

STATEMENT OF BASIS
Three Corners Regional Landfill
Cherokee, County
Facility No. 303-0008

Introduction

Alabama Waste Disposal Solutions, LLC has applied for renewal of Major Source Operating Permit (MSOP) No. 303-0008 for the Three Corners Regional Landfill. This proposed Title V MSOP renewal has been developed in accordance with the provisions of ADEM Admin Code r. 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 the permit.

The facility originally began operations in 1991. The initial Title V MSOP was issued on November 16, 2000, and this is the third renewal. The current MSOP expired on November 14, 2015, but the renewal application was received on May 12, 2015. ADEM Admin. Code r. 335-3-16-12(c) states “If a timely and complete application for a permit renewal is submitted, but the Department fails to take final action to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied and any permit shield granted for the permit shall continue in effect during that time”; therefore, the current MSOP was administratively continued.

The facility is located in Cherokee County, which is in compliance with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against Three Corners Regional Landfill necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at <https://echo.epa.gov/> (Search using Facility ID AL0000000112900024).

Potential emissions are as follows:

Pollutant	Potential Emissions (tpy)
PM ₁₀	47.5
SO ₂	9.42
NO _x	23.57
CO	30.79
NMOC (Uncontrolled in 2024)*	1,015.7
NMOC (From Flare)	1.5
VOC	123.04
HAPs	10.13

*Calculated using landgem default values instead of site-specific values to insure estimate is not lower than actual emissions produced.

No other criteria pollutants are emitted in sufficient quantities, actually or potentially, to exceed the major source threshold of 100 tons per year.

Requirements

X001: MSW Landfill

The landfill is currently subject to 40 CFR 62, Subpart OOO - Federal Plan Requirements for Municipal Solid Waste (MSW) Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014, because it has a design capacity greater than both 2.5 million megagrams and 2.5 million cubic meters. It will become subject to ADEM Chapter 335-3-19 Control of Municipal Solid Waste Landfill Gas Emissions (once approved by the Environmental Protection Agency (EPA)) because it has a design capacity greater than 2.5×10^6 cubic meters and 2.5×10^6 megagrams and has not commenced construction, reconstruction, or modification after July 17, 2014. Previously, it was subject to 40 CFR 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills. In 2005, Three Corners' uncontrolled non-methane organic compounds (NMOC) emissions exceeded the 50 megagrams per year threshold it was previously subject to under Subpart WWW, and the facility has thus installed a gas collection and control system (GCCS) and is subject to the operational standards, and monitoring, recordkeeping, and reporting requirements for a GCCS.

Because the NMOC emissions have exceeded 50 megagrams per year, Three Corners is also subject to 40 CFR 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants (NESHAP): Municipal Solid Waste Landfills. This includes any alternatives to operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions that have already been approved under Subpart WWW. Subpart AAAA also requires MSW landfills to keep the records and reports specified in the general provisions of 40 CFR 60. Recent changes to Subpart AAAA include an operating temperature increase for gas field wells from 131 F to 145 F, an end to meeting an oxygen standard of 5% or less (though monitoring is still required), and changes to the procedures for correcting exceedances. The startup, shutdown, and malfunction (SSM) requirements no longer apply as of September 27, 2021. The standards of Subpart AAAA will still apply during SSM and instances of SSM will be reported in the semiannual report instead of a separate SSM report. Alternatives approved under Subpart WWW can still be used to comply with Subpart AAAA. Subpart AAAA also introduced changes to the timelines for correcting exceedances of the operating parameters, as well as changes to the procedures to be followed in situations where more than fifteen days may be required to correct a parameter exceedance.

In addition to the requirements of the Federal Rule, ADEM Chapter 335-3-19, and the NESHAP, the flare is also subject to the requirements of 40 CFR 60.18 covering general control device and work practice requirements.

