

Review of Geographic Factors related to UIC Permit Issuance
 August 18, 2016

Applicant	Muskegon Development Company	
Well Name	Holcomb #1-22	
Permit Writer	Bill Tong	
Permit No.	MI-035-2R-0034; MDEQ #59345	
Latitude/Longitude	44.0308, -84.6595 based on GeoWebFace data, Clare County	
Bedrock	The well site is near the border between the Jurassic Red Beds and the Sartnaw Formation. These may be USDWs.	
Coastal Zone Management Area	The site is not within the Michigan Coastal Zone Management Area.	
EJ	EISCREEN: there is one parameter > 20%: Low Income Population is 56%.	
Field Rules?	Not applicable	
Public notice map	EJ/UIC/Technical/Permits/Maps/035-0034.gif	
Traverse USDW?	This site is not in the area in Michigan in which the Traverse Limestone can be an Underground Source of Drinking Water.	
Tribal land?	There are no federally-recognized tribal lands in Clare County. The site is 15 miles from the Saginaw Chippewa Indian Tribe land in Isabella Co.	
Wild & Scenic River?	There are no federally-recognized Wild & Scenic Rivers in Clare County.	
WIPA?	The site is 5.1 miles from the Skeels Christian School Type 2 Provisional WHPA.	
Nearest Public Water Supply	7.6 miles from the 8.1 miles from the City of Harrison. PWSID MI0003030;	
Nearest Private Water Supply	Gladwin Nursing and Rehabilitation Community ...: PWSID MI0062653	
Other notes	None shown nearby	
Bedrock from the MDNR Michigan Bedrock Geology shapefile, dated 8/12/16.		



EISCREEN Report (Version 2016)

3 mile Ring Centered at 44.030800,-84.659500, MICHIGAN, EPA Region 5

Approximate Population: 1,577

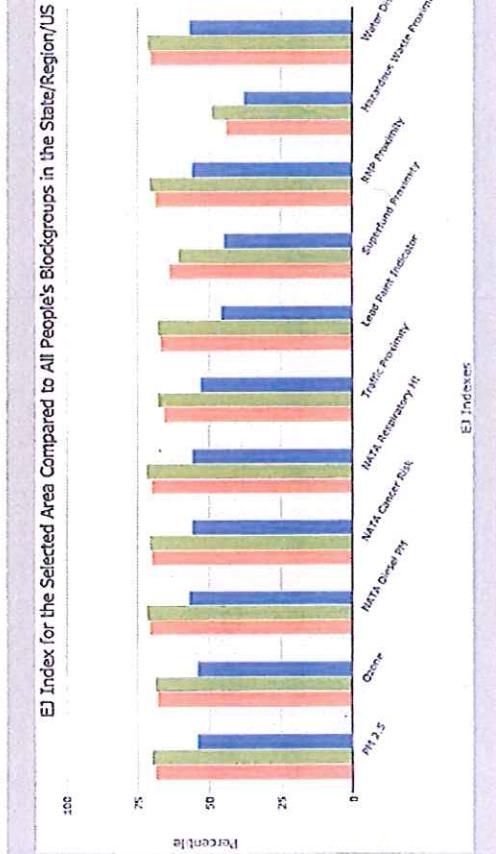
Input Area (sq. miles): 28.27

MI-035-2R-0034



Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	69	70	54
EJ Index for Ozone	68	69	54
EJ Index for NATA* Diesel PM	71	72	57
EJ Index for NATA* Air Toxics Cancer Risk	70	71	56
EJ Index for NATA* Respiratory Hazard Index	70	72	56
EJ Index for Traffic Proximity and Volume	66	68	53
EJ Index for Lead Paint Indicator	67	68	46
EJ Index for Superfund Proximity	64	61	45
EJ Index for RMP Proximity	68	71	56
EJ Index for Hazardous Waste Proximity	44	49	38
EJ Index for Water Discharge Proximity	71	72	57

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



State Percentile Regional Percentile USA Percentile

This report shows the values for environmental and demographic indicators and EISCREEN 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 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 EISCREEN documentation for discussion of these issues before drafting reports.

