

Common Sense Initiative, Automobile Manufacturing Sector

*U.S. Automobile Assembly Plants and Their Communities:
Environmental Economic, and Demographic Profile*

**Part III: Automobile/Light Duty Truck Assembly
Plant-Community Profiles**

**53. General Motors (Saturn)
Spring Hill, TN**

December 1997

Contents and Guidelines for Use

Users of this profile should carefully review the description of methods, data limitations, and guidelines for use and interpretation of the data presented in Part I of the report.

Contents:

Plant Locations (National and Michigan maps)
Plant Location, Database Identification Numbers, 1994 Production and Employment
1991 and 1993 RCRA Biennial Report Summary
1991-1994 TRI Releases and Transfers Summary
1994 TRI Releases and Transfers by Chemical
1991-1994 Volatile Organic Compound and Nitrogen Oxide Emissions
1994 Summary of TRI Chemical Releases and Transfers from Sources within 3 Miles of Assembly Plant
Air Quality Attainment Status for Criteria Pollutants (as of 1994)
Community Demographic and Economic Characteristics
Facility Location (map)
Area Wide 1994 TRI Emission Profile (map)
1994 TRI Releases and Transfers from Sources within 3 Miles of Assembly Plant, by Chemical
Demographic Characteristics (maps)

General Guidelines for Use

Efforts have been made to ensure that the data presented here are accurate. The Project Team could not independently verify data accuracy in all cases, however, and some errors may remain. The following is a partial list of factors that should be considered in using these profiles:

1. Current releases presented in this report represent only some of the contamination sources in a given area. Data on historical releases (prior to 1991) were not included, and releases from non-assembly plant emission sources were identified only through the Toxics Release Inventory (TRI). TRI data do not cover all sources of releases. Considering only TRI data for a given community may mis-state the relative contribution of plants and their neighboring TRI facilities to an area's total releases.
2. Care must be taken to distinguish true changes over time in environmental releases from apparent changes, due, for example, to changes in the scope of reporting requirements.
3. TRI data are often based on engineering estimates and are reported on an annual basis. Data on releases over shorter time frames are not available.
4. TRI, the Biennial Report and other databases do not include all substances and environmental releases of concern.

Notes on Comparisons Across Facilities

1. The following factors can affect an assembly plant's environmental profile, among other things: the number of vehicles produced, plant age, process equipment age, and vehicle size and configuration.
2. Some plants are highly-integrated, performing some parts and all assembly steps in-house. Others obtain parts from other manufacturing facilities, or share assembly operations with another plant.
3. States differ in how they define hazardous waste and how they treat recycled wastes and small quantity generators. Therefore, data on quantities of BRS wastes generated may not be comparable for plants located in different states.
4. Area-wide averages for economic and demographic characteristics may be better or worse measures of the plant's immediate community, depending on the specific location of a plant within the reporting area.

**Plant-Community Profile:
General Motors (Saturn)
Spring Hill TN**

12/2/97

LOCATION	Address	100 Saturn Pkwy., Spring Hill TN 37174		DESCRIPTION	Produced Saturn Coupe, Sedan & Wagon in 1994.		
	Lat/Long:	latitude (degrees N)	35 43' 15"		ID NUMBERS	RCRA ID	TND981468648
		longitude (degrees W)	86 58' 15"	AIRS ID		AFS4711900132	
	County:	Maury	MSA: na	NPDES ID		-	
	Other counties within 3 miles of plant:		Williamson	TRI	37174STRNC100SA		

OPERATIONS	Production	Employment
Calendar Year: 1991	95,821	
1992	212,112	
1993	282,657	
1994	280,002	7,871

