpart KKKK, the CTs/duct burners are no longer obligated to meet the requirements of NSPS, Subparts GG, Da, Db, and Dc.

The estimated emissions and the associated standards for the combined-cycle combustion turbines are listed below.

Emission Standards

Opacity:

- Except during startup, shutdown, and load change, visible emissions from these units shall not exceed 10% opacity.

(ADEM Admin. Code r. 335-3-14-.04) BACT

Particulate Matter (PM):

- The PM emissions from each combustion turbine/duct burner stack shall not exceed 0.011 lb/MMBtu and 27.5 lbs/hr.

(ADEM Admin. Code r. 335-3-14-.04) BACT

The PM BACT emission standards apply at all times except during startup, shutdown, and load change.

Sulfur Dioxide (SO₂):

- The SO₂ emissions from each combustion turbine/duct burner stack shall not exceed 0.90 lb/MWh gross output or 0.060 lb/MMBtu heat

input (3-hr rolling average).

(40 CFR 60.4330(a), Subpart KKKK)

The SO₂ emission standards apply at all times except during startup, shutdown, and malfunction.

- The SO₂ emissions from each combustion turbine/duct burner stack shall not exceed 0.0056 lb/MMBtu and 15.2 lbs/hr (3-hr rolling average).

(ADEM Admin. Code r. 335-3-14-.04) BACT

The SO₂ BACT emission standards apply at all times except during startup, shutdown, and load change.

Nitrogen Oxides (NO_x):

- The combined NO_x emissions from each combustion turbine/duct burner stack shall not exceed 0.009 lb/MMBtu and 24.6 lb/hr (3-hr rolling average).

(ADEM Admin. Code r. 335-3-14-.04) BACT

- The NO_x emissions from each combustion turbine/duct burner stack shall not exceed 15 ppm (at 15% O₂) or 0.43 lb/MWh of useful output (30-day rolling average).

(40 CFR. 60 Subpart KKKK, Table 1)

- The NO_x emissions from each combustion turbine/duct burner stack shall not exceed 96 ppm at (15% O₂) or 4.7 lb/MWh of useful output when operating at a level less than 75% load (30-day rolling average).

(40 CFR Part 60 Subpart KKKK, Table 1)

The NO_x BACT emission standards apply at all times except during startup, shutdown, and malfunction.

Carbon Monoxide (CO):

- The combined CO emissions from each combustion turbine/duct burner stack shall not exceed 0.073 lb/MMBtu and 194 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) BACT

- The CO emissions while firing the combustion turbine only shall not exceed 0.022 lb/MMBtu and 59.6 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) BACT

The CO emission standards apply at all times except during startup, shutdown, and load change.

Volatile Organic Compounds (VOC):

- The combined VOC emissions from each combustion turbine/duct burner stack shall not exceed 0.0068 lb/MMBtu and 18.1 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) BACT

The VOC emission standards apply at all times except during startup, shutdown, and load change.

Sulfuric Acid Mist (H₂SO₄):

- The combined H₂SO₄ emissions from each combustion turbine/duct burner stack shall not exceed 0.00086 lb/MMBtu and 2.3 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) BACT

The H₂SO₄ emission standards apply at all times except during startup, shutdown, and load change.

Operational Parameters:

- The turbines and duct burners shall fire only natural gas.

(ADEM Admin. Code r. 335-3-14-.04) BACT

- The combined hours of operation for power augmentation with duct firing, power augmentation alone, and duct firing alone shall not exceed 2000 hours in any consecutive 12-month period.

(ADEM Admin. Code r. 335-3-14-.04) BACT

- Originally this facility was required to operate the combined cycle units at a load above 75% except for periods of startup or shutdown (See PSD Permit issued September 28, 2008). Persistent with the PSD and Title V permit, this facility may operate at a load below 75% if compliance with emission standards have been verified by compliance test and ambient air modeling confirms that all ambient air standards would be met at the new minimum load. On December 15, 2015, the facility submitted stack test data to verify a new minimum load of 45%. Hillabee Power Plant also submitted, on May 20, 2016, ambient air modeling confirming the minimum load of 45%. The meteorological section of the air division at the Department confirmed those results with a memorandum dated January 5, 2017, stating that emissions from this facility is not expected to cause or contribute to any violation of the NAAQS or PSD Increment.

Expected Emissions

Particulate Matter (PM) and Opacity:

- During a compliance test on November 3, 2015, the PM emission rates from these units were less than the permitted allowable emission limit of 0.011 lb/MMBtu and 27.5 lb/hr. The following is the highest emission rates indicated by that compliance test:

Unit	PM lb/MMBtu	PM (lb/hr)
1	0.004 lb/MMBtu	6.3
2	0.0022lb/MMBtu	3.76

Sulfur Dioxide (SO₂):

- Natural gas is the exclusive fuel for these units, resulting in an emission rate of approximately 0.0006 lb/MMBtu.