X002: MSW Landfill Asbestos NESHAP

The landfill has also accepted waste containing asbestos, making it subject to the NESHAP 40 CFR 61, Subpart M - National Emission Standard for Asbestos. Subpart M contains standards for covering asbestos containing waste and details the records that must be kept and reports that must be submitted on asbestos containing waste.

PSD

The potential volatile organic compound (VOC) emissions from the landfill are less than 250 tons per year; therefore, the facility is not subject to the Prevention of Significant Deterioration (PSD).

Monitoring of emissions

Three Corners Regional Landfill maintains records on site of the design capacity report, waste in place, year to year waste acceptance rates, and other records to show compliance with 40 CFR 63, Subpart AAAA; 40 CFR 62, Subpart OOO; and ADEM Admin. Rule R. 335-3-19 (once approved by the EPA).

The flare is monitored to ensure the continuous presence of a flame. Three Corners Regional Landfill has been granted an exemption from the requirement to monitor the gas flow rate to the flare due to the absence of a means to bypass the flare. The flare is operated in accordance with the requirements of 40 CFR 60.18.

Compliance Assurance Monitoring (CAM) is not applicable as Three Corners is subject to standards that were promulgated after November 15, 1990. According to 40 CFR 64.2(b)(1)(i) on exemptions from CAM, emission limitations or standards proposed after November 15, 1990 pursuant to section 111 or 112 of the Clean Air Act are exempt from CAM requirements, and there are no other source specific standards applicable to this facility.

Recordkeeping and Reporting Requirements:

Three Corners Regional Landfill is required to keep records including, but not limited to, the current amount of solid waste in place, year-by-year waste acceptance rates, above required monitoring and testing of the GCCS for a minimum of 5 years. These records will be evaluated by the Department during the annual inspection. The facility is also required to submit a deviation report on a semi-annual basis and an Annual Compliance Certification (ACC).

Environmental Justice:

ADEM utilized EJSCREEN screening tool to perform an analysis of the area. (Appendix A)

Recommendation:

I recommend that the Three Corners Regional Landfill be issued the enclosed Title V permit 303-0008 for a Municipal Solid Waste Landfill with a design capacity of greater than 2.5×10^6 Megagrams with a gas collection system and flare.

