

**Public Involvement Plan  
for**

**SANDIA NATIONAL LABORATORY  
BERNALILLO COUNTY, NEW MEXICO  
EPA ID# NM5890110518**

Prepared by:

Hazardous Waste Bureau  
New Mexico Environment Department  
Santa Fe, New Mexico

## **I. Public Involvement Plan Overview**

The New Mexico Environment Department (NMED), Hazardous Waste Bureau (Bureau or HWB) developed this Public Involvement Plan (PIP) for hazardous waste management activities required by 20.4.1.901 NMAC such as permit issuance, denial, permit renewal, permit modifications, and activities associated with the FFCO and the Consent Order at Sandia National Laboratory (SNL or the Facility).

SNL headquarters is located within the boundaries of Kirtland Air Force Base (KAFB) near Albuquerque in Bernalillo County, New Mexico. KAFB is located between the Sandia and Manzano mountain ranges in southeastern Albuquerque, New Mexico and covers 52,223 acres on a high arid mesa approximately 5 miles east of the Rio Grande. SNL occupies 2,829 acres of land owned by the DOE and an additional 14,920 acres of land provided through land-use permits with KAFB, the U.S. Forest Service (USFS), the State of New Mexico, and the Pueblo of Isleta. SNL is located at 1515 Eubank SE, Albuquerque, New Mexico, 87123. The Facility is located on KAFB immediately south and southeast of the Albuquerque city limits and occupies five Technical Areas (TAs) designated I through V and additional test areas.

This PIP integrates information about the community and identifies resources needed by the Bureau to successfully incorporate community participation activities into the decision-making process. The PIP identifies NMED staff and resources needed to accomplish these activities.

In developing this PIP, community participation needs at the site were assessed to ensure appropriate promotion of public outreach by identifying whether there is a combination of environmental and demographic factors (e.g., low income, minority, limited English proficiency, linguistically isolated households) that may affect public participation actions. This assessment identifies community outreach needs based on the type of activity and potential effects to the surrounding community and addresses the provision of public access to information about the review process.

To the extent possible, public participation and informational activities related to implementation of this PIP will be held within the timelines outlined below. Public notice activities are subject to statutory or regulatory deadlines.

Documents issued for public comment will generally be made available for a 60-day period to allow for formal public review and comments and there will be a minimum 30-day notice for public informational meetings, if scheduled. Based on the demographics of the area, the Bureau will provide pertinent information in both English and Spanish, and other languages as appropriate, in public notices, public informational meeting notices, and other announcements (e.g., radio broadcasts, newspaper notices, mailings).

If public informational meetings are held, the Bureau will make arrangements for simultaneous Spanish interpretation during the informational meetings, and, to the extent practicable, make

arrangements for translating to languages other than Spanish, if applicable, and also for obtaining services for persons with disabilities.

This PIP was developed by the Hazardous Waste Bureau and may be amended to address specific actions at SNL and after considering public comments and feedback. The Bureau will make the final approval of the PIP and amendments.

## **II. Contacts**

The HWB contact for this report review process is:

Neelam Dhawan, Acting Program Manager  
Hazardous Waste Bureau  
Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6313

Phone: (505) 476-6000

Fax: (505) 476-6030

Email: [neelam.dhawan@env.nm.gov](mailto:neelam.dhawan@env.nm.gov)

Hazardous Waste Bureau actions issued for public comment will include specific instructions for submitting comments related these activities.

## **III. Assistance for Non-English Language Speakers and Persons with Disabilities**

The Bureau will include information about how persons may request non-English speaker language assistance and accommodations for persons with disabilities (e.g., deaf and/or non-English language interpreters) in public notices and notices for informational meetings, if held, related to the report review process. Public notices will direct public requests for assistance to the Bureau contact, who will notify the Department's Non-Discrimination Coordinator. Arrangements will be made by the Bureau for document translation, interpretation, or disability services related to the activity or proceeding, as necessary. The following information will be provided in public notices so that hearing-impaired callers and persons with a disability can contact the Bureau and ask questions about the activity or proceeding:

Toll-free numbers are available for Telecommunication Device for Deaf (TDD) or TeleType (TTY) users to access the New Mexico Relay Network at 1-800-659-1779 (voice); TTY users: 1-800-659-8331. HWB public notices will include Bureau contact information for persons with a disability who require assistance or auxiliary aid to participate in this process.

## **IV. Department Websites**

Public notices and outreach materials will include links to the following websites:

New Mexico Environment Department - [www.env.nm.gov](http://www.env.nm.gov)  
Hazardous Waste Bureau - [www.env.nm.gov/hazardous-waste](http://www.env.nm.gov/hazardous-waste)  
NMED Public Notices: [www.env.nm.gov/public-notice](http://www.env.nm.gov/public-notice)

## **V. EJSCREEN Summary**

To assess the need to specifically reach and inform Limited English Proficient (LEP) community populations to encourage public participation, the Bureau used Environmental Justice mapping and screening (EJSCREEN). EJSCREEN was developed by the U.S. Environmental Protection Agency (EPA). EJSCREEN provides up to twelve (12) environmental indexes and seven (7) demographic indexes. In the most recent update to EJSCREEN (version 2.2), the demographic data for 2012-2016 via the American Community Survey (ACS), the 2020 U.S. Census, and the 2010 U.S. Census values were no longer directly provided. Instead, an EJScreen Community Report (CR) is generated, summarizing environmental and socioeconomic data into environmental justice and supplemental indexes (i.e., health indicators, climate indicators, and critical service gaps) and can be reviewed in Appendix A to this PIP.

### **NEPA Assist Tool**

NEPAAssist was a tool that was developed by the EPA Geologic Information System to facilitate the environmental review and planning Process. Additional ACS demographic data, for 2012-2016 via the American Community Survey (ACS), the 2020 U.S. Census, and the 2010 U.S. Census was accessed through the EPA NEPAAssist Tool is used to generate an EJScreen American Community Survey (ACS) Summary Report and can be reviewed in Appendix A to this PIP.

To meet the search criteria specified in NMED policy 07-13, preliminary screenings were conducted using the EPA EJSCREEN tool and the EPA NEPAAssist tool to generate reports from the American Community Survey (ACS) using a four-mile radius around the SNL Technical Areas (TAs) and Areas Of Concern (AOCs).

### **Summary Results**

Three CR and three ACS reports were generated. The first CR and ACS reports are included as Appendix A-1, and include a four-mile radius around the area that contains TA-I, TA-II, TA-IV, and the Tijeras Arroyo Groundwater (TAG) AOC. The reports indicated that there are 65,411 households within a four-mile radius; and the per capita income households for the population within a four-mile radius was \$31,322. All of the households located within a four-mile radius of the MWL were located north of Kirtland Air Force Base.