Nitrogen Oxides (NO_x):

- During a compliance test on November 3, 2015, the NO_x emission rates from these units were less than the permitted allowable emission limit of 0.009 lb/MMBtu and 24.6 lb/hr. The following is the highest emission rates indicated by that compliance test:

Unit	NO_x lb/MMBtu	NO_x (lb/hr)
1	0.0076 lb/MMBtu	11.87
2	0.0069 lb/MMBtu	11.64

Carbon Monoxide (CO):

- During a compliance test on November 3, 2015, the CO emission rates from these units were less than the permitted allowable emissions limits of 0.022 lb/MMBtu and 59.6 lb/hr when firing the turbine only, and 0.073 lb/MMBtu and 194 lb/hr during times when power augmentation is in operation. The following are the highest emission rates indicated by the initial performance testing:

Unit	CO (lb/MMBtu)	CO (lb/hr)
1	0.016	24.66
2	0.015	25.27

Volatile Organic Compounds (VOC):

- During a compliance test on November 3, 2015, the VOC emission rates from these units were less than the permitted allowable emissions limits of 0.0068 lb/MMBtu and 18.1 lb/hr. The following is the highest emission rates indicated by the initial performance testing:

Unit	VOC (lb/MMBtu)	VOC (lb/hr)
1	0.0019	5.26
2	0.002	3.18

Green House Gases (GHG):

- The facility reported a total of 2,088,878 Tons. This is an estimate of the actual emissions.

Periodic monitoring and Compliance Assurance Monitoring (CAM)

Particulate Matter (PM) and Opacity:

- Based on the expected levels of emissions as compared to the regulatory allowable emission limits, periodic monitoring of opacity and particulate matter emissions is not considered necessary. Additionally, the only control device for the CT is an SCR that is only used to control NOx emissions; therefore, CAM is not applicable for PM and Opacity.

Sulfur Dioxide (SO₂):

- As stated within the NSPS regulations for gas turbines, periodic monitoring for SO₂ is not required based on the requirements for the units to only fire natural gas. Additionally, the only control device for the CT is an SCR that is only used to control NO_x emissions; therefore, CAM is not applicable for SO₂ or Sulfuric Acid Mist.

Nitrogen Oxides (NO_x):

- The combined-cycle combustion turbine units are required by the current permit to operate continuously on each exhaust stack a NO_x continuous emission monitoring system (CEMS). The CEMS is used to demonstrate compliance with the best available control technology (BACT) emission limits, the Acid Rain Program, and CSAPR.
- The facility is required to maintain and operate NO_x Continuous Emissions Monitoring Systems (CEMS) on these units in accordance with 40 CFR Part 75. Based on 40 CFR §64.2, the only pollutant potentially subject to CAM would be NO_x since it is the only pollutant which is controlled by an active control device and the potential uncontrolled emission rate is greater than 100 tons per year. 40 CFR §64.2(b)(vi) provides exemptions for the CAM regulations including using CEMS as a continuous compliance determination method (CCDM). NO_x CEMS is specified as the compliance determination method for each NO_x emission limit. As a result, CAM is not applicable for NO_x.

Volatile Organic Compounds (VOC) and Carbon Monoxide (CO):

- Based on the results of the initial compliance testing and the expected levels of emissions as compared to the regulatory allowable emission limits, no periodic monitoring of VOC and CO emissions is considered necessary. Additionally, the only control device for the CT is an SCR that is only used to control NO_x emissions; therefore, CAM is not applicable for VOC and CO.

Record Keeping and Reporting

- An excess emissions report for the combined turbine/duct burner stack as defined by 40 CFR Part 60, Subpart A, §60.7(c) and (d), shall be submitted quarterly to the Department within 30 days of the end of each reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c) and 40 CFR §60.7(c) and (d))

- Records of monthly and rolling 12-month power augmentation with duct burning, power augmentation alone, and duct firing alone shall be maintained in a form suitable for inspection for a period of at least two years.

(ADEM Admin. Code r. 335-3-14-.04) BACT

- The facility shall comply with the recordkeeping and reporting requirements of CSAPR.

(ADEM Admin. Code r. 335-3-5-.31, 335-3-5-.35, 335-3-8-.33, 335-3-8-.37, 335-3-8-.65, and 335-3-8-.69)

Cross-State Air Pollution Rule

- These units are subject to the applicable provisions of Cross-State Air Pollution Rule (CSAPR) to include all applicable provisions of the SO₂ Group 2 Trading Program requirements.

(ADEM Admin. Code r. 335-3-5-.06 through 335-3-5-.36)

- These units are subject to the applicable provisions of Cross-State Air Pollution Rule (CSAPR) to include all applicable provisions of the NO_x Annual Trading Program requirements.