John Robert Gill
Chemical Branch
Air Division

October 6, 2022

Appendix A
EJSCREEN Report

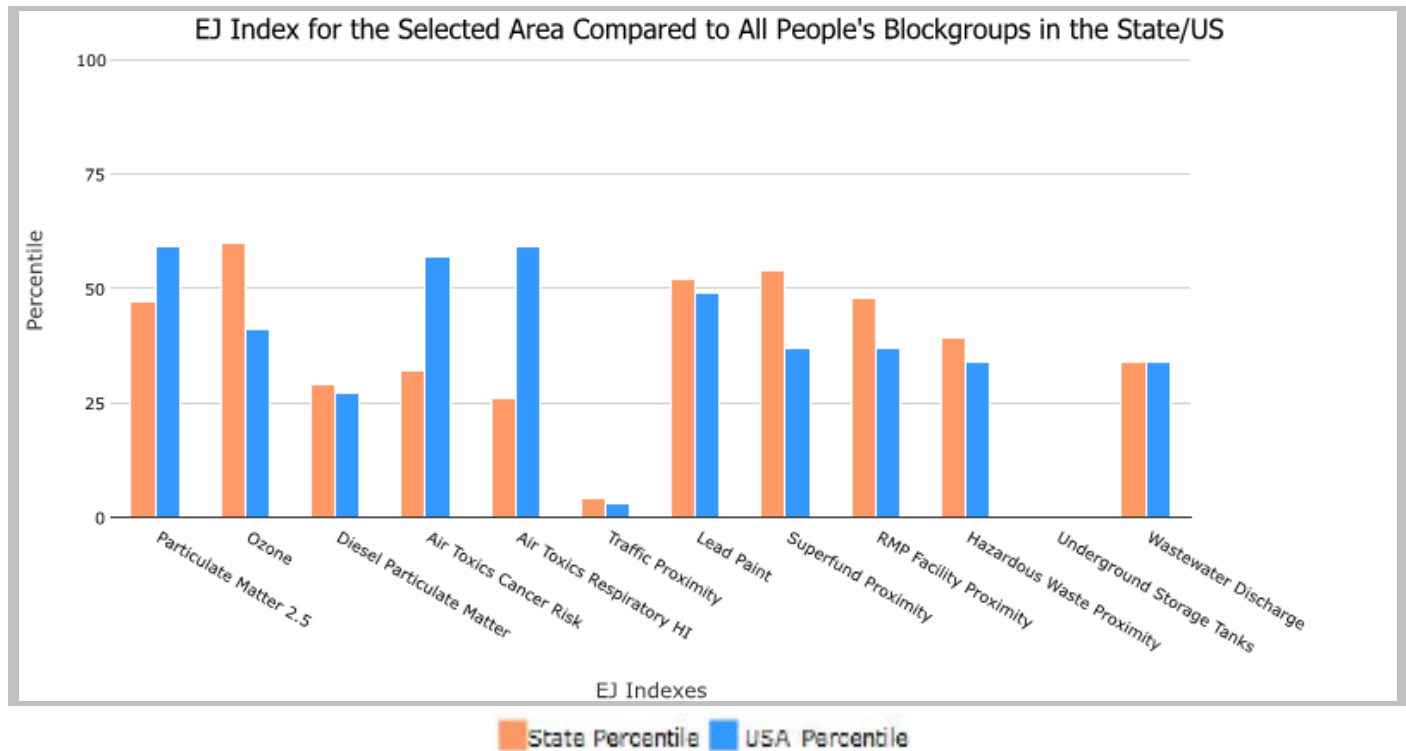
1 mile Ring Centered at 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 61

Input Area (sq. miles): 3.14

Three Corners Landfill

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
EJ Index for Particulate Matter 2.5	47	59
EJ Index for Ozone	60	41
EJ Index for Diesel Particulate Matter*	29	27
EJ Index for Air Toxics Cancer Risk*	32	57
EJ Index for Air Toxics Respiratory HI*	26	59
EJ Index for Traffic Proximity	4	3
EJ Index for Lead Paint	52	49
EJ Index for Superfund Proximity	54	37
EJ Index for RMP Facility Proximity	48	37
EJ Index for Hazardous Waste Proximity	39	34
EJ Index for Underground Storage Tanks	0	0
EJ Index for Wastewater Discharge	34	34



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 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 61

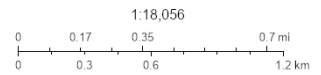
Input Area (sq. miles): 3.14

Three Corners Landfill



January 4, 2023

Three Corners Landfill



Esri, HERE, Garmin, IPC, Maxar

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

EJScreen Report (Version 2.1)

1 mile Ring Centered at 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 61

Input Area (sq. miles): 3.14

Three Corners Landfill

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.87	8.92	45	8.67	58
Ozone (ppb)	39.8	39	57	42.5	31
Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.111	0.223	22	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	35	53	28	80-90th
Air Toxics Respiratory HI*	0.4	0.47	35	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	0.62	290	3	760	1
Lead Paint (% Pre-1960 Housing)	0.14	0.17	53	0.27	41
Superfund Proximity (site count/km distance)	0.029	0.051	49	0.13	27
RMP Facility Proximity (facility count/km distance)	0.15	0.46	45	0.77	28
Hazardous Waste Proximity (facility count/km distance)	0.13	0.9	31	2.2	23
Underground Storage Tanks (count/km ²)	0.0061	1.9	0	3.9	0
Wastewater Discharge (toxicity-weighted concentration/m distance)	4.1E-05	0.36	30	12	25
Socioeconomic Indicators					
Demographic Index	28%	38%	41	35%	47
People of Color	11%	35%	25	40%	26
Low Income	44%	36%	62	30%	74
Unemployment Rate	5%	6%	55	5%	56
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	33%	13%	94	12%	93
Under Age 5	4%	6%	44	6%	42
Over Age 64	18%	17%	54	16%	59

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 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.