PLANT ENVIRONMENTAL PROFILE

RCRA BIENNIAL REPORT

<i>Waste Code(s)</i>	<i>Wastewater?</i>	<i>Physical Form</i>	<i>Source</i>	<i>Mgd. On/Off-Site</i>	<i>Management Method</i>	<i>Quantity Generated (tons)</i>	<i>Quantity Shipped (tons)</i>	<i>Quantity Mgd. On-Site (tons)</i>
1991								
F005	?	Not rep't	Not rep't	Off	M049 incineration	98.1	89.3	0
D007, D008	?	Not rep't	Not rep't	Off	M137 other disposal	2.6	2.6	0
D001, F003, F005, D035	?	Not rep't	Not rep't	Off	M061 fuel blending	963.2	963.2	0
D001	?	Not rep't	Not rep't	Off	M049 incineration	0.2	0.2	0
D001, F003	?	Not rep't	Not rep't	Off	M049 incineration	5.4	5.4	0
D001, F003	?	Not rep't	Not rep't	Off	M061 fuel blending	7.1	7.1	0
D001, D018	?	Not rep't	Not rep't	Off	M061 fuel blending	8	8	0
D001	?	Not rep't	Not rep't	Off	M061 fuel blending	34.5	31.9	0
D008	?	Not rep't	Not rep't	Off	M111 stabilization	66.5	64.3	0
F002	?	Not rep't	Not rep't	Off	M049 incineration	0.5	0.5	0
F002	?	Not rep't	Not rep't	Off	M137 other disposal	0.5	0.5	0
D001	?	Not rep't	Not rep't	Off	M061 fuel blending	1.6	1.7	0
D001, F002, F003	?	Not rep't	Not rep't	Off	M061 fuel blending	1.8	2.4	0
D002	?	Not rep't	Not rep't	Off	M121 neutralization	0.6	0.6	0
F002, F005	?	Not rep't	Not rep't	Off	M049 incineration	0.3	0.3	0
D001, F002, F003, F005	?	Not rep't	Not rep't	Off	M049 incineration	1.2	1.2	0
D001, F003	?	Not rep't	Not rep't	Off	M061 fuel blending	2.8	2.8	0
D001, F003	?	Not rep't	Not rep't	Off	M049 incineration	2.7	2.7	0
D002	?	Not rep't	Not rep't	Off	M121 neutralization	0.2	0.2	0
D001, D035	?	Not rep't	Not rep't	Off	M137 other disposal	0.9	0.9	0
F005	?	Not rep't	Not rep't	Off	M137 other disposal	0.3	0.3	0
D001, F003, F005, D035	?	Not rep't	Not rep't	Off	M049 incineration	0.4	0.4	0
D001, D005	?	Not rep't	Not rep't	Off	M061 fuel blending	83.5	70.5	0
D002	?	Not rep't	Not rep't	Off	M137 other disposal	0.2	0.2	0
D001	?	Not rep't	Not rep't	Off	M049 incineration	0.1	0.1	0
D001	?	Not rep't	Not rep't	Off	M049 incineration	0.1	0.1	0
F002, F005	?	Not rep't	Not rep't	Off	M049 incineration	0.3	0.3	0
D001, F003, D035	?	Not rep't	Not rep't	Off	M061 fuel blending	2	2	0
D009	?	Not rep't	Not rep't	Off	?	4.2	?	0
D001	?	Not rep't	Not rep't	Off	M049 incineration	0.3	0.3	0
D007	?	Not rep't	Not rep't	Off	M049 incineration	0.2	0.2	0
U080	?	Not rep't	Not rep't	Off	M049 incineration	0.1	0.1	0
D008	?	Not rep't	Not rep't	Off	M049 incineration	0.1	0.1	0
D001, F002	?	Not rep't	Not rep't	Off	M061 fuel blending	0.4	0.4	0
TOTAL - 1991						1,290.9	1,260.8	0.0

**Plant-Community Profile:
General Motors (Saturn)
Spring Hill TN**

12/23/97

PLANT ENVIRONMENTAL PROFILE (continued)

RCRA BIENNIAL REPORT (continued)