(ADEM Admin. Code r. 335-3-8-.07 through 335-3-8-.70)

11.64 MMBtu/hr Indirect-fired Fuel Heater (Natural Gas Fired)

The fuel heater fires only pipeline quality natural gas. The fuel heater is manufactured by Total Energy Resources and has a maximum heat input of 11.64 MMBtu/hr.

The 11.64 MMBtu/hr Indirect-fired fuel heater was subject to a Prevention of Significant Deterioration (PSD) Review in which BACT was established for NO_x, SO₂, CO, VOC, PM/PM₁₀/PM_{2.5}. Air Permit No. 310-0022-X002, issued on September 24, 2008, set the original BACT limits for this source. The fuel heater utilizes low-NO_x burner technology for the control of NO_x emissions. The fuel heater is fired by pipeline quality natural gas which inherently limits the PM/PM₁₀/PM_{2.5} and SO₂ emissions.

The fuel heater is also subject to the Federal New Source Performance Standards (NSPS) contained in 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*. However, as a unit that would be fired exclusively by natural gas, Subpart Dc includes no applicable emissions standards. The estimated emissions and the associated standards for the fuel heater are listed below.

Emission Standards

Particulate Matter (PM) and Sulfur Dioxide (SO₂):

- The fuel heater shall only fire pipeline quality natural gas.

(ADEM Admin. Code r. 335-3-14-.04) BACT

Nitrogen Oxides (NO_x):

- The NO_x emissions from the fuel heater stack shall not exceed 0.13 lb/MMBtu and 1.6 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) BACT

Carbon Monoxide (CO):

- The CO emissions from the fuel heater stack shall not exceed 0.081 lb/MMBtu and 0.94 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) BACT

Volatile Organic Compounds (VOC):

- The fuel heater shall use good combustion practices in order to minimize VOC emissions.

(ADEM Admin. Code r. 335-3-14-.04) BACT

Expected Emissions

Particulate Matter (PM) and Opacity:

- According to the Manufacturer's emissions specifications, the maximum expected particulate emissions from the unit are 0.010 lb/MMBtu or 0.12 lb/hr.

Sulfur Dioxide (SO₂):

- According to the Manufacturer's emissions specifications, the maximum expected sulfur dioxide emissions from the unit are 0.002 lb/MMBtu or 0.023 lb/hr.

Nitrogen Oxides (NO_x):

- According to the Manufacturer's emissions specifications, the maximum expected nitrogen oxides emissions from the unit are 0.133 lb/MMBtu or 1.55 lb/hr.

Carbon Monoxide (CO):

- According to the Manufacturer's emissions specifications, the maximum expected carbon monoxide emissions from the unit are 0.081 lb/MMBtu or 0.94 lb/hr.

Volatile Organic Compounds (VOC):

- According to the Manufacturer's emissions specifications, the maximum expected volatile organic compound emissions from the unit are 0.009 lb/MMBtu or 0.10 lb/hr.

Periodic Monitoring

No periodic monitoring is required by regulation for this unit.

Compliance Assurance Monitoring (CAM)

No control equipment is utilized to meet any applicable emissions limitation and therefore, CAM does not apply to any pollutant emitted by this unit.

Recordkeeping and Reporting

The permittee must record and maintain records of the amount of each fuel combusted in this unit during each calendar month in a form suitable for inspection for a period of at least two years following the date of generation.

40 CFR 60.48c(g)(2)

MACT Subpart ZZZZ – Existing Emergency Firewater Pump

This emergency firewater pump is subject to 40 CFR 63, Subpart ZZZZ, because it was manufactured before the applicability dates in 40 CFR Part 60 Subpart IIII. This emergency generator is not subject to 40 CFR Part 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) because this fire pump engine was manufactured before the applicability date of July 1, 2006. This emergency generator is subject to the applicable requirements in 40 CFR Part 63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE)).

<u>Source #</u>	<u>HP</u>	<u>Fuel</u>
004	805	Diesel

NSPS Subpart IIII

Subpart IIII applies to owners and operators of engines that commence construction after July 11, 2005, where the engines are manufactured on or after July 1, 2006. This compression ignition firewater pump was manufactured before July 1, 2006; therefore, Subpart IIII does not apply.

(40 CFR Part 60 Subpart IIII, §60.4200(a)(3))

MACT Subpart ZZZZ

Emission Standards

- This unit is subject to the applicable requirements listed in Table 2d of 40 CFR 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

(40 CFR Part 63 Subpart ZZZZ, §63.6602)

- The Permittee must operate and maintain this unit according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(40 CFR Part 63 Subpart ZZZZ, §63.6625(e)(3))

- The Permittee must install a non-resettable hour meter for each unit if one is not already installed.

