

## GEOTECHNICAL WELLS

### House Bill 6213

**Sponsor: Rep. Raymond Basham**

**Committee: Conservation, Environment  
and Recreation**

**Complete to 11-9-98**

### A SUMMARY OF HOUSE BILL 6213 AS INTRODUCED 9-24-98

House Bill 6213 would add a new part, Part 141, to the Natural Resources and Environmental Protection Act (NREPA) to establish standards for the drilling, closing, and reporting of geotechnical wells. The bill would also establish penalties for violations of Part 141, and would create a Geotechnical Well Oversight Fund, into which civil fines imposed for the violations would be deposited. The provisions of the bill would apply to geotechnical wells that are known as soil borings, groundwater monitoring wells, closed-loop heat exchange wells, elevator cylinder wells, or cathodic protection wells. Neither water wells that are regulated under Part 127 of the Public Health Code (MCL 333.12701 et al.), or wells regulated under the Safe Drinking Water Act (MCL 325.1001 et al.) would be included under the bill's provisions.

Well Specifications. The bill would establish several provisions regarding the plugging of wells, although the Department of Environmental Quality (DEQ) could grant an