The percent minority population within a four-mile radius of the TAG AOC was 58% and the percent of population by race within a four-mile radius of the TAG AOC was 42% white Non-Hispanic. Within a four-mile radius of the TAG AOC, 43% of the population was listed as Hispanic, 4% were listed as American Indian, 3% of the population were listed as Black, and 3% were listed as Asian.



The percentage of linguistically isolated households within a four-mile radius from the TAG AOC was 5%. The portion of linguistically isolated households within four-miles of the facility who spoke Spanish was 74%.

The percentage of the population who were age 5+ who spoke only English within a four-mile radius of the TAG AOC was 74%, and for those who spoke a language other than English at home, 17% spoke English “very well” within a four-mile radius of the TAG AOC. These results indicate that for the affected communities, the percentage of persons who speak English “less than very well” within a four-mile radius of the TAG AOC is 9% which is less than the state average (10%) and more than the national average (8.7%).

The second CR and ACS reports are included as Appendix A-2, and include a four-mile radius around the area that contains TA-III and TA-V. The reports indicated that there are 2,855 households within a four-mile radius; the per capita income households for the population within a four-mile radius was \$33,555. The households located within a four-mile radius of the TA-III and TA-V were located northeast of KAFB and to the west of KAFB.

The percent minority population within a four-mile radius of the TA-III and TA-V was 53% and the percent of population by race within a four-mile radius of the area was 47% white Non-Hispanic. Within a four-mile radius of the area, 38% of the population is listed as Hispanic, 4% of the population was listed as Black and 6% were listed as Asian.

The percentage of linguistically isolated households within a four-mile radius from the TA-III and TA-V was 1%. The portion of linguistically isolated households within four-miles of the facility who spoke Spanish was 99%.

The percentage of the population who were age 5+ who spoke only English within a four-mile radius of the TA-III and TA-V was 81%, and for those who spoke a language other than English at home, 13% spoke English “very well” within a four-mile radius of the TA-III and TA-V. These results indicate that for the affected communities, the percentage of persons who speak English “less than very well” within a four-mile radius of the TA-III and TA-V is 6% which is less than the state average (10%) and less than the national average (8.7%).

The third CR and ACS reports are included as Appendix A-3, and include a four-mile radius around the area that contains the Burn Site Groundwater (BSG) AOC. The reports indicated which indicated that there are 417 households within a four-mile radius; the per capita income households for the population within a four-mile radius was \$37,000. All of the households located within a four-mile radius of the BSG AOC were located northeast and east of KAFB.

The percent minority population within a four-mile radius of the BSG AOC was 34% and the percent of population by race within a four-mile radius of the BSG AOC was 66% white Non-Hispanic. Within a four-mile radius of the BSG AOC, 21% of the population was listed as Hispanic, 2% were listed as Asian, and 11% were listed as two or more races.

The percentage of linguistically isolated households within a four-mile radius from the BSG AOC was 0%.

The percentage of the population who were age 5+ who spoke only English within a four-mile radius of the BSG AOC was 95%, and for those who spoke a language other than English at home, 4% spoke English “very well” within a four-mile radius of the Facility. These results indicate that for the affected communities, the percentage of persons who speak English “less than very well” within a four-mile radius of the BSG AOC is 1% which is less than the state average (10%) and less than the national average (8.7%).

Based on the EJSCREEN and ACS Summary Reports, along with the history of public involvement at the site and the site background, the HWB has determined that public notice documents should provide basic information concerning public involvement opportunities in both English and Spanish. This information will include how to request materials in Spanish or to speak with Hazardous Waste Bureau staff through an interpreter.

## **VI. Public Participation Activities**

The HWB will conduct the following public participation and outreach activities associated with this CAC process:

- Postal mailings
- Radio announcements
- Newspaper publications
- Website postings
- Public meetings, as necessary

## **VII. Postal Mailing or E-Mailing of Notices to Persons on the Facility-Specific Mailing List**

The Hazardous Waste Bureau maintains a facility mailing list for SNL that includes individuals and local, state, and federal government and tribal agencies interested in RCRA-related facility activities. The Bureau maintains contact information which is updated or is supplemented, if additional information becomes available. Individuals, organizations, and other interested parties are added to the list as requested. If the Bureau receives returned mail, subsequent to the issuance of a public notice, indicating the recipient is no longer at the listed address; the name may be removed from a facility mailing list.

## **VIII. Notices in the State Newspaper and Local Newspapers**

Public notices that are required to be published in state and local newspapers will be published in English and Spanish in the Albuquerque Journal (state-wide circulation) and the Santa Fe New Mexican. There is no local Spanish-language newspaper in New Mexico.

Albuquerque Journal: <https://www.abqjournal.com/>

Santa Fe New Mexican: <https://www.santafenewmexican.com/>

## **IX. Public Notices**

Public notices are issued for public comment periods related to various hazardous waste management activities, public informational meetings, and selected other public notifications. Public notices are mailed to persons included on the facility mailing list, published in the Albuquerque Journal and the Santa Fe New Mexican, broadcast as public service announcements on the radio, and posted on the Hazardous Waste Bureau website. The notifications will be issued in Spanish and English. These notices will provide general information about the specific activity and contact information for submitting comments, and if held, the time and location of public informational meetings.

## **X. Public Comment Periods**

The Hazardous Waste Bureau generally provides a 60-day comment for major permit actions to allow the public an opportunity to comment on permit actions. The Hazardous Waste Bureau may extend the public comment period, if a request is received during the public comment period to extend the comment period based on significant interest. The Hazardous Waste Bureau will provide public notice of any extension to a public comment period as described in Section IX above.

## **XI. Public Information Meetings**

The SNL facility is inaccessible to the public. Access is restricted by the Kirtland Air Force Base boundary fencing and security which prohibits access by unauthorized persons.

Because contact with the public, and therefore members of the public with limited English proficiency, is infrequent and the sites do not currently pose a risk to human health or the environment, the Bureau does not plan to hold a public informational meeting to provide information regarding this report review, and will publish the public notice for this action this action in accordance with 20.4.1.901.C NMAC.

## **XII. Other Outreach**

In addition to the public notice procedures described in Section IX above, notices in the form of flyers announcing public comment periods and informational meetings, if held, may be posted in locations throughout the community (e.g., local businesses, schools, libraries). All notices will be posted on the NMED Hazardous Waste Bureau website. Depending on the cost and a radio station's public service broadcast availability, the Bureau may use commercial radio announcements or informational broadcasts in both English and Spanish.