<i>Waste Code(s)</i>	<i>Wastewater?</i>	<i>Physical Form</i>	<i>Source</i>	<i>Mgd. On/Off-Site</i>	<i>Management Method</i>	<i>Quantity Generated (tons)</i>	<i>Quantity Shipped (tons)</i>	<i>Quantity Mgd. On-Site (tons)</i>
<i>1993</i>								
F003, F005	?	Not rep't	Not rep't	Off	M049 incineration	98.2	97.9	0.0
D001, F003, F005, D035	?	Not rep't	Not rep't	Off	M029 solvents recov.	606.4	606.4	0.0
D001	?	Not rep't	Not rep't	Off	M125 other treat.	0.14	0.07	0.0
D001, F003	?	Not rep't	Not rep't	Off	M049 incineration	1.17	1.4	0.0
D001, D018	?	Not rep't	Not rep't	Off	M125 other treat.	2.13	1.36	0.0
D001	?	Not rep't	Not rep't	Off	M125 other treat.	2.73	1.49	0.0
D008	?	Not rep't	Not rep't	Off	M132 landfill	22.3	22.3	0.0
D001, D018	?	Not rep't	Not rep't	Off	M125 other treat.	1.77	1.12	0.0
D001, F002, F003	?	Not rep't	Not rep't	Off	M125 other treat.	1.33	1.12	0.0
F003, D035	?	Not rep't	Not rep't	Off	M049 incineration	3.34	3.34	0.0
D035	?	Not rep't	Not rep't	Off	M132 landfill	6.56	6.57	0.0
D001, D035	?	Not rep't	Not rep't	Off	M999 not rep't.	5.18	5.18	0.0
D001	?	Not rep't	Not rep't	Off	M137 other disposal	0.02	0.04	0.0
D001, F003, D035	?	Not rep't	Not rep't	Off	M125 other treat.	5.96	5.3	0.0
D009	?	Not rep't	Not rep't	Off	M132 landfill	6.95	6.96	0.0
D001, F002	?	Not rep't	Not rep't	Off	M125 other treat.	0.39	0.2	0.0
D001	?	Not rep't	Not rep't	Off	M125 other treat.	0.71	1.1	0.0
D022, D035	?	Not rep't	Not rep't	Off	M049 incineration	0.21	0.21	0.0
D001, F003, F005	?	Not rep't	Not rep't	Off	M049 incineration	0.42	0.42	0.0
D001, D035, F002, F003, F005	?	Not rep't	Not rep't	Off	M125 other treat.	0.07	0.07	0.0
D001, P022, D008	?	Not rep't	Not rep't	Off	M049 incineration	0.25	0.25	0.0
TOTAL - 1993						766.2	762.8	0.0

TOXICS RELEASE INVENTORY

<i>Total lbs of TRI chemicals:</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Energy Recovery</i>	<i>Off-Site Recycling</i>	<i>Off-Site Treatment</i>	<i>Off-Site Disposal</i>	<i>Total Transfers</i>
1991	197,684	838,715	1,036,399	63,680	802,114	677,855	49,781	80,864	1,674,294
1992	90,362	769,314	859,676	29,984	46,749	19,257,884	26,139	165,212	19,525,968
1993	79,722	674,093	753,815	31,497	26,175	1,156,945	27,303	108,139	1,350,059
1994	220,849	851,633	1,072,482	9,680	2,891	798,077	1,723	128,631	941,002
Lbs. per vehicle produced:									
1991	2.06	8.75	10.82	0.66	8.37	7.07	0.52	0.84	17.47
1992	0.43	3.63	4.05	0.14	0.22	90.79	0.12	0.78	92.05
1993	0.28	2.38	2.67	0.11	0.09	4.09	0.10	0.38	4.78
1994	0.79	3.04	3.83	0.03	0.01	2.85	0.01	0.46	3.36

**Plant-Community Profile:
General Motors (Saturn)
Spring Hill TN**

12/2/97

PLANT ENVIRONMENTAL PROFILE (continued)

1994 TRI Emissions/Releases by Chemical (lbs.)

<i>Chemical Name</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Energy Recovery</i>	<i>Off-Site Recycling</i>	<i>Off-Site Treatment</i>	<i>Off-Site Disposal</i>	<i>Total Transfers</i>
METHANOL	1,700	41,000	42,700	0	0	2,100	260	610	2,970
N-BUTYL ALCOHOL	5,000	11,000	16,000	0	0	120	4	220	344
BENZENE	27,000	24,000	51,000	0	170	0	0	0	170
METHYL ETHYL KETONE	5,700	3,600	9,300	0	0	83	110	230	423
METHYL METHACRYLATE	26,000	23,000	49,000	0	0	0	0	0	0
1,2,4-TRIMETHYLBENZENE	490	14,000	14,490	0	0	7,600	1	500	8,101
ETHYLBENZENE	1,100	28,000	29,100	0	100	23,000	10	690	23,800
STYRENE	33,000	120,000	153,000	0	0	0	0	1	1
ETHYLENE GLYCOL	47	14	61	0	0	14,000	390	0	14,390
METHYL ISOBUTYL KETONE	1,900	39,000	40,900	0	0	110,000	76	1,800	111,876
TOLUENE	25,000	38,000	63,000	0	850	0	150	227	1,227
CYCLOHEXANE	11	4	15	0	210	0	0	0	210
XYLENE (MIXED ISOMERS)	12,000	190,000	202,000	0	400	250,000	710	5,600	256,710
METHYL TERT-BUTYL ETHER	0	11	11	0	520	0	0	0	520
MANGANESE	0	1	1	0	0	83,000	0	37,000	120,000
NICKEL	0	0	0	0	0	28,200	0	681	28,881
COPPER	0	0	0	0	0	209,000	0	971	209,971
PHOSPHORIC ACID	900	0	900	0	0	130	0	34,800	34,930
GLYCOL ETHERS	81,000	320,000	401,000	340	641	69,072	12	9,000	79,065
LEAD COMPOUNDS	0	0	0	2,400	0	12	0	9,970	12,382
MANGANESE COMPOUNDS	0	0	0	1,400	0	0	0	5,900	7,300
NICKEL COMPOUNDS	0	0	0	1,000	0	0	0	4,201	5,201
ZINC COMPOUNDS	0	3	3	4,000	0	1,760	0	16,230	21,990
FORMIC ACID	1	0	1	540	0	0	0	0	540
TOTAL	220,849	851,633	1,072,482	9,680	2,891	798,077	1,723	128,631	941,002