(40 CFR Part 63 Subpart ZZZZ, §63.6625(f))

- This unit may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of this unit is limited to 100 hours per year. There is no time limit on the use of this unit in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. This unit may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in 40 CFR 63 Subpart ZZZZ, is prohibited.

(40 CFR Part 63 Subpart ZZZZ, §63.6640(f))

Expected Emissions

The expected emissions are based on AP-42 emission factors, manufacturer's certifications, and a maximum operation of 500 hours per year. The expected emissions of the firewater pump engine subject to Subpart ZZZZ – Existing Firewater Pump Emergency Engines are shown below:

Pollutant	805 HP Firewater Pump	
	lb/hr	TPY
PM₁₀/ PM_{2.5}	0.752	0.188
SO₂	0.125	0.031
NO_x	10.7	2.7
CO	2.31	0.6
VOC	0.850	0.212
CO_{2e}	--	233.84

MACT Monitoring

The Permittee shall perform the following activities:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Or utilize an oil analysis program as describe in §63.6625(i) or §636625(j).

(40 CFR Part 63 Subpart ZZZZ, Table 2d & §63.6625(i))

If an oil analysis program is utilized for a stationary compression ignition engine, the Permittee must perform the oil analysis at the same frequency specified above for changing the oil. The Permittee must at a minimum analyze the following parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new, viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new, or percent water content (by volume) is greater than 0.5. If any of the limits are exceed, the Permittee must change the oil

within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later.

(40 CFR Part 63 Subpart ZZZZ, §63.6625(i))

CAM

This source has no active control device; therefore, CAM does not apply for any pollutants.

Recordkeeping and Reporting

The Permittee must keep records of the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. These records shall be maintained in a manner suitable for inspection for a period of 5 years from record generation.

(40 CFR Part 63 Subpart ZZZZ, §63.6625(i))

The Permittee must keep records of the maintenance conducted on these units in order to demonstrate that you operated and maintained these units and after-treatment control device (if any) according to your own maintenance plan or according to manufacturer's written instructions. These records shall be maintained in a manner suitable for inspection for a period of 5 years from record generation.

(40 CFR Part 63 Subpart ZZZZ, §63.6655(e))

The Permittee must keep records of the hours of operation of each engine that is recorded through the non-resettable hour meter. The facility must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. These records shall be maintained in a manner suitable for inspection for a period of 5 years from record generation.

(40 CFR Part 63 Subpart ZZZZ, §63.6655(f))

Environmental Justice

ADEM utilized the EJSCREEN screening tool to perform an analysis of the area. Please refer to Appendix A.

Recommendation:

Based on the above analysis and pending the resolution of any comments received during the 30-day public comment period and 45-day EPA review, I recommend issuing the renewal MSOP for Hillabee Energy Center.

Tyler Phillips
Industrial Minerals Section
Energy Branch
Air Division

Date

Appendix A

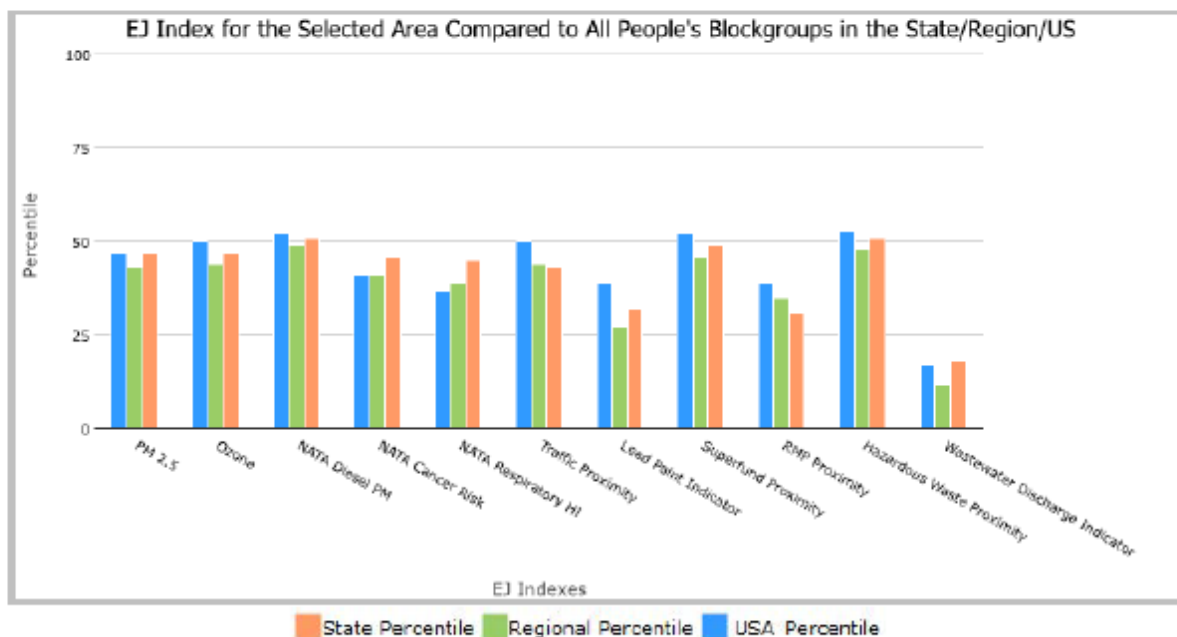
1 mile Ring around the Area, ALABAMA, EPA Region 4

