



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

RUSSELL J. HARDING, Director

REPLY TO:

DRINKING WATER & RADIOLOGICAL
PROTECTION DIVISION
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PO BOX 30630
LANSING, MI 48909-8130

June 18, 1999

TO: Water Well Drilling Contractors

FROM: Michael Gaber, Chief
Well Construction Unit
Drinking Water and Radiological Protection Division

SUBJECT: Discharge of Drilling Materials into Surface Waters

Water well drilling contractors are urged to exercise caution when performing well drilling or abandoned well plugging operations near lakes, rivers, streams, and other watercourses to prevent the discharge of drilling materials into surface waters. Drilling materials that may adversely impact surface water quality include drilling fluids, drill cuttings, grouts, formation materials from well development processes, and eroded materials from flowing well breakouts. The state well construction code requires that a well be located at least 10 feet from a surface water body. While this minimum isolation distance sufficiently addresses public health concerns, it cannot be relied on to prevent discharge of drilling materials into surface waters.

The discharge of drilling materials (except for clear, potable water) into surface water violates Part 95 of 1994 PA 451 (Natural Resources and Environmental Protection Act). Part 95 of 1994 PA 451, 324.9502(1) states the following:

"A person shall not place, throw, deposit, discharge, or cause to be discharged into or onto the waters of the state, any litter, sewage, oil, or other liquid or solid materials that render the water unsightly, noxious, or otherwise unwholesome so as to be detrimental to the public health or welfare or to the enjoyment of the water for recreational purposes."

Contractors may be subject to prosecution if a discharge to surface waters occurs. In fact, warrants and summons were issued earlier this year by a northern Michigan district court against a water well drilling contractor for discharge of drilling fluids into a lake. Violation of Part 95 is a felony with a minimum penalty of \$2,500.00 and a maximum penalty of \$25,000.00 for the first offense. The court may also impose an additional penalty of \$25,000.00 per day for a continuing violation. The penalty for a second offense is a minimum of \$25,000.00 and a maximum of \$50,000.00. In addition to the monetary penalty, a violator is subject to up to 2 years imprisonment.

If you intend to drill a well or plug an abandoned well where the potential for such discharge exists, special precautions should be taken. Some recommended procedures are:

- Transport of fluids and cuttings offsite.

- 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 downstream of the drill site and prevent their migration towards surface waters.
- Straw or hay bale barriers, or other structures to retain fluid and drill cuttings.

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

cc: Local Health Departments
Michigan Ground Water Association
David Hamilton, SWQD, DEQ
Lt. Greg Eagle, Office of Criminal Investigations, DEQ
Flint C. Watt, DWRPD, DEQ