Because contact with the public, and therefore members of the public with limited English proficiency, is infrequent and the sites do not pose a risk to human health or the environment, the Bureau does not plan to provide additional public outreach for these activities.

### **XIII. Site Repositories**

During public comment periods, in addition to information being posted on the Hazardous Waste Bureau website, copies of relevant documents will be accessible in print or on-line at the following location:

NMED Hazardous Waste Bureau  
Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505  
505-476-6000  
<https://www.env.nm.gov/hazardous-waste/>

### **XIV. Responses to Comments**

The HWB must ensure that the approved documents are consistent with the New Mexico Hazardous Waste Management Regulations. All written comments submitted will become part of the administrative record, will be considered in formulating a final decision, and may cause the document to be revised. The HWB will respond in writing to all significant public comments. The response will specify which provisions, if any, of the document have been changed in the final administrative decision, and the reasons for the change. This response will also be posted on the Bureau's website and the Bureau will notify all persons who have provided written comments.

After consideration of all written public comments received, the Bureau will approve or deny the document. If the Bureau disapproves the document, the Facility will be provided by mail a copy of the disapproval and will be required to submit a revised document for Bureau approval. The Bureau will make the final response publicly available. All persons that provided written comments, or who requested notification in writing, will be notified of the final decision by mail.

**APPENDIX A**

**EJSCREEN Community Reports and**

**NEPAssist American Community Survey Summary Reports**

**APPENDIX A-1**

**EJ Screen Community Report and American  
Community Survey Summary Report for TA-I, TA-II,  
TA-IV, and the Tijeras Arroyo Groundwater (TAG) AOC**



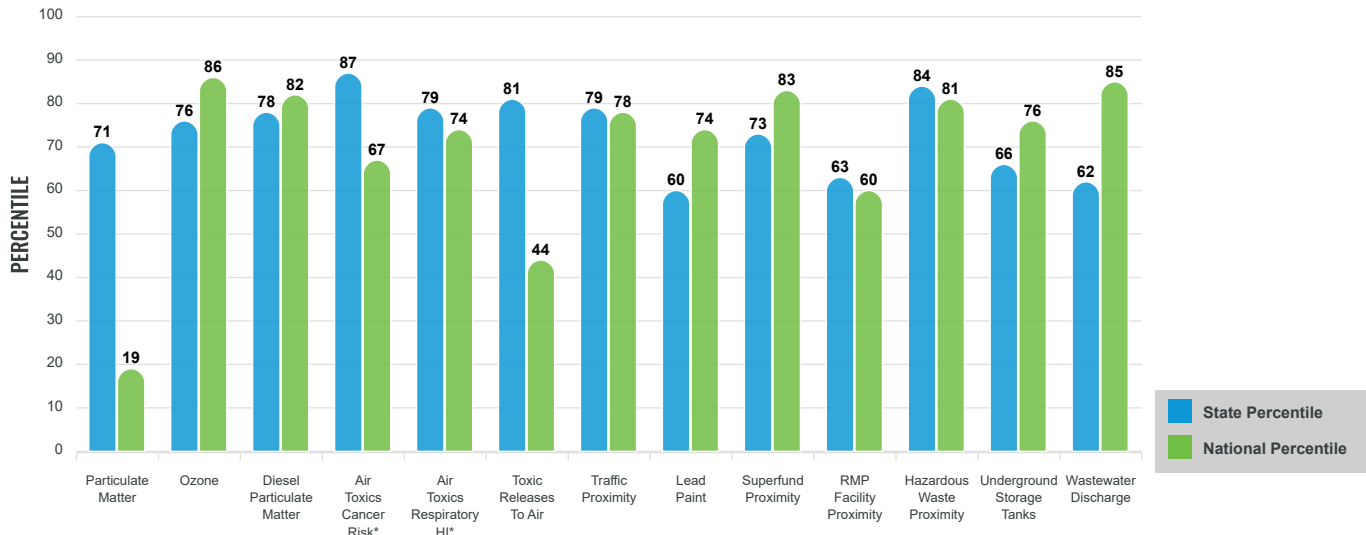
## Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

### EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

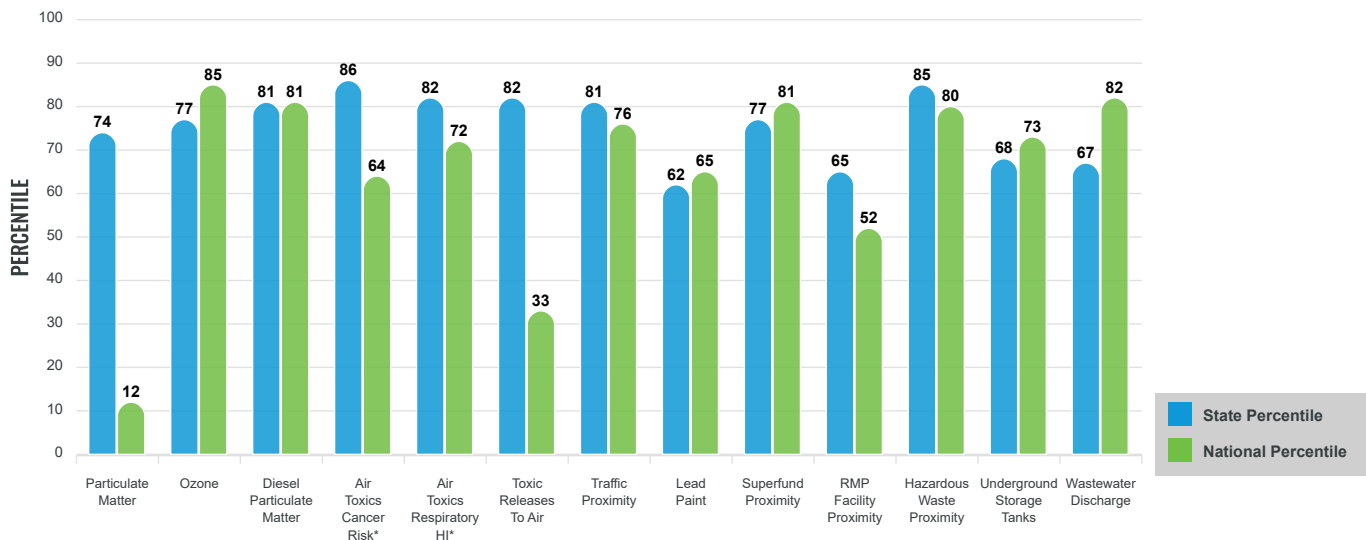
#### EJ INDEXES FOR THE SELECTED LOCATION



### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 4 miles Ring around the Area



# EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	5.78	5.16	70	8.08	7
Ozone (ppb)	66.1	64.7	73	61.6	81
Diesel Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	0.385	0.194	84	0.261	81
Air Toxics Cancer Risk* (lifetime risk per million)	24	18	34	25	5
Air Toxics Respiratory HI*	0.3	0.21	69	0.31	31
Toxic Releases to Air	84	29	94	4,600	22
Traffic Proximity (daily traffic count/distance to road)	240	84	91	210	78
Lead Paint (% Pre-1960 Housing)	0.31	0.19	75	0.3	59
Superfund Proximity (site count/km distance)	0.16	0.14	80	0.13	79
RMP Facility Proximity (facility count/km distance)	0.12	0.15	59	0.43	35
Hazardous Waste Proximity (facility count/km distance)	2.3	0.73	89	1.9	76
Underground Storage Tanks (count/km <sup>2</sup> )	3	3.3	71	3.9	66
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.062	0.47	59	22	79
<b>SOCIOECONOMIC INDICATORS</b>					
Demographic Index	50%	51%	48	35%	74
Supplemental Demographic Index	17%	17%	53	14%	68
People of Color	58%	62%	42	39%	71
Low Income	41%	40%	53	31%	71
Unemployment Rate	6%	7%	59	6%	65
Limited English Speaking Households	5%	6%	63	5%	74
Less Than High School Education	10%	14%	47	12%	57
Under Age 5	6%	5%	63	6%	60
Over Age 64	17%	19%	51	17%	57
Low Life Expectancy	20%	19%	54	20%	54

\*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>.

## Sites reporting to EPA within defined area:

Superfund .....	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities .....	7
Water Dischargers .....	460
Air Pollution .....	323
Brownfields .....	7
Toxic Release Inventory .....	9

## Other community features within defined area:

Schools .....	46
Hospitals .....	5
Places of Worship .....	78

## Other environmental data:

Air Non-attainment .....	No
Impaired Waters .....	Yes

Selected location contains American Indian Reservation Lands* .....	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community .....	Yes
Selected location contains an EPA IRA disadvantaged community .....	Yes

Report for 4 miles Ring around the Area

## EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	20%	19%	54	20%	55
Heart Disease	5.6	6.2	31	6.1	39
Asthma	10.4	10.3	64	10	66
Cancer	5.6	5.7	49	6.1	37
Persons with Disabilities	16.7%	16.6%	56	13.4%	74

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	4%	9%	45	12%	38
Wildfire Risk	26%	58%	34	14%	83

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	18%	22%	50	14%	69
Lack of Health Insurance	9%	9%	54	9%	63
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for 4 miles Ring around the Area

Location: User-specified polygonal location  
 Ring (buffer): 4-miles radius  
 Description: Sandia National Labs

Summary of ACS Estimates		2017 - 2021	
Population			145,764
Population Density (per sq. mile)			2,052
People of Color Population			84,704
% People of Color Population			58%
Households			64,971
Housing Units			70,600
Housing Units Built Before 1950			6,409
Per Capita Income			31,185
Land Area (sq. miles) (Source: SF1)			71.05
% Land Area			100%
Water Area (sq. miles) (Source: SF1)			0.33
% Water Area			0%

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population by Race</b>			
Total	145,764	100%	1,346
Population Reporting One Race	128,064	88%	3,761
White	96,480	66%	959
Black	5,842	4%	419
American Indian	8,271	6%	725
Asian	4,905	3%	356
Pacific Islander	44	0%	33
Some Other Race	12,523	9%	1,269
Population Reporting Two or More Races	17,700	12%	714
Total Hispanic Population	63,031	43%	1,356
Total Non-Hispanic Population	82,733		
White Alone	61,061	42%	602
Black Alone	4,992	3%	343
American Indian Alone	6,304	4%	711
Non-Hispanic Asian Alone	4,302	3%	356
Pacific Islander Alone	34	0%	33
Other Race Alone	663	0%	186
Two or More Races Alone	5,377	4%	348
<b>Population by Sex</b>			
Male	72,847	50%	940
Female	72,917	50%	641
<b>Population by Age</b>			
Age 0-4	8,608	6%	477
Age 0-17	29,721	20%	682
Age 18+	116,043	80%	603
Age 65+	24,983	17%	351

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.  
 N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2017 - 2021

Location: User-specified polygonal location

Ring (buffer): 4-miles radius

Description: Sandia National Labs

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population 25+ by Educational Attainment</b>			
Total	102,771	100%	612
Less than 9th Grade	4,121	4%	247
9th - 12th Grade, No Diploma	6,004	6%	255
High School Graduate	23,949	23%	344
Some College, No Degree	23,551	23%	415
Associate Degree	9,712	9%	395
Bachelor's Degree or more	35,434	34%	382
<b>Population Age 5+ Years by Ability to Speak English</b>			
Total	137,156	100%	1,183
Speak only English	101,776	74%	645
Non-English at Home <sup>1+2+3+4</sup>	35,380	26%	997
<sup>1</sup> Speak English "very well"	23,915	17%	449
<sup>2</sup> Speak English "well"	5,508	4%	530
<sup>3</sup> Speak English "not well"	3,894	3%	459
<sup>4</sup> Speak English "not at all"	2,063	2%	224
<sup>3+4</sup> Speak English "less than well"	5,957	4%	491
<sup>2+3+4</sup> Speak English "less than very well"	11,465	8%	722
<b>Linguistically Isolated Households*</b>			
Total	2,994	100%	250
Speak Spanish	2,205	74%	249
Speak Other Indo-European Languages	154	5%	88
Speak Asian-Pacific Island Languages	509	17%	115
Speak Other Languages	126	4%	51
<b>Households by Household Income</b>			
Household Income Base	64,971	100%	398
< \$15,000	10,773	17%	396
\$15,000 - \$25,000	7,334	11%	283
\$25,000 - \$50,000	16,073	25%	338
\$50,000 - \$75,000	10,938	17%	207
\$75,000 +	19,853	31%	295
<b>Occupied Housing Units by Tenure</b>			
Total	64,971	100%	398
Owner Occupied	33,085	51%	357
Renter Occupied	31,887	49%	398
<b>Employed Population Age 16+ Years</b>			
Total	119,047	100%	715
In Labor Force	74,495	63%	619
Civilian Unemployed in Labor Force	4,439	6%	267
Not In Labor Force	44,552	37%	510