Approximate Population: 159

Input Area (sq. miles): 4.00

Hillabee

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	47	43	47
EJ Index for Ozone	47	44	50
EJ Index for NATA [*] Diesel PM	51	49	52
EJ Index for NATA [*] Air Toxics Cancer Risk	46	41	41
EJ Index for NATA [*] Respiratory Hazard Index	45	39	37
EJ Index for Traffic Proximity and Volume	43	44	50
EJ Index for Lead Paint Indicator	32	27	39
EJ Index for Superfund Proximity	49	46	52
EJ Index for RMP Proximity	31	35	39
EJ Index for Hazardous Waste Proximity	51	48	53
EJ Index for Wastewater Discharge Indicator	18	12	17



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.

EJSCREEN Report (Version 2020)

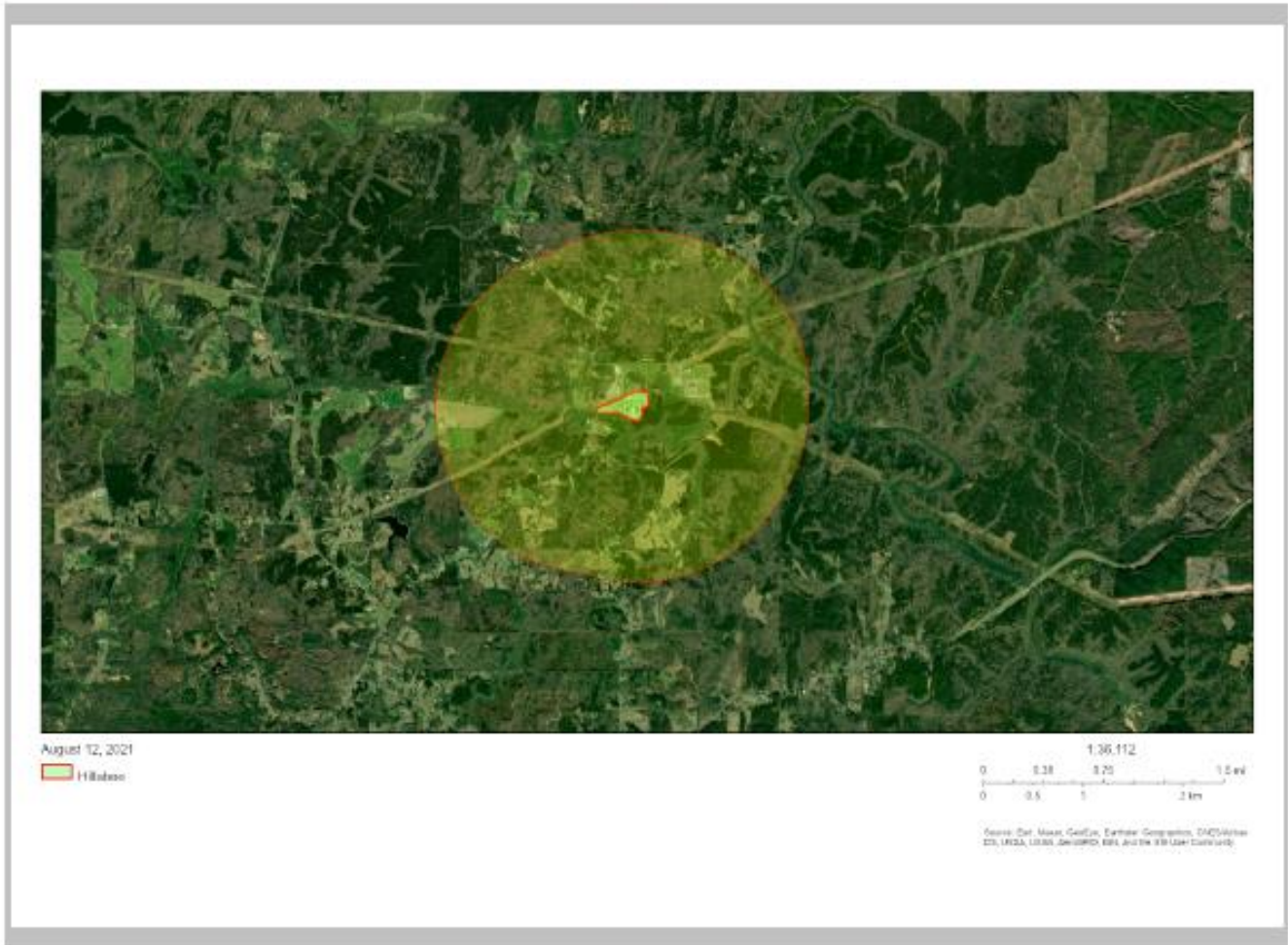


1 mile Ring around the Area, ALABAMA, EPA Region 4

Approximate Population: 159

Input Area (sq. miles): 4.00

Hillabee



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

EJSCREEN Report (Version 2020)



1 mile Ring around the Area, ALABAMA, EPA Region 4

Approximate Population: 159

Input Area (sq. miles): 4.00

Hillabee

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 $\mu\text{g}/\text{m}^3$)	9.42	9.31	61	8.57	86	8.55	78
Ozone (ppb)	36.7	38	23	38	40	42.9	15