August 18, 2016



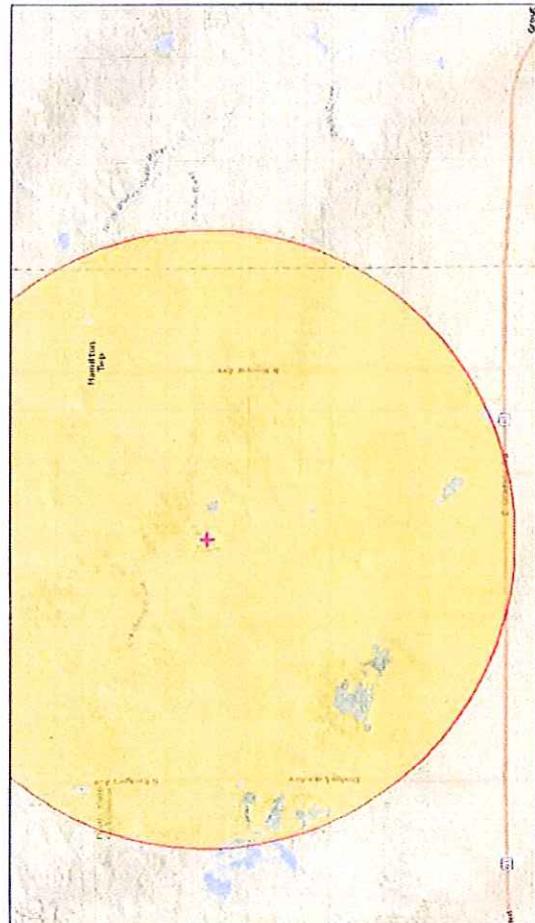
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Date

Area

Digitized Point

172,224
1 mi
2 mi
0 1 2 3 4
Benton Harbor, Michigan, United States
Source: U.S. Census Bureau, American Community Survey, 2010
Data: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, US Aerial, and the GIS User Community

Sites reporting to EPA

Superfund NPL

Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)

National Pollutant Discharge Elimination System (NPDES)



United States
Environmental Protection
Agency

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Selected Variables	Value	State Avg.	%ile in State	EPA Region	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	8.21	9.76	8	10.6	3	9.32	24
Ozone (ppb)	46.8	50.3	7	50.3	13	47.4	41
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.153	0.726	6	0.931	<50th	0.937	<50th
NATA* Cancer Risk (lifetime risk per million)	21	31	7	34	<50th	40	<50th
NATA* Respiratory Hazard Index	0.62	1.3	6	1.7	<50th	1.8	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	5.1	570	16	370	12	590	11
Lead Paint Indicator (% Pre-1960 Housing)	0.3	0.39	49	0.39	46	0.3	60
Superfund Proximity (site count/km distance)	0.046	0.14	35	0.12	39	0.13	39
RMP Proximity (facility count/km distance)	0.044	0.32	10	0.51	4	0.43	6
Hazardous Waste Proximity (facility count/km distance)	0.026	0.069	42	0.069	36	0.072	36
Water Discharger Proximity (facility count/km distance)	0.023	0.25	1	0.31	0	0.31	2
Demographic Indicators							
Demographic Index	30%	30%	66	29%	67	36%	51
Minority Population	5%	24%	24	24%	26	37%	13
Low Income Population	56%	35%	81	33%	84	35%	81
Linguistically Isolated Population	1%	2%	66	2%	62	5%	48
Population With Less Than High School Education	15%	11%	74	11%	73	14%	63
Population Under 5 years of age	6%	6%	58	6%	54	6%	51
Population over 64 years of age	22%	15%	84	14%	85	14%	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.