

ELKHART COUNTY, INDIANA
HAZARDOUS MATERIALS HIGHWAY TRAFFIC
FLOW STUDY SUMMER - FALL 2010

	Representative Materials	ERG	I-80/90 East	I-80/90 West	SR 4	US 6	SR 13	SR 15	SR 19	US 20	US 33	SR 112	SR 119	SR 120	TOTALS
Hours of Observation			36	36	5	15	28	35	42	41	20	0	9	8	275
T/T Box Van			4,454	4656	45	825	1092	1064	935	4038	541	0	18	140	17,808
Straight truck			421	491	56	467	848	784	1138	1529	491	0	59	452	6,736
Flat bed			643	730	5	282	412	182	282	1027	113	0	6	53	3,735
Multi Trailers			374	392	0	8	4	17	18	47	4	0	0	5	869
Cryogenic			12	31	0	0	1	3	1	2	0	0	0	0	50
Compressed Gas			3	0	0	0	0	0	0	0	0	0	0	0	3
Molten Sulphur			0	2	0	0	0	0	0	1	0	0	0	0	3
Pneumatic Bulk			85	77	13	10	41	38	11	65	4	0	0	2	346
Atmospheric Tanker (306/406)			105	48	1	1	10	13	13	43	6	0	0	4	244
Atmospheric Tanker			125	216	5	15	38	32	14	85	18	0	0	0	548
Corrosive tanker			14	19	0	4	6	2	0	16	0	0	0	0	61
High Pressure gas			8	14	0	5	8	5	1	9	3	0	0	0	53
Total Qualifying Vehicles			6,244	6,676	125	1,617	2,460	2,140	2,413	6,862	1,180	0	83	656	30,456
Vehicles per hour (day light)			173	185	25	108	88	61	67	167	59	0	9	82	
Vehicles per year			1,519,373	1,624,493	219,000	944,328	769,829	535,611	503,283	1,466,125	516,840		80,787	718,320	
Explosives: Class 1															
Placard Only		112	0	0	0	0	0	0	1	1	0	0	0	0	2
1.1 D Mass explosion hazard		112	0	1	0	0	0	0	0	0	0	0	0	0	1
1.4 No significant blast hazard		114	1	0	0	0	0	0	0	0	0	0	0	0	1
Explosives Total			1	1	0	0	0	0	1	1	0	0	0	0	4
Gases: Class 2															
Flammable Gas	Acetylene	118	7	5	1	0	2	3	7	1	2	0	0	2	30
1030 Difluoroethane		115	1	1	0	0	0	0	0	0	0	0	0	0	2
1046 Helium		121	0	1	0	0	0	0	0	0	0	0	0	0	1
1075 Propane		115	4	7	0	9	19	16	13	34	8	0	1	2	113
1077 Propylene		115	1	0	0	0	0	0	0	0	0	0	0	0	1
3161 Liquefied Gas, flammable		115	0	3	0	0	0	0	0	0	0	0	0	0	3
Non Flammable Gas		121	11	16	1	3	10	8	15	21	5	0	0	5	95
1005 Anhydrous Ammonia		125	1	0	0	1	0	0	0	0	1	0	0	0	3
1044 Fire extinguishers		126	0	0	0	0	1	0	0	0	0	0	0	0	1
1046 Helium		121	1	0	0	0	0	0	0	0	0	0	0	0	1
1080 Sulfur Hexafluoride		126	1	0	0	0	0	0	0	0	0	0	0	0	1
1951 Argon, refrigerated		120	10	7	0	0	0	0	0	0	0	0	0	0	17
1963 Helium, refrigerated		120	2	0	0	0	0	0	0	0	0	0	0	0	2
1977 Nitrogen cryogenic liquid		120	7	12	0	0	1	3	0	1	0	0	0	0	24
2167 Carbon Dioxide, refrigerated		120	3	10	0	0	1	0	0	1	0	0	0	1	16
Inhalation Hazard		123	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Gases		49	63	2	13	34	30	35	58	16	0	1	10	311	
Total Flammable Gas		13	17	1	9	21	19	20	35	10	0	1	4	150	
Flammable Gas% of Gases			26.53%	26.98%	50.00%	69.23%	61.76%	63.33%	57.14%	60.34%	62.50%		100.00%	40.00%	48.23%
Flammable Liquids: Class 3															
Flammable		127	55	73	2	10	17	10	16	34	4	0	0	2	223
1090 Acetone		127	0	1	0	0	0	0	0	0	0	0	0	0	1
1123 Butyl Acetates		129	1	1	0	0	0	0	0	0	0	0	0	0	2
1133 Adhesives, flammable		128	4	0	0	0	0	0	0	0	0	0	0	0	4
1170 Ethyl Alcohol		127	1	2	0	0	0	0	0	0	0	0	0	0	3
1175 Ethylbenzene	130P	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1192 Ethyl Acetate	129	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1193 Methyl Ethyl Ketone	127	0	3	0	0	0	0	1	0	0	0	0	0	0	4
1197 Extracts, flavoring	127	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1203 Gasoline	128	60	44	3	7	19	22	23	70	10	0	0	0	0	258
1206 Heptanes	128	1	1	0	0	0	2	0	0	2	0	0	0	0	6
1210 Printer's Ink	129	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1212 Isobutyl Alcohol	129	1	1	0	0	0	0	0	0	0	0	0	0	0	2
1220 Isopropyl Acetate	129	1	1	0	0	0	0	0	0	0	0	0	0	0	2