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.169	0.346	13	0.417	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	45	43	59	36	90-95th	32	90-95th
NATA* Respiratory Hazard Index	0.71	0.65	69	0.52	95-100th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	52	220	44	350	36	750	25
Lead Paint Indicator (% Pre-1960 Housing)	0.15	0.18	58	0.15	66	0.28	45
Superfund Proximity (site count/km distance)	0.019	0.054	25	0.083	29	0.13	16
RMP Proximity (facility count/km distance)	0.3	0.41	68	0.6	56	0.74	49
Hazardous Waste Proximity (facility count/km distance)	0.13	0.82	27	0.91	23	5	17
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0026	1.2	68	0.65	80	9.4	71
Demographic Indicators							
Demographic Index	27%	36%	43	37%	39	36%	45
People of Color Population	12%	34%	25	39%	21	39%	24
Low Income Population	43%	38%	62	36%	64	33%	72
Linguistically Isolated Population	0%	1%	71	3%	51	4%	45
Population With Less Than High School Education	14%	14%	56	13%	62	13%	67
Population Under 5 years of age	5%	6%	45	6%	45	6%	43
Population over 64 years of age	23%	16%	85	17%	82	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.

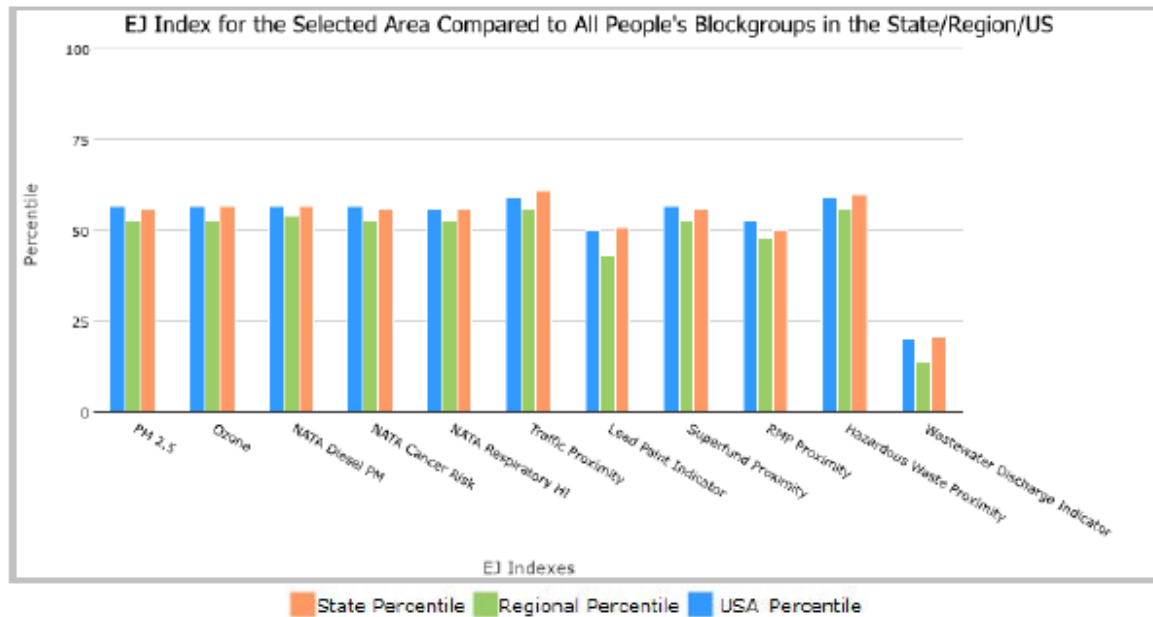
3 miles Ring around the Area, ALABAMA, EPA Region 4