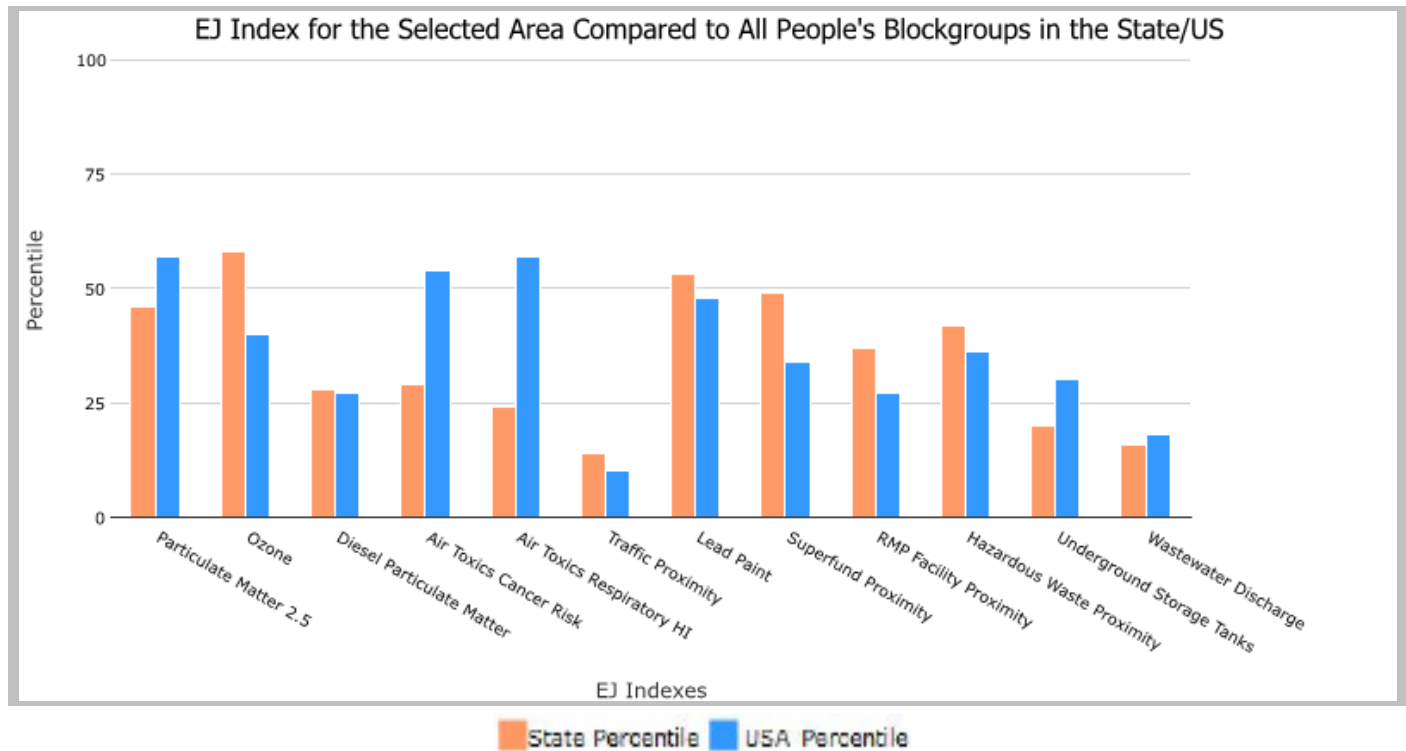
3 miles Ring Centered at 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 852