**VOC/NOx Emissions:
(lbs/year)**

	VOCs	NOx
1990	822,000	88,000
1991	NA	NA
1992	NA	NA
1993	822,011*	88,200**
1994	NA	NA
	*estimated	**estimated NO2

**Plant-Community Profile:
General Motors (Saturn)
Spring Hill TN**

12/2/97

COMMUNITY ENVIRONMENTAL PROFILE

TRI Chemical Releases & Transfers from Sources Within 3 Miles of Auto/LDT Plant (lbs.)

<i>Facility (w. map #)</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Transfers</i>	<i>Total Transfers</i>
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[None]

**Air Quality Attainment Status
(as of 1994)***

ozone - attainment or unclassifiable
carbon monoxide - attainment or unclassifiable
particulates - unclassifiable
lead - unclassifiable
NO2 - cannot be classified or better than national standards
SO2 - attainment

* no changes in designations occurred between 1994 and 1996

**Plant-Community Profile:
General Motors (Saturn)
Spring Hill TN**

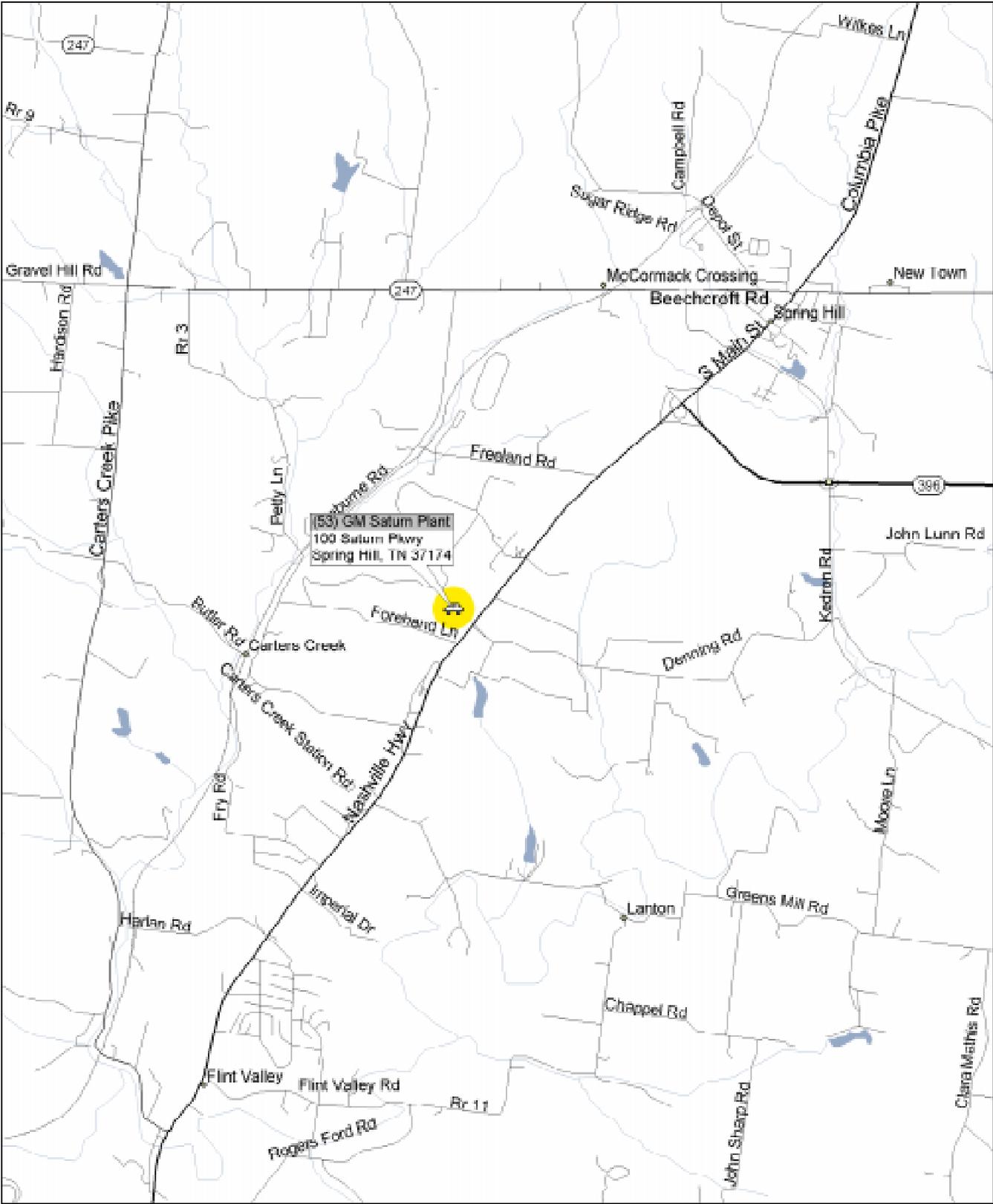
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COMMUNITY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