Approximate Population: 2,394

Input Area (sq. miles): 30.79

Hillabee

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	56	53	57
EJ Index for Ozone	57	53	57
EJ Index for NATA* Diesel PM	57	54	57
EJ Index for NATA* Air Toxics Cancer Risk	56	53	57
EJ Index for NATA* Respiratory Hazard Index	56	53	56
EJ Index for Traffic Proximity and Volume	61	56	59
EJ Index for Lead Paint Indicator	51	43	50
EJ Index for Superfund Proximity	56	53	57
EJ Index for RMP Proximity	50	48	53
EJ Index for Hazardous Waste Proximity	60	56	59
EJ Index for Wastewater Discharge Indicator	21	14	20



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 around the Area, ALABAMA, EPA Region 4

Approximate Population: 2,394

Input Area (sq. miles): 30.79

Hillabee



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



EJSCREEN Report (Version 2020)



3 miles Ring around the Area, ALABAMA, EPA Region 4

Approximate Population: 2,394

Input Area (sq. miles): 30.79

Hillabee

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 $\mu\text{g}/\text{m}^3$)	9.41	9.31	61	8.57	86	8.55	78
Ozone (ppb)	36.7	38	23	38	40	42.9	15
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.165	0.348	11	0.417	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	45	43	59	36	90-95th	32	90-95th
NATA* Respiratory Hazard Index	0.71	0.65	68	0.52	95-100th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	44	220	41	350	33	750	23
Lead Paint Indicator (% Pre-1960 Housing)	0.15	0.18	60	0.15	67	0.28	47
Superfund Proximity (site count/km distance)	0.019	0.054	24	0.083	29	0.13	16
RMP Proximity (facility count/km distance)	0.25	0.41	64	0.6	52	0.74	45
Hazardous Waste Proximity (facility count/km distance)	0.15	0.82	31	0.91	28	5	20
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0014	1.2	63	0.65	77	9.4	68
Demographic Indicators							
Demographic Index	34%	36%	55	37%	51	36%	56
People of Color Population	25%	34%	48	39%	41	39%	43
Low Income Population	43%	38%	61	36%	64	33%	71
Linguistically Isolated Population	0%	1%	71	3%	51	4%	45
Population With Less Than High School Education	17%	14%	65	13%	71	13%	74
Population Under 5 years of age	7%	6%	64	6%	65	6%	62
Population over 64 years of age	23%	16%	83	17%	80	15%	83

* 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.

Save as PDF



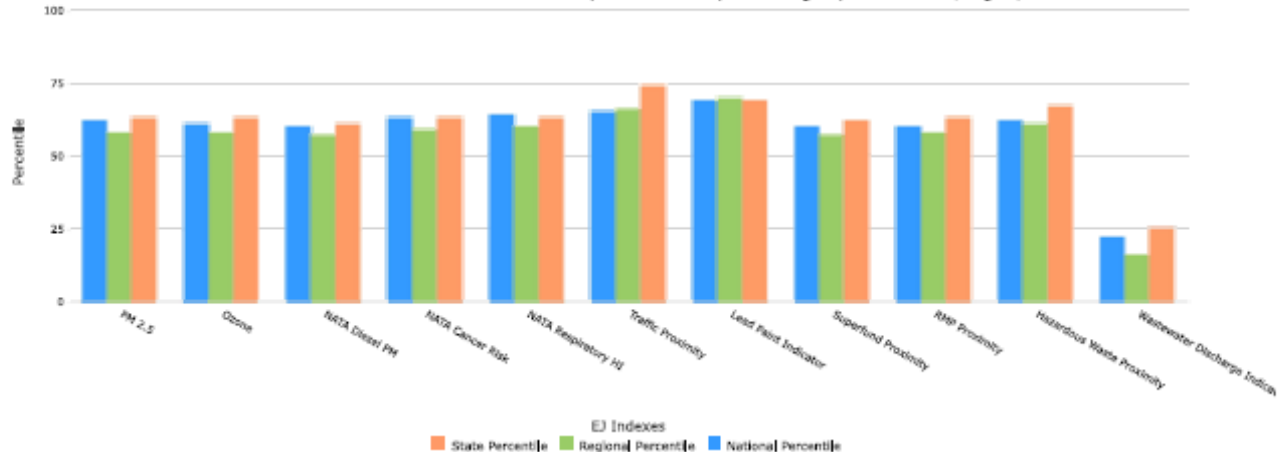
EJSCREEN Report (Version 2020)

5 miles Ring around the Area
ALABAMA, EPA Region 4
Approximate Population: 9,833
Input Area (sq. miles): 82.70