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

\*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location  
 Ring (buffer): 4-miles radius  
 Description: Sandia National Labs

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population by Language Spoken at Home*</b>			
Total (persons age 5 and above)	138,435	100%	1,183
English	103,334	75%	1,198
Spanish	25,314	18%	1,205
French, Haitian, or Cajun	948	1%	186
German or other West Germanic	623	0%	146
Russian, Polish, or Other Slavic	196	0%	91
Other Indo-European	729	1%	186
Korean	347	0%	197
Chinese (including Mandarin, Cantonese)	547	0%	260
Vietnamese	1,454	1%	307
Tagalog (including Filipino)	514	0%	101
Other Asian and Pacific Island	340	0%	94
Arabic	312	0%	107
Other and Unspecified	3,776	3%	572
Total Non-English	35,102	25%	1,629

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.  
 N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2017 - 2021.  
 \*Population by Language Spoken at Home is available at the census tract summary level and up.

**APPENDIX A-2**

**EJ Screen Community Report and American  
Community Survey Summary Report for TA-  
III and TA-V**



# Bernalillo County, NM

### A3 Landscape



1:144,448

0 1.5 3 6  
0 2.25 4.5 9 km

City of Albuquerque, ERI, HERE, Garmin, MRCOG-N  
Behnsann Huxton, Earthstar Geographics

## COMMUNITY INFORMATION



Speak Spanish	99%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	1%
Speak Other Languages	0%

 $\frac{1}{4}$

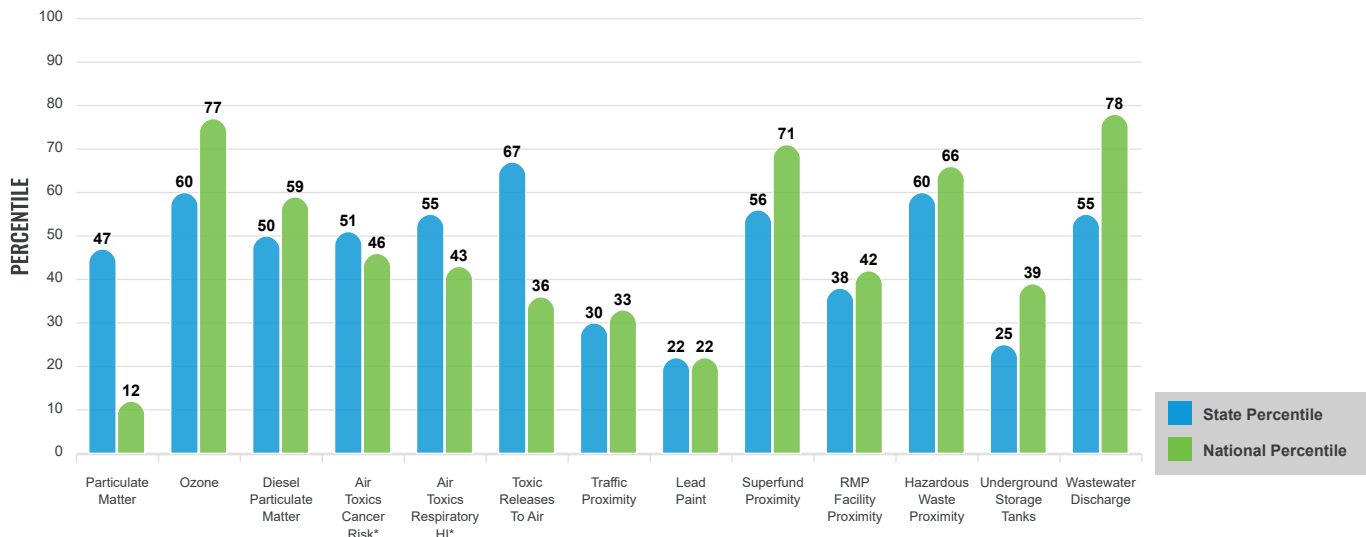
## Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

### EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

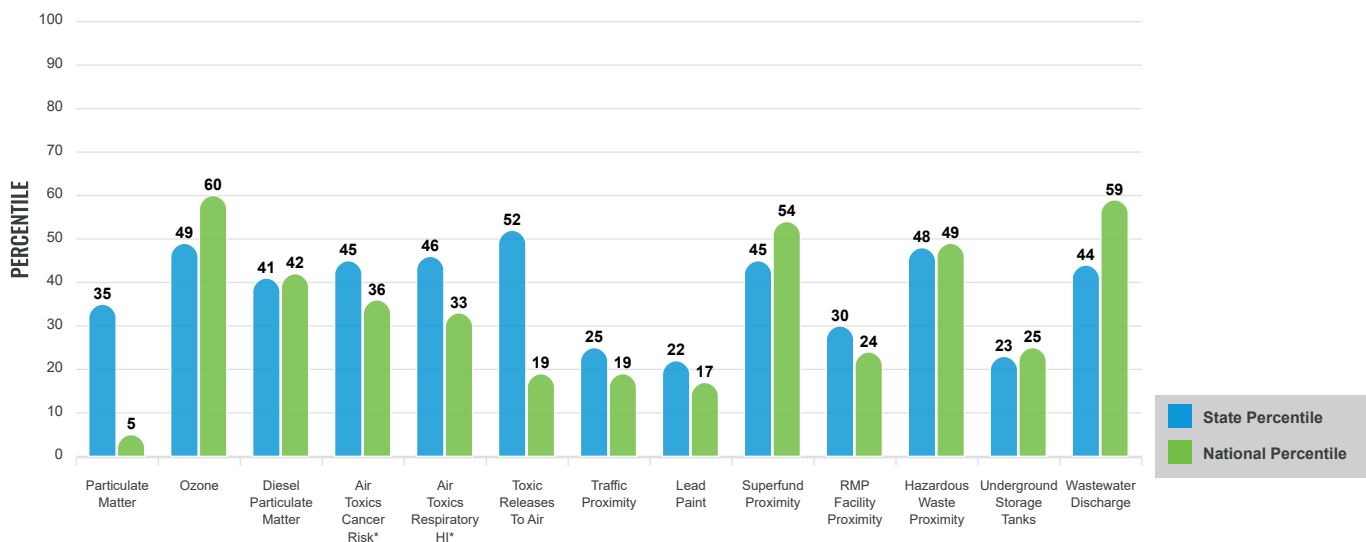
#### EJ INDEXES FOR THE SELECTED LOCATION



### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 4 miles Ring around the Area



# EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	5.41	5.16	51	8.08	5
Ozone (ppb)	66.1	64.7	72	61.6	81
Diesel Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	0.201	0.194	65	0.261	46
Air Toxics Cancer Risk* (lifetime risk per million)	20	18	34	25	5
Air Toxics Respiratory HI*	0.23	0.21	29	0.31	4
Toxic Releases to Air	130	29	97	4,600	26
Traffic Proximity (daily traffic count/distance to road)	15	84	39	210	20
Lead Paint (% Pre-1960 Housing)	0.036	0.19	33	0.3	23
Superfund Proximity (site count/km distance)	0.1	0.14	68	0.13	66
RMP Facility Proximity (facility count/km distance)	0.089	0.15	48	0.43	25
Hazardous Waste Proximity (facility count/km distance)	1.3	0.73	78	1.9	66
Underground Storage Tanks (count/km <sup>2</sup> )	0.34	3.3	39	3.9	36
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.16	0.47	72	22	84
<b>SOCIOECONOMIC INDICATORS</b>					
Demographic Index	36%	51%	24	35%	59
Supplemental Demographic Index	8%	17%	14	14%	25
People of Color	53%	62%	37	39%	68
Low Income	17%	40%	18	31%	31
Unemployment Rate	8%	7%	67	6%	74
Limited English Speaking Households	3%	6%	56	5%	68
Less Than High School Education	2%	14%	16	12%	17
Under Age 5	9%	5%	82	6%	81
Over Age 64	17%	19%	50	17%	56
Low Life Expectancy	11%	19%	1	20%	1

\*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>.

## Sites reporting to EPA within defined area:

Superfund .....	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities .....	2
Water Dischargers .....	238
Air Pollution .....	23
Brownfields .....	4
Toxic Release Inventory .....	6

## Other community features within defined area:

Schools .....	3
Hospitals .....	1
Places of Worship .....	0

## Other environmental data:

Air Non-attainment .....	No
Impaired Waters .....	Yes

Selected location contains American Indian Reservation Lands* .....	Yes
Selected location contains a "Justice40 (CEJST)" disadvantaged community .....	Yes
Selected location contains an EPA IRA disadvantaged community .....	Yes

Report for 4 miles Ring around the Area

## EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	11%	19%	1	20%	1
Heart Disease	4.8	6.2	15	6.1	22
Asthma	9.3	10.3	15	10	33
Cancer	6.4	5.7	68	6.1	52
Persons with Disabilities	11.6%	16.6%	23	13.4%	43

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	13%	9%	76	12%	74
Wildfire Risk	84%	58%	50	14%	89

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	14%	22%	40	14%	59
Lack of Health Insurance	4%	9%	24	9%	32
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for 4 miles Ring around the Area

Location: User-specified polygonal location  
Ring (buffer): 4-miles radius  
Description: Sandia National Labs

Summary of ACS Estimates		2017 - 2021	
Population		8,118	
Population Density (per sq. mile)		96	
People of Color Population		4,307	
% People of Color Population		53%	
Households		2,796	
Housing Units		2,856	
Housing Units Built Before 1950		16	
Per Capita Income		33,555	
Land Area (sq. miles) (Source: SF1)		84.29	
% Land Area		99%	
Water Area (sq. miles) (Source: SF1)		0.51	
% Water Area		1%	

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population by Race</b>			
Total	8,118	100%	740
Population Reporting One Race	7,364	91%	1,935
White	6,196	76%	771
Black	354	4%	205
American Indian	198	2%	396
Asian	496	6%	273
Pacific Islander	1	0%	15
Some Other Race	118	1%	275
Population Reporting Two or More Races	754	9%	338
Total Hispanic Population	3,090	38%	614
Total Non-Hispanic Population	5,028		
White Alone	3,811	47%	524
Black Alone	324	4%	205
American Indian Alone	151	2%	393
Non-Hispanic Asian Alone	471	6%	273
Pacific Islander Alone	0	0%	13
Other Race Alone	0	0%	13
Two or More Races Alone	272	3%	129
<b>Population by Sex</b>			
Male	4,218	52%	368
Female	3,900	48%	548
<b>Population by Age</b>			
Age 0-4	738	9%	245
Age 0-17	2,109	26%	324
Age 18+	6,009	74%	487
Age 65+	1,383	17%	351

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.  
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2017 - 2021

Location: User-specified polygonal location

Ring (buffer): 4-miles radius

Description: Sandia National Labs

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population 25+ by Educational Attainment</b>			
Total	5,007	100%	447
Less than 9th Grade	8	0%	179
9th - 12th Grade, No Diploma	77	2%	93
High School Graduate	685	14%	183
Some College, No Degree	1,270	25%	362
Associate Degree	504	10%	214
Bachelor's Degree or more	2,463	49%	310
<b>Population Age 5+ Years by Ability to Speak English</b>			
Total	7,380	100%	619
Speak only English	5,993	81%	565
Non-English at Home <sup>1+2+3+4</sup>	1,387	19%	292
<sup>1</sup> Speak English "very well"	964	13%	262
<sup>2</sup> Speak English "well"	305	4%	135
<sup>3</sup> Speak English "not well"	106	1%	245
<sup>4</sup> Speak English "not at all"	11	0%	80
<sup>3+4</sup> Speak English "less than well"	117	2%	249
<sup>2+3+4</sup> Speak English "less than very well"	423	6%	277
<b>Linguistically Isolated Households*</b>			
Total	86	100%	138
Speak Spanish	84	99%	136
Speak Other Indo-European Languages	0	0%	13
Speak Asian-Pacific Island Languages	1	1%	16
Speak Other Languages	0	0%	16
<b>Households by Household Income</b>			
Household Income Base	2,796	100%	357
< \$15,000	249	9%	253
\$15,000 - \$25,000	82	3%	153
\$25,000 - \$50,000	450	16%	260
\$50,000 - \$75,000	322	12%	167
\$75,000 +	1,693	61%	295
<b>Occupied Housing Units by Tenure</b>			
Total	2,796	100%	357
Owner Occupied	2,446	87%	357
Renter Occupied	350	13%	231
<b>Employed Population Age 16+ Years</b>			
Total	6,112	100%	548
In Labor Force	4,136	68%	416
Civilian Unemployed in Labor Force	270	7%	161
Not In Labor Force	1,976	32%	358

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

\*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location  
 Ring (buffer): 4-miles radius  
 Description: Sandia National Labs

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population by Language Spoken at Home*</b>			
Total (persons age 5 and above)	6,599	100%	839
English	4,917	75%	637
Spanish	642	10%	546
French, Haitian, or Cajun	38	1%	63
German or other West Germanic	0	0%	13
Russian, Polish, or Other Slavic	9	0%	150
Other Indo-European	14	0%	70
Korean	141	2%	197
Chinese (including Mandarin, Cantonese)	119	2%	145
Vietnamese	330	5%	307
Tagalog (including Filipino)	6	0%	46
Other Asian and Pacific Island	31	0%	37
Arabic	12	0%	43
Other and Unspecified	340	5%	572
Total Non-English	1,681	25%	991

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.  
 N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2017 - 2021.  
 \*Population by Language Spoken at Home is available at the census tract summary level and up.