Input Area (sq. miles): 28.27

Three Corners Landfill

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
EJ Index for Particulate Matter 2.5	46	57
EJ Index for Ozone	58	40
EJ Index for Diesel Particulate Matter*	28	27
EJ Index for Air Toxics Cancer Risk*	29	54
EJ Index for Air Toxics Respiratory HI*	24	57
EJ Index for Traffic Proximity	14	10
EJ Index for Lead Paint	53	48
EJ Index for Superfund Proximity	49	34
EJ Index for RMP Facility Proximity	37	27
EJ Index for Hazardous Waste Proximity	42	36
EJ Index for Underground Storage Tanks	20	30
EJ Index for Wastewater Discharge	16	18



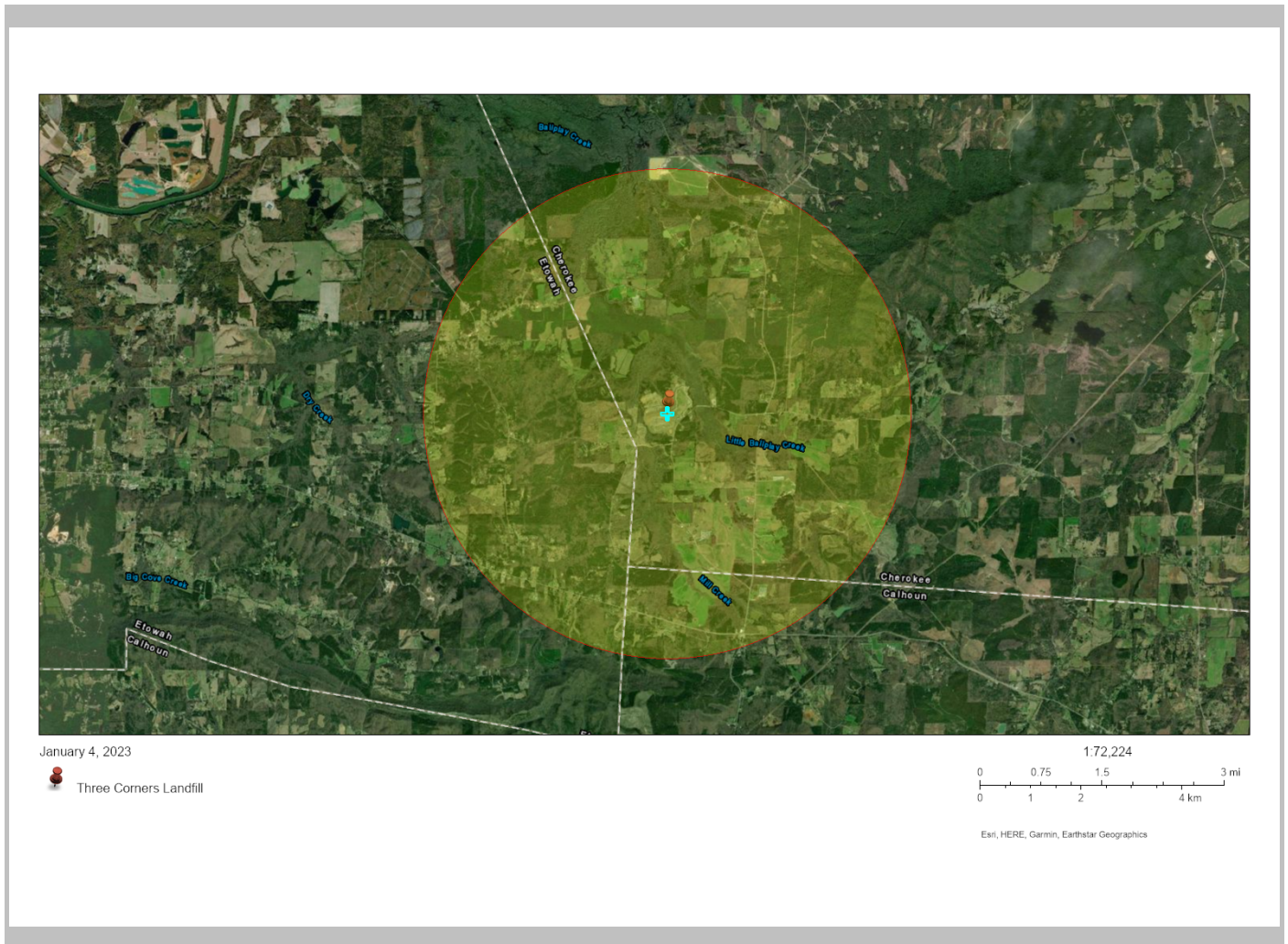
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective 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 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 852