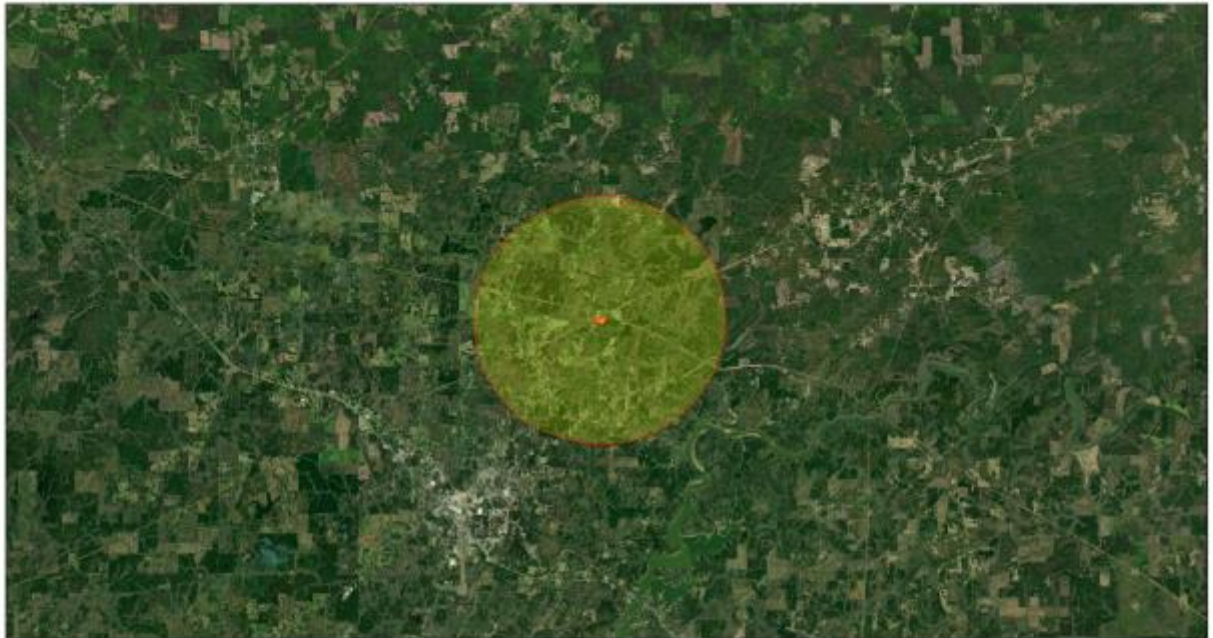
Hillabee

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	63	58	62
EJ Index for Ozone	63	58	61
EJ Index for NATA* Diesel PM	61	57	60
EJ Index for NATA* Air Toxics Cancer Risk	63	59	63
EJ Index for NATA* Respiratory Hazard Index	63	60	64
EJ Index for Traffic Proximity and Volume	74	66	65
EJ Index for Lead Paint Indicator	69	70	69
EJ Index for Superfund Proximity	62	57	60
EJ Index for RMP Proximity	63	58	60
EJ Index for Hazardous Waste Proximity	67	61	62
EJ Index for Wastewater Discharge Indicator	25	16	22

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.



August 12, 2021

mi/aboo

1:144,448



Source: Esri, DeLorme, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, 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
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.43	9.31	61	8.57	86	6.55	79
Ozone (ppb)	36.7	38	23	38	40	42.9	15
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.171	0.346	14	0.417	<50th	0.478	<50th
NATA* Air Toxics Cancer Risk (risk per MM)	45	43	60	36	90-95th	32	90-95th
NATA* Respiratory Hazard Index	0.72	0.65	71	0.52	95-100th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	63	220	47	350	39	750	27
Lead Paint Indicator (% pre-1980s housing)	0.24	0.18	78	0.15	79	0.28	57
Superfund Proximity (site count/km distance)	0.018	0.054	23	0.083	28	0.13	15
RMP Proximity (facility count/km distance)	0.24	0.41	63	0.6	51	0.74	44
Hazardous Waste Proximity (facility count/km distance)	0.18	0.82	34	0.91	34	5	23
Wastewater Discharge Indicator (toxicity-weighted concentration/km distance)	0.00094	1.2	60	0.65	75	9.4	65
Demographic Indicators							
Demographic Index	41%	36%	67	37%	62	36%	65
People of Color Population	36%	34%	62	39%	54	39%	55
Low Income Population	46%	38%	67	36%	69	33%	75
Linguistically Isolated Population	0%	1%	71	3%	51	4%	45
Population with Less Than High School Education	21%	14%	76	13%	80	13%	80
Population under Age 5	5%	6%	47	6%	48	6%	46
Population over Age 64	19%	16%	71	17%	71	15%	74

*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>.

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