	<i>Census Block</i>	<i>0-1 Mile</i>	<i>0-3 Miles</i>	<i>1-3 Miles</i>	<i>3-5 Miles</i>	<i>County</i>	<i>State</i>	<i>U.S.</i>
Total Population (1994)	NA	NA	NA	NA	NA	63,889	5,175,233	260,340,990
Total Population (1990)	1,552	117	1,905	1,788	3,537	54,812	4,877,185	248,709,873
% Change 1990-1994	NA	NA	NA	NA	NA	17	6	5
Total Area (sq. mi.) (1990)	40.8	3.1	28.2	25.1	50.2	612.9	41,219.5	3,536,278.1
Population/sq. mi. (land area) (1990)	38	37	67	71	70	89	118	70
Median Household Income (1994)						NA	28,639	32,264
Median Household Income (1989)						26,238	24,807	30,056
% Change 1979-1989 (constant \$)						6	5	7
% Change 1989-1994 (constant \$)						NA	15	7
Per Capita Personal Income (1993)						17,275	18,439	20,800
Per Capita Personal Income (1989)						13,505	15,074	17,690
% Change 1989-1993 (current \$)						28	22	18
Minority Percentage (1990)	1	3	7	8	8	16	16	20
Pct. of Households Below Poverty Level (1989)	8	11	13	13	14	30	18	20
Pct. Not Completing High School (1990)	29	34	30	30	29	34	31	25
Total Employment (1994) (civilian nonfarm)						36,559	2,665,000	131,056,000
Unemployment Rate (1994)						5	5	6
Manufacturing Employment (1993)						9,709	513,568	18,183,381
Mfgr. as % Total Employment (1993)						41	26	19
Manufacturing Employment (1992)						NA	504,000	18,253,000
Production Workers (1992)						NA	370,000	11,654,000
% Change in Mfgr. Employment 1987-1992						NA	4	-4
Assembly Plant as % Total Mfgr. Workers						81		

Data sources used were not always complete or current.
Attempts have been made to verify data, but errors may still exist.

Spring Hill, TN, GM Saturn Plant



Microsoft Expedia
Streets98

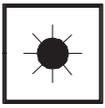
GENERAL MOTORS CORP
100 SATURN PKY
SPRING HILL TN
Tri Number: 37174STRNC100SA

Map #	SIC	Name	Address	City	State
0	3711	SATURN CORP.	100 SATURN PKY.	SPRING HILL	TN

AREA WIDE 1994 TRI EMISSION PROFILE

GENERAL MOTORS CORP
MAURY COUNTY, Tennessee

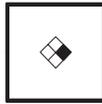
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Longitude: 86 58 15



Map Key:
Auto
Plant
Truck



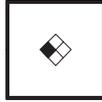
Air
Release



Land
Release



Water
Release



Transfer
location
to offsite

3 Mile Buffer



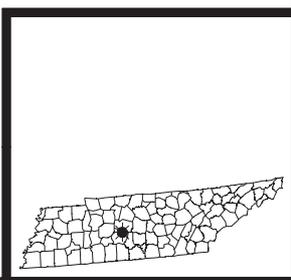
Number without a Symbol denotes no reported emissions over 0.5 pounds per year

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
 GENERAL MOTORS CORP TRI NO: 37174STRNC100SA

