

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION
GROUNDWATER SECTION – WELL CONSTRUCTION UNIT**

MINIMUM WELL ISOLATION DISTANCES
(From Contamination Sources and Buildings)
Part 127, Act 368, P.A. 1978 And Act 399, P.A. 1976

The following lists sources of contamination and the well isolation distances required from those sources by state codes. The Michigan Department of Environmental Quality and local health departments have authority to issue deviations from these minimum isolation distances on a case by case basis. Criteria for issuance of deviations are set forth in R 325.1613 of the Rules for Part 127, and R 325.10809 of the Rules for Act 399.

* = For the isolation distances marked with a single asterisk, the isolation distance is for a source of contamination which is not specifically listed in the rules. However, the source of contamination is interpreted as belonging in a general contamination source group (example - a sewage holding tank is the same as a septic tank) which is listed in the rules, and therefore, the isolation distance listed in this document is required.

** = For the isolation distances marked with a double asterisk, the isolation distance is from a source of contamination which is not specifically named in the rules. However, the Michigan Department of Environmental Quality has established a recommended isolation distance based on the contaminant involved, the risk to public health, and other factors. Under the general authority of a health officer's responsibility to protect the public health, health officers may modify this recommended isolation distance, either increasing or decreasing it, on a case by case basis.

CONTAMINATION SOURCE	REQUIRED MINIMUM ISOLATION DISTANCE (FEET)		
	Part 127, Act 368 PA 1978	Act 399, PA 1976	
		IIb and III	I and IIa
Agricultural chemical/ fertilizer storage or preparation area	150	800	2000
Animal/poultry yard	50	75	200
Brine wells/injection wells	**150	**800	**2,000
Building or projection thereof	3	3	3
Cemetery/graves	**50	*75	*200
Cesspool	50	75	200
Chemical Storage	150	800	2,000
Contaminant plumes, known (Act 307, LUST sites, etc.)	**150	**800	**2,000
Drainfield	50	75	200
Drywell	50	75	200
Footing Drains	10	10	10
Fuel/chemical storage tanks – Underground or abovegrade and associated piping			
depot/tank farm	300	800	2,000
1,100 gal. or larger, without secondary containment	300	800	2,000
1,100 gal. or larger with secondary containment	50	800	2,000
less than 1,100 gal. that store motor or heating fuel for noncommercial purpose or consumptive use on premises where fuel is stored	50	800	2,000
less than 1,100 gal. that store motor fuel for commercial purpose	*50	800	2,000
located in a basement, regardless of size	*50	800	2,000
Grease trap	50	*75	*200
Kennels	50	*75	*200
Landfill or dump sites (Active or Inactive)	800	800	2,000

Liquid Petroleum (LP) Tanks (See comments on last page)			
Liquid waste draining into the soil	50	*75	200
Metering station for pipelines	*300	*300	*300
Municipal wastewater effluent or sludge disposal area (land surface application or subsurface injection)	300	800	2,000
Oil or gas well	300	300	300
Other wastewater handling or disposal unit	50	*75	*200
Petroleum product processing or bulk storage	300	800	2,000
Pipelines gas, oil, etc.	*300	*300	*300
natural gas (See comments on last page)			
Privy/Outhouse	50	75	200
Seepage pit	50	75	200
Septic tank	50	75	200
Septage waste (land application area)	800	800	2,000
Sewage holding tank	50	*75	*200
Sewage lagoon serving a single family dwelling	50	75	200
Sewage lagoon effluent – land application area	50	800	2,000
Sewage or liquid waste draining into soil	50	*75	*200
Sewage pump chamber, transfer station, or lift station	50	75	200
Sewers			
Buried gravity sewer (sanitary or storm) - Service weight or heavier ductile-iron or cast iron, or schedule 40 PVC, all with watertight joints	10	75	200
Buried pressure sewer (sanitary or storm) Watertight joints (pressure tested after installation to 100 psi), equivalent to Schedule 40 or SDR 21, and meets or exceeds ASTM Specifications D1785-91 or D2241-89	10 (by written deviation only)	75	200
Buried gravity or pressure sewer (sanitary or storm), constructed of materials not meeting the specifications listed in the two categories above, or the materials are unknown	50	75	200
Sump pit			
Receiving other than household waste (footing drain, roof drain, etc.)	10	10	10
Receiving household waste (laundry, softener backwash, sink waste, etc.)	50	75	200
Surface water (lake, river, stream, pond, ditch, etc.)	10	75	200
Unfilled space below ground surface (except an approved basement, basement offset, or crawl space beneath single family dwelling)	10	10	10

Comments: Natural gas and liquid petroleum (LP) are not considered sources of ground water contamination because of the volatile gas nature of the fuels. If leaks occur, the gases escape into the atmosphere. Leaked gases do not migrate downward into the soil. Wells should be sufficiently isolated from natural gas lines or LP tanks to minimize the potential for damage to the lines or tanks during well construction or repair, trenching of water lines, etc., and to allow accessibility to the well.

