TO: Water Well Drilling Contractors

FROM: Michael Gaber, Chief
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and

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SUBJECT: Water Well Drilling Near Surface Waters

The Department of Environmental Quality (DEQ) urges water well drilling contractors to exercise caution when constructing, repairing, or plugging water wells near lakes, rivers and streams. The discharge of drilling fluids, drill cuttings, grout, and other materials into the waters of the state can adversely impact surface water quality and the habitat of aquatic organisms and is illegal.

Well drilling activities within 500 feet of a lake or stream may require a permit under Part 91 – Soil Erosion and Sedimentation Control (SESC), of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended. The landowner or well driller should contact the county or municipal agency responsible for enforcing Part 91 prior to doing any earth work such as drilling, grading, or trenching within 500 feet of a lake or stream. A list if SESC permitting agencies, by county, can be found at michigan.gov/deqwd. (Click on SESC Program, then click on SESC Agencies.)

If drilling operations result in the discharge of sediment (including bentonite and other drilling materials) onto adjacent properties or into waters of the state, Part 91 (SESC) and § 324.3109 of Part 31 of NREPA have been violated. Contractors are subject to civil fines and are liable for damages for, injury to, destruction of, or loss of natural resources resulting from the violation.
The Michigan Water Well Construction and Pump Installation Code, R 325.1622, requires that a well be located at least 10 feet from a surface water body. This minimum isolation distance addresses public health concerns but cannot be relied on to prevent the discharge of drilling materials into surface waters.

Special precautions must be taken if you plan to drill or plug a well where the potential exists for discharge into surface waters or wetlands. Some recommended practices are:

- Transport of fluids and cuttings off site.
- Ditching to divert drilling fluids and cuttings into an upland vegetated area, where filtration through vegetation and soil can occur.
- Construction of a shallow trench, pit, or soil berm to contain the fluids and drill cuttings.
- Using geofabrics or erosion control matting to retain solids at the drill site and prevent their migration toward surface waters.
- Straw or hay bale barriers or other structures to retain fluid and drill cuttings.

Other practices may be required by the local SESC enforcement official.

This memorandum supersedes the DEQ, Well Construction Unit, June 19, 1999, memorandum on Discharge of Drilling Materials into Surface Waters.

Your cooperation in protecting our states water resources is appreciated. If you have any questions, please contact our office or your local SESC official.

cc: Local Health Departments
    SESC Agencies
    Michigan Ground Water Association
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