Chemical Name	Air Fugitive (Non-Point Source) Emissions	Air Stack (Point Source) Emissions	Discharge to Surface Water	On-Site Land Disposal	TOTAL RELEASES	Discharge to POTW	Transfer	TOTAL TRANSFERS
SATURN CORP. SIC DESCRIPTION: MOTOR VEHICLES & CAR BODIES MAP LOCATION NO: 0								
100 SATURN PKY. SIC CODE: 3711								
SPRING HILL TN 37174								
	1	0	0	0	1	540	0	540
METHANOL	1,700	41,000	0	0	42,700	0	2,970	2,970
N-BUTYL ALCOHOL	5,000	11,000	0	0	16,000	0	344	344
BENZENE	27,000	24,000	0	0	51,000	0	170	170
METHYL ETHYL KETONE	5,700	3,600	0	0	9,300	0	423	423
METHYL METHACRYLATE	26,000	23,000	0	0	49,000	0	0	0
1,2,4-TRIMETHYLBENZENE	490	14,000	0	0	14,490	0	8,101	8,101
ETHYLBENZENE	1,100	28,000	0	0	29,100	0	23,800	23,800
STYRENE	33,000	120,000	0	0	153,000	0	1	1
ETHYLENE GLYCOL	47	14	0	0	61	0	14,390	14,390
METHYL ISOBUTYL KETONE	1,900	39,000	0	0	40,900	0	111,876	111,876
TOLUENE	25,000	38,000	0	0	63,000	0	1,227	1,227
CYCLOHEXANE	11	4	0	0	15	0	210	210
XYLENE (MIXED ISOMERS)	12,000	190,000	0	0	202,000	0	256,710	256,710
METHYL TERT-BUTYL ETHER	0	11	0	0	11	0	520	520
MANGANESE	0	1	0	0	1	0	120,000	120,000
NICKEL	0	0	0	0	0	0	28,881	28,881
COPPER	0	0	0	0	0	0	209,971	209,971
PHOSPHORIC ACID	900	0	0	0	900	0	34,930	34,930
GLYCOL ETHERS	81,000	320,000	0	0	401,000	340	78,725	79,065
LEAD COMPOUNDS	0	0	0	0	0	2,400	9,982	12,382
MANGANESE COMPOUNDS	0	0	0	0	0	1,400	5,900	7,300
NICKEL COMPOUNDS	0	0	0	0	0	1,000	4,201	5,201
ZINC COMPOUNDS	0	3	0	0	3	4,000	17,990	21,990
SUBTOTALS	220,849	851,633	0	0	1,072,482	9,680	931,322	941,002

General Motors (Saturn) Spring Hill Maury County, Tennessee

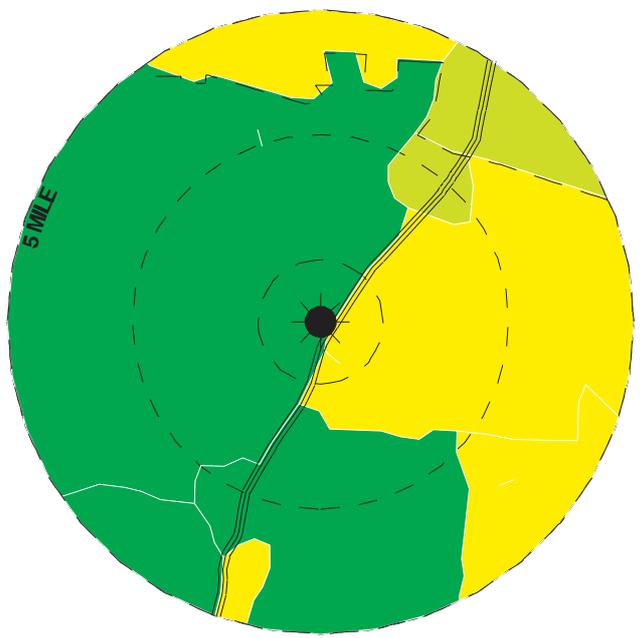
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Longitude: 86 58 15 W



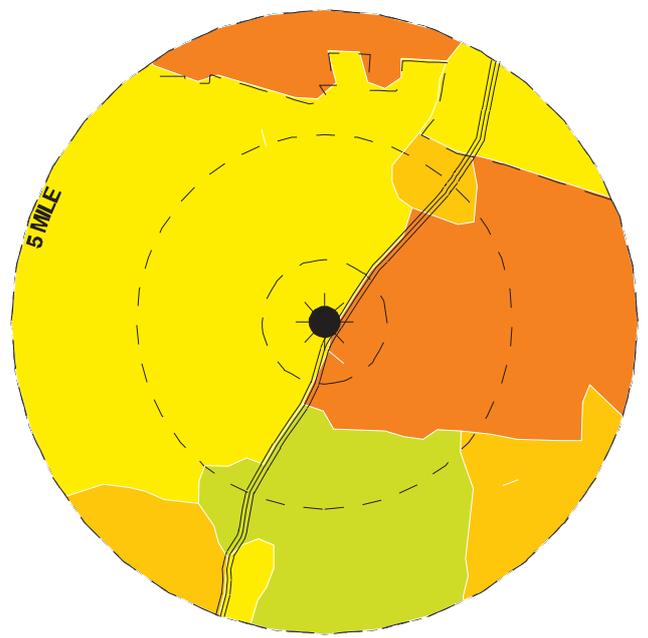
- MAP KEY:**
- County Boundaries
 - Inter State Highway
 - US Highway
 - Rail Road
 - One Mile
 - Three Miles
 - Five Miles
- POPULATION DENSITY / SQ. MILE**
- Greater than 10000
 - 1000 - 10000
 - 100 - 1000
 - 10-100
 - 1-10

- Minority, poverty, and High School Incomplete percentages**
- Greater than 50
 - 40 - 50
 - 30 - 40
 - 20 - 30
 - 10 - 20
 - 0 - 10

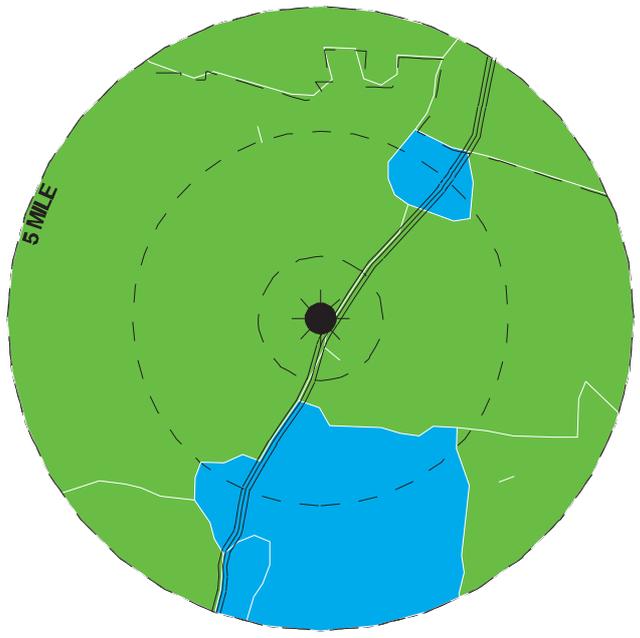
Percentage of Total Population Below Poverty Level



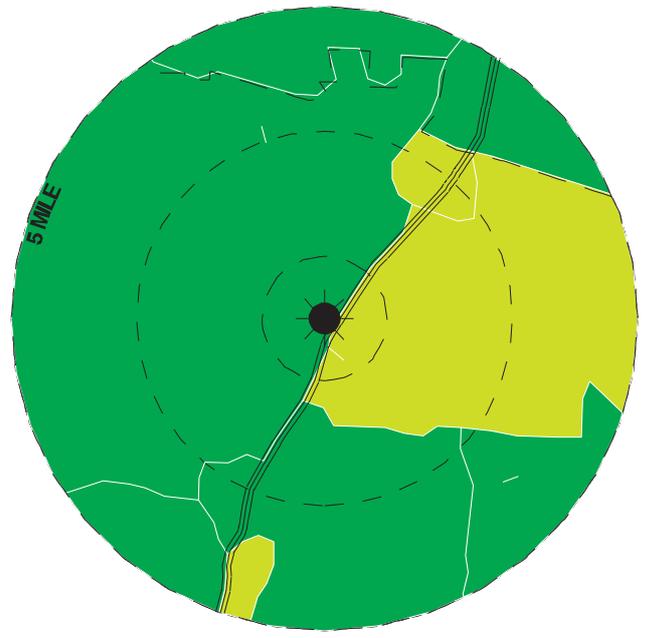
Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population