Input Area (sq. miles): 28.27

Three Corners Landfill



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

EJScreen Report (Version 2.1)



3 miles Ring Centered at 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 852

Input Area (sq. miles): 28.27

Three Corners Landfill

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.88	8.92	46	8.67	58
Ozone (ppb)	40	39	59	42.5	32
Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.112	0.223	23	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	35	53	28	80-90th
Air Toxics Respiratory HI*	0.4	0.47	35	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	6.8	290	13	760	7
Lead Paint (% Pre-1960 Housing)	0.17	0.17	59	0.27	44
Superfund Proximity (site count/km distance)	0.027	0.051	45	0.13	26
RMP Facility Proximity (facility count/km distance)	0.11	0.46	33	0.77	19
Hazardous Waste Proximity (facility count/km distance)	0.17	0.9	36	2.2	28
Underground Storage Tanks (count/km ²)	0.11	1.9	21	3.9	28
Wastewater Discharge (toxicity-weighted concentration/m distance)	2.4E-05	0.36	27	12	22
Socioeconomic Indicators					
Demographic Index	26%	38%	37	35%	44
People of Color	10%	35%	23	40%	24
Low Income	42%	36%	58	30%	71
Unemployment Rate	3%	6%	46	5%	45
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	22%	13%	80	12%	84
Under Age 5	6%	6%	56	6%	56
Over Age 64	17%	17%	52	16%	57

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 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.

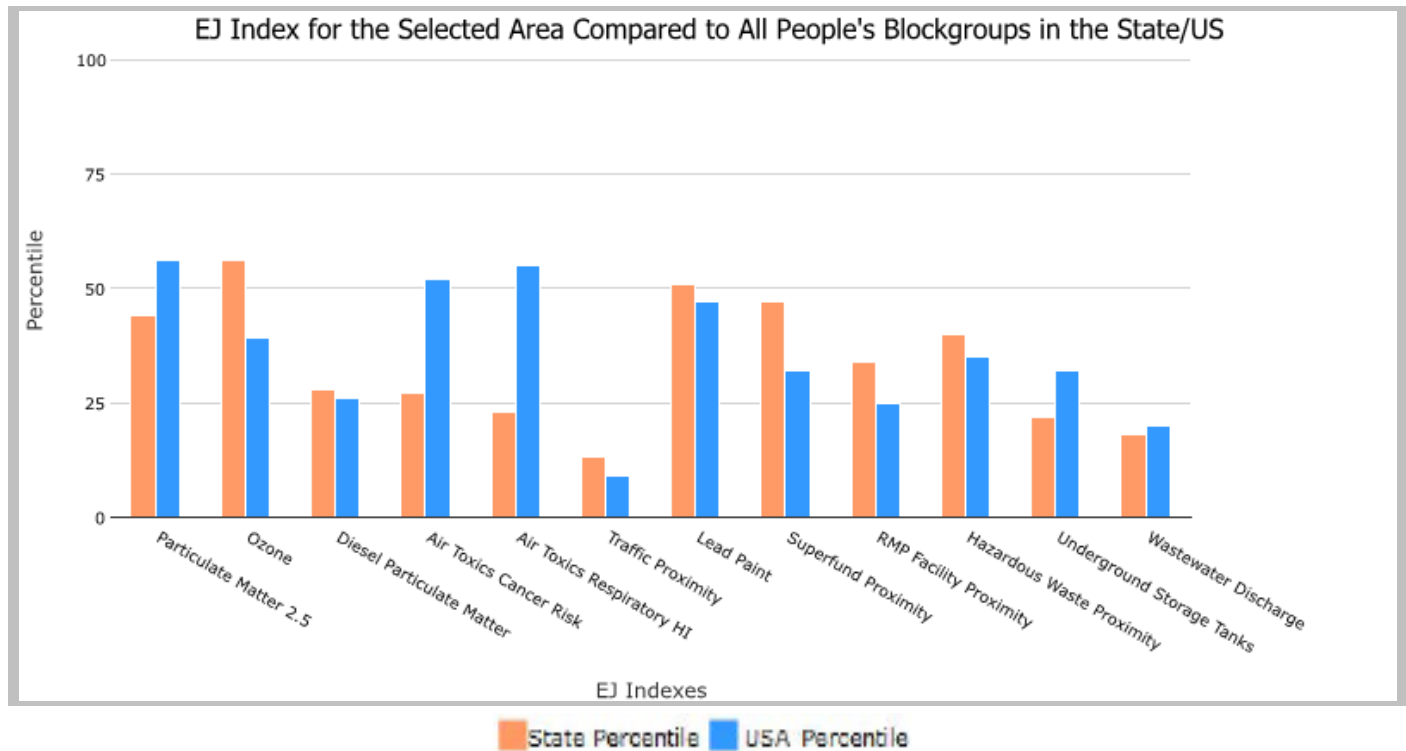
5 miles Ring Centered at 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 2,507

