



**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU**

**CRITERIA FOR REDUCING THE 800-FOOT MINIMUM WELL ISOLATION DISTANCE FOR MAJOR SOURCES
OF CONTAMINATION WITHOUT SECONDARY CONTAINMENT ❶**

APPLICABLE FOR EXISTING TYPE IIB AND TYPE III PUBLIC WATER
SUPPLIES WITH A CAPACITY OF LESS THAN 70 GPM OR A PROJECTED WITHDRAWAL
AVERAGE OF 100,000 GALLONS PER DAY OR LESS FOR ANY 30 CONSECUTIVE DAYS

Reduction allowed down to 400 feet where the following protection factors are documented	Reduction allowed down to 200 feet where the following protection factors are documented
<p align="center">A or, B+D or, C+D or F or,</p> <p align="center">(Any from 200' reduction column)</p>	<p align="center">A+B or, ★ E or, A+C or, F+B+C or, A+D or, F+B+D or, A+F or, F+C+D or, ★ B+C or, F+E</p> <p align="center">★ for fertilizer, pesticide, fuels w/o secondary containment</p>

PROTECTION FACTORS

- A - Ground water flow direction is away from well
- B - Confining material of 10' of continuous clay or 20' of a continuous clay mixture
- C - Well casing depth is 100' or more
- D - Well pump capacity is 25 gallons per minute or less
- E - B (min. of 10' continuous clay or 20' continuous clay mixture) + C (min. of 60' casing depth) = 100' or more.
- F - Manure storage constructed with flexible membrane liners, or reinforced concrete, or steel, or solid manure stacking facility with roof and concrete floor constructed in accordance with USDA Natural Resources Conservation Service field office technical guide standards and specifications and sited/graded to protect the water supply in the event of failure.

❶ Major source contaminants with secondary containment meeting the regulating agencies requirements, may be located within 800 feet of a Type IIB or Type III public water supply with less than 70 gallons per minute capacity /or 100,000 gallons per day or less withdrawal. The actual isolation should be maximized to the extent possible and not less than 75 feet unless specified by rule.

APPLICABILITY

The above criteria shall be used where it is necessary to upgrade an existing storage, handling area, tank, or structure for major source contaminants within the 800-foot isolation of a drinking water well. Tanks or structures that comply with applicable regulations and are located in accordance with the above procedures are considered to be complying with requirements to maintain isolation distance from the well to the contaminant source. **Wells must be properly constructed and unused wells properly abandoned, as determined by the DEQ, local health department, or a registered well drilling contractor and bacteriologic and nitrate standards levels meet drinking water standards.**

The local health department shall be provided with a copy of the decision wherever this protocol is used to reduce isolation from an existing well. Deviations from isolation distances authorized through issuance of well construction permits may incorporate additional criteria in accordance with 1976 PA 399, or Part 127, 1978 PA 368.