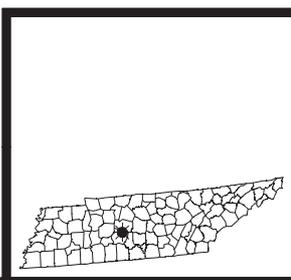


General Motors (Saturn) Spring Hill Maury County, Tennessee

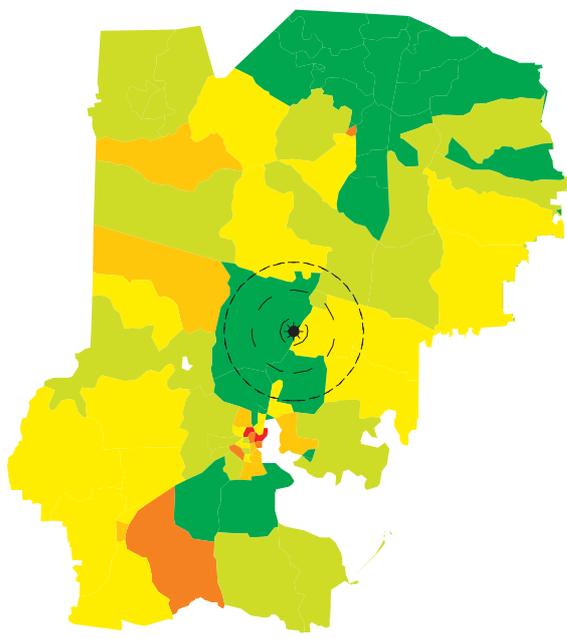
Latitude: 35 43 15 N
Longitude: 86 58 15 W

- MAP KEY:**
- County Boundaries
 - Inter State Highway
 - US Highway
 - Rail Road
 - One Mile
 - Three Miles
 - Five Miles
- POPULATION DENSITY / SQ. MILE**
- Greater than 10000
 - 1000 - 10000
 - 100 - 1000
 - 10-100
 - 1-10

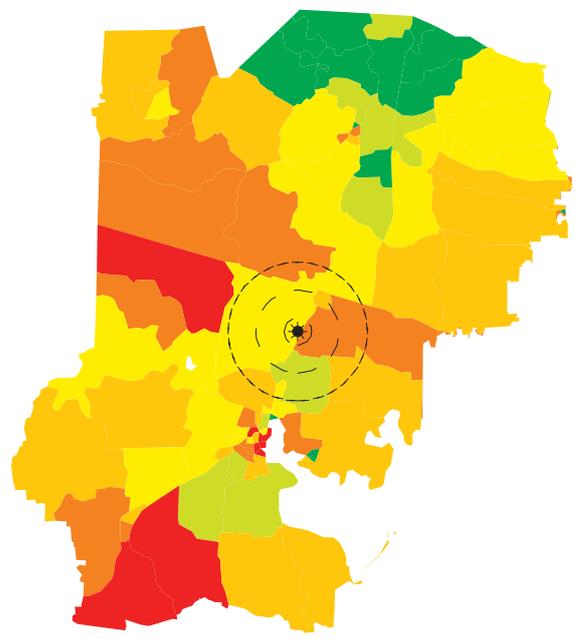
- Minority, poverty, and High School Incomplete percentages**
- Greater than 50
 - 40 - 50
 - 30 - 40
 - 20 - 30
 - 10 - 20
 - 0 - 10



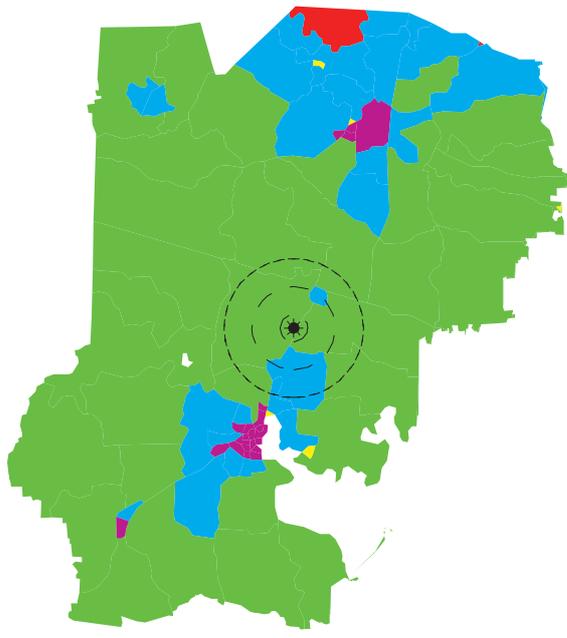
Percentage of Total Population Below Poverty Level



Percentage of Population not Completing High School



Population Density
People Per Sq. Mile



Minority Population
Percent of Total Population