Input Area (sq. miles): 78.53

Three Corners Landfill

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
EJ Index for Particulate Matter 2.5	44	56
EJ Index for Ozone	56	39
EJ Index for Diesel Particulate Matter*	28	26
EJ Index for Air Toxics Cancer Risk*	27	52
EJ Index for Air Toxics Respiratory HI*	23	55
EJ Index for Traffic Proximity	13	9
EJ Index for Lead Paint	51	47
EJ Index for Superfund Proximity	47	32
EJ Index for RMP Facility Proximity	34	25
EJ Index for Hazardous Waste Proximity	40	35
EJ Index for Underground Storage Tanks	22	32
EJ Index for Wastewater Discharge	18	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.

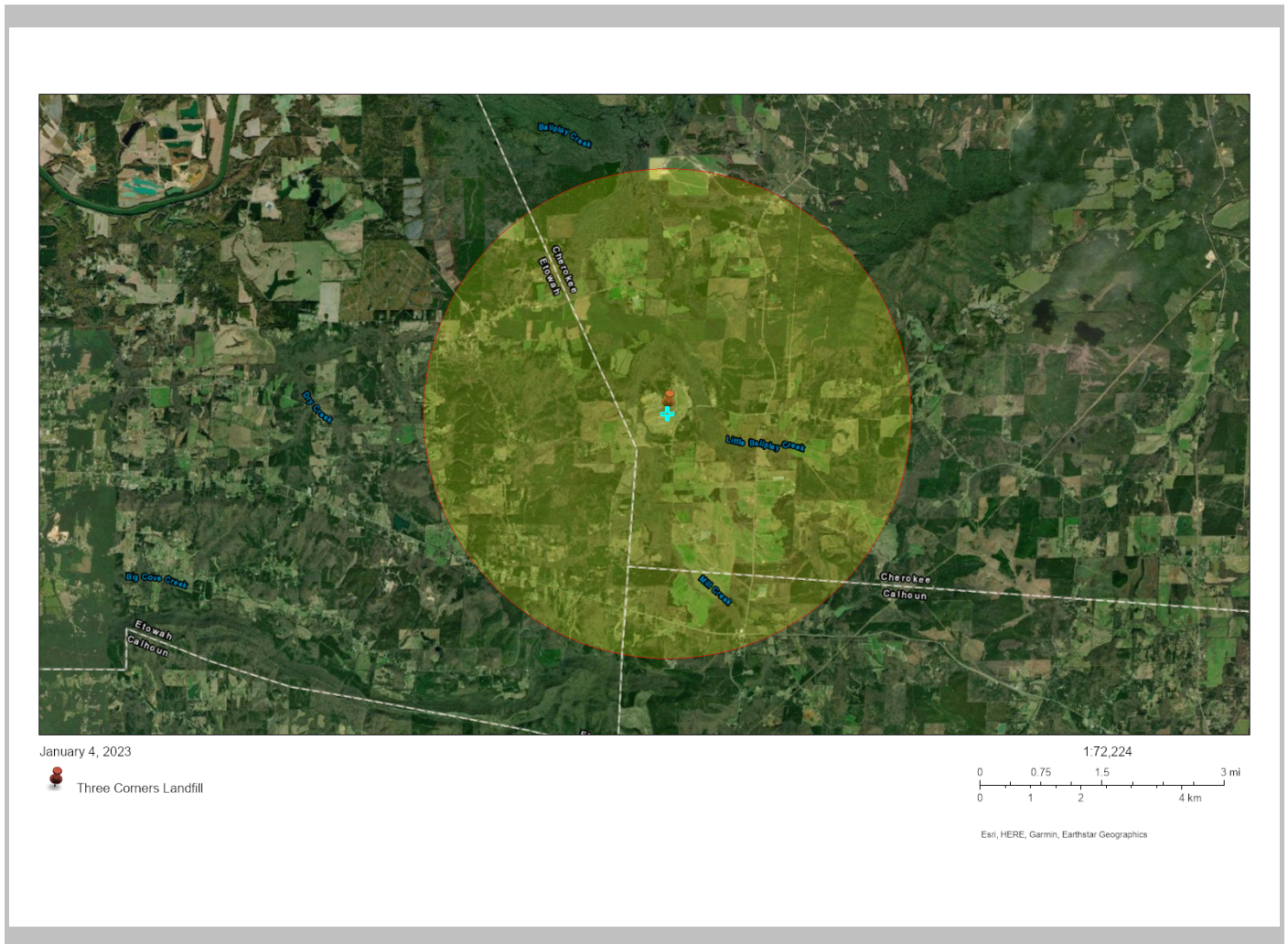
EJScreen Report (Version 2.1)

5 miles Ring Centered at 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 2,507

Input Area (sq. miles): 78.53

Three Corners Landfill



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

EJScreen Report (Version 2.1)

5 miles Ring Centered at 33.995590,-85.730315, ALABAMA, EPA Region 4

Approximate Population: 2,507

Input Area (sq. miles): 78.53

Three Corners Landfill

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.88	8.92	46	8.67	58
Ozone (ppb)	40	39	59	42.5	32
Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.113	0.223	24	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	35	53	28	80-90th
Air Toxics Respiratory HI*	0.4	0.47	35	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	6.2	290	12	760	6
Lead Paint (% Pre-1960 Housing)	0.17	0.17	59	0.27	44
Superfund Proximity (site count/km distance)	0.027	0.051	45	0.13	25
RMP Facility Proximity (facility count/km distance)	0.1	0.46	31	0.77	17
Hazardous Waste Proximity (facility count/km distance)	0.17	0.9	35	2.2	28
Underground Storage Tanks (count/km ²)	0.13	1.9	24	3.9	29
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0001	0.36	35	12	31
Socioeconomic Indicators					
Demographic Index	25%	38%	35	35%	42
People of Color	9%	35%	20	40%	21
Low Income	41%	36%	57	30%	70
Unemployment Rate	5%	6%	54	5%	55
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	20%	13%	73	12%	80
Under Age 5	5%	6%	51	6%	51
Over Age 64	20%	17%	63	16%	67

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 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.