**APPENDIX A-3**

**EJ Screen Community Report and American  
Community Survey Summary Report for Burn Site  
Groundwater (BSG) AOC**



This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

**4 miles Ring around the Area**  
**Population: 862**  
**Area in square miles: 60.35**

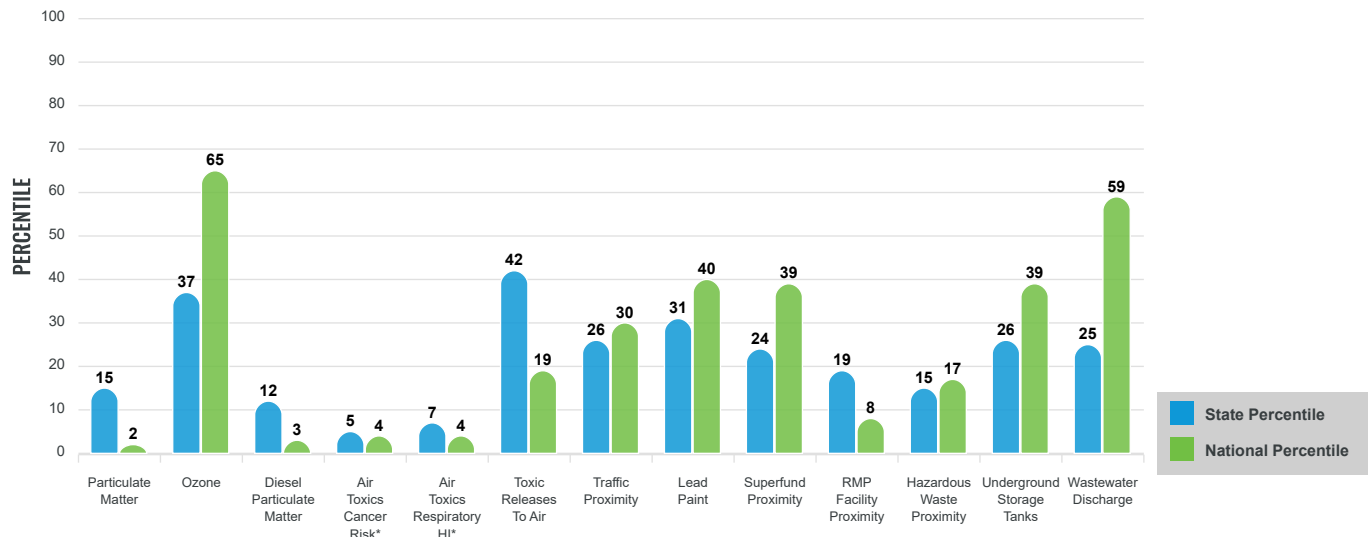
## Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

### EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

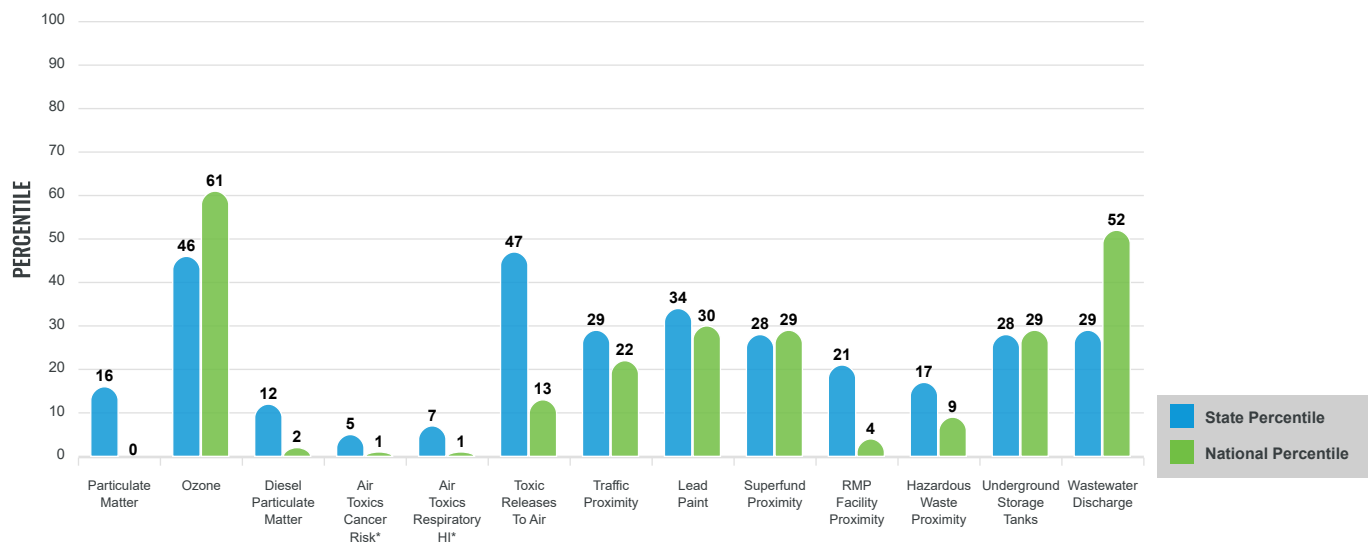
#### EJ INDEXES FOR THE SELECTED LOCATION



### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 4 miles Ring around the Area



# EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	4.29	5.16	26	8.08	1
Ozone (ppb)	65.6	64.7	64	61.6	78
Diesel Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	0.0391	0.194	18	0.261	2
Air Toxics Cancer Risk* (lifetime risk per million)	10	18	1	25	1
Air Toxics Respiratory HI*	0.1	0.21	4	0.31	1
Toxic Releases to Air	35	29	70	4,600	15
Traffic Proximity (daily traffic count/distance to road)	18	84	42	210	23
Lead Paint (% Pre-1960 Housing)	0.1	0.19	49	0.3	35
Superfund Proximity (site count/km distance)	0.037	0.14	42	0.13	33
RMP Facility Proximity (facility count/km distance)	0.035	0.15	30	0.43	5
Hazardous Waste Proximity (facility count/km distance)	0.06	0.73	28	1.9	11
Underground Storage Tanks (count/km <sup>2</sup> )	0.13	3.3	34	3.9	29
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0076	0.47	42	22	65
<b>SOCIOECONOMIC INDICATORS</b>					
Demographic Index	24%	51%	11	35%	41
Supplemental Demographic Index	9%	17%	16	14%	28
People of Color	34%	62%	13	39%	53
Low Income	15%	40%	16	31%	28
Unemployment Rate	7%	7%	63	6%	71
Limited English Speaking Households	0%	6%	0	5%	0
Less Than High School Education	3%	14%	22	12%	24
Under Age 5	6%	5%	65	6%	61
Over Age 64	22%	19%	66	17%	72
Low Life Expectancy	19%	19%	51	20%	50

\*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>.

## Sites reporting to EPA within defined area:

Superfund .....	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities .....	0
Water Dischargers .....	12
Air Pollution .....	0
Brownfields .....	0
Toxic Release Inventory .....	1

## Other community features within defined area:

Schools .....	0
Hospitals .....	0
Places of Worship .....	1

## Other environmental data:

Air Non-attainment .....	No
Impaired Waters .....	Yes

Selected location contains American Indian Reservation Lands* .....	Yes
Selected location contains a "Justice40 (CEJST)" disadvantaged community .....	Yes
Selected location contains an EPA IRA disadvantaged community .....	Yes

Report for 4 miles Ring around the Area

## EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	19%	19%	51	20%	50
Heart Disease	5.5	6.2	31	6.1	39
Asthma	9.8	10.3	39	10	49
Cancer	6.4	5.7	70	6.1	54
Persons with Disabilities	15.1%	16.6%	44	13.4%	65

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	10%	9%	70	12%	67
Wildfire Risk	91%	58%	55	14%	91

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	5%	22%	16	14%	29
Lack of Health Insurance	7%	9%	42	9%	52
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for 4 miles Ring around the Area

Location: User-specified polygonal location  
Ring (buffer): 4-miles radius  
Description: Sandia National Labs

Summary of ACS Estimates		2017 - 2021	
Population		879	
Population Density (per sq. mile)		15	
People of Color Population		298	
% People of Color Population		34%	
Households		425	
Housing Units		473	
Housing Units Built Before 1950		31	
Per Capita Income		37,000	
Land Area (sq. miles) (Source: SF1)		57.10	
% Land Area		100%	
Water Area (sq. miles) (Source: SF1)		0.07	
% Water Area		0%	
		2017 - 2021 ACS Estimates	Percent
			MOE (±)
<b>Population by Race</b>			
Total		879	100%
Population Reporting One Race		722	82%
White		700	80%
Black		2	0%
American Indian		0	0%
Asian		20	2%
Pacific Islander		0	0%
Some Other Race		1	0%
Population Reporting Two or More Races		157	18%
Total Hispanic Population		183	21%
Total Non-Hispanic Population		696	
White Alone		580	66%
Black Alone		2	0%
American Indian Alone		0	0%
Non-Hispanic Asian Alone		20	2%
Pacific Islander Alone		0	0%
Other Race Alone		0	0%
Two or More Races Alone		94	11%
<b>Population by Sex</b>			
Male		415	47%
Female		464	53%
<b>Population by Age</b>			
Age 0-4		52	6%
Age 0-17		113	13%
Age 18+		766	87%
Age 65+		191	22%

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2017 - 2021

Location: User-specified polygonal location

Ring (buffer): 4-miles radius

Description: Sandia National Labs

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population 25+ by Educational Attainment</b>			
Total	699	100%	322
Less than 9th Grade	8	1%	43
9th - 12th Grade, No Diploma	12	2%	48
High School Graduate	92	13%	99
Some College, No Degree	226	32%	189
Associate Degree	65	9%	87
Bachelor's Degree or more	296	42%	194
<b>Population Age 5+ Years by Ability to Speak English</b>			
Total	827	100%	363
Speak only English	787	95%	385
Non-English at Home <sup>1+2+3+4</sup>	40	5%	90
<sup>1</sup> Speak English "very well"	29	4%	76
<sup>2</sup> Speak English "well"	2	0%	46
<sup>3</sup> Speak English "not well"	9	1%	71
<sup>4</sup> Speak English "not at all"	0	0%	45
<sup>3+4</sup> Speak English "less than well"	9	1%	84
<sup>2+3+4</sup> Speak English "less than very well"	11	1%	96
<b>Linguistically Isolated Households*</b>			
Total	0	100%	28
Speak Spanish	0	100%	17
Speak Other Indo-European Languages	0	0%	13
Speak Asian-Pacific Island Languages	0	0%	13
Speak Other Languages	0	0%	13
<b>Households by Household Income</b>			
Household Income Base	425	100%	184
< \$15,000	40	9%	66
\$15,000 - \$25,000	10	2%	45
\$25,000 - \$50,000	73	17%	119
\$50,000 - \$75,000	68	16%	81
\$75,000 +	235	55%	186
<b>Occupied Housing Units by Tenure</b>			
Total	425	100%	184
Owner Occupied	385	91%	180
Renter Occupied	40	9%	86
<b>Employed Population Age 16+ Years</b>			
Total	779	100%	341
In Labor Force	401	51%	237
Civilian Unemployed in Labor Force	29	7%	72
Not In Labor Force	378	49%	283

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

\*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location  
 Ring (buffer): 4-miles radius  
 Description: Sandia National Labs

	2017 - 2021 ACS Estimates	Percent	MOE (±)
<b>Population by Language Spoken at Home*</b>			
Total (persons age 5 and above)	1,941	100%	848
English	1,708	88%	805
Spanish	172	9%	407
French, Haitian, or Cajun	0	0%	43
German or other West Germanic	0	0%	19
Russian, Polish, or Other Slavic	0	0%	19
Other Indo-European	10	1%	43
Korean	0	0%	19
Chinese (including Mandarin, Cantonese)	0	0%	19
Vietnamese	14	1%	56
Tagalog (including Filipino)	0	0%	19
Other Asian and Pacific Island	0	0%	19
Arabic	0	0%	19
Other and Unspecified	37	2%	126
Total Non-English	233	12%	1,169

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.  
 N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2017 - 2021.  
 \*Population by Language Spoken at Home is available at the census tract summary level and up.