1230 Methanol	131	0	3	0	0	0	0	0	0	0	0	0	0	0	4
1231 Methyl Acetate	129	0	1	0	0	0	0	0	2	5	0	0	0	0	1
1263 Paint related material	128P	6	9	0	0	5	0	1	2	0	0	0	0	0	25
1265 Isopentane	128	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1266 Purfumery solvents	127	0	4	0	0	0	1	0	0	0	0	0	0	0	5
1268 Petroleum Products	128	3	1	0	1	2	0	3	1	2	0	0	0	0	13
1293 Tinctures, medicinal	127	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1294 Toluene	130	1	4	0	0	0	0	0	0	0	0	0	0	0	5
1307 Xylenes	130	1	0	0	0	0	0	1	0	0	0	0	0	0	2
1648 Acetonitrile	127	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1863 Aviation Fuel	128	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1866 Resin Solution	127	6	9	0	3	1	1	4	6	0	0	0	0	0	30
1966 Hydrogen, cryogenic	115	5	1	0	0	0	0	0	0	0	0	0	0	0	6
1987 Denatured Alcohol	127	0	0	0	0	0	0	0	1	1	0	0	0	1	3
1993 Combustible Liquid, nos	128	12	21	0	2	0	0	2	5	0	0	0	0	0	42
2055 Styrene monomer, stabilized	128P	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2348 Butyl Acrylates, stabilized	129P	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2924 Flammable Liquid, corrosive	132	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3092 1-methoxy, 2-propanol	129	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3272 Esters, nos	127	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Flammables Total			168	186	5	23	46	34	51	122	17	0	0	3	655
Flammable Solids: Class 4															
Fiam Solid		134	3	4	0	1	1	0	0	0	0	0	0	0	9
2448 Sulfur, molten	133	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Spontaneously Combustible		136	2	0	0	0	0	0	0	0	0	0	0	0	2
Water reactive Dangerous When Wet	139	5	3	0	0	0	0	0	0	0	0	0	0	0	9
1969 Magnesium	138	0	0	0	1	0	0	0	0	0	0	0	0	0	1
2257 Potassium	138	0	0	0	0	0	0	0	0	2	0	0	0	0	2
3132 Water reactive solid, flammable, nos	138	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Flammable Solids Total			10	10	0	2	1	0	0	3	0	0	0	0	26
Oxidizer: Class 5															
Division 5.1		143	3	7	0	2	0	2	0	2	0	0	0	0	16
Oxygen		122	3	0	0	0	1	0	5	4	1	0	0	2	16
1073 Oxygen	122	2	3	0	1	1	0	2	1	1	0	0	0	0	11
1450 Bromates, inorganic, nos	140	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1463 Chromic trioxide, anhydrous	141	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1479 Oxidizing solid, nos	140	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1486 Potassium Nitrate	140	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1493 Silver Nitrate	140	1	1	0	0	0	0	0	0	0	0	0	0	0	2
2014 Hydrogen Peroxide, 20 to 60 %	140	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2725 Nickel Nitrate	140	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Division 5.2 Organic Peroxides	148	1	6	0	0	0	0	1	1	0	0	0	0	0	9
3214 Permanganate, inorganic, aqueous	140	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Oxidizer Total			13	21	0	3	2	2	8	8	2	0	0	2	61
Toxic/Infection Risk: Class 6															
Infectious Substance		158	0	0	0	0	0	0	0	0	0	0	0	1	1
Poison		153	0	3	0	0	0	0	0	0	0	0	0	0	3
Toxic		153	0	2	0	0	0	0	0	0	0	0	0	0	2
Inhalation Hazard		153	2	1	0	0	0	0	0	0	0	0	0	0	3
1017 Chlorine	124	0	1	0	0	0	0	0	0	1	0	0	0	0	3
1079 Sulphur Dioxide	125	0	1	0	2	0	2	0	0	0	0	0	0	0	5
1738 Bezyl Chloride	140	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1897 Perchloroethylene	160	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Toxic Total			2	10	0	2	1	2	0	1	0	0	0	0	18
Radioactive: Class 7															
		163	0	2	0	0	0	0	0	0	0	0	0	0	2
Corrosive: Class 8															
Corrosive		153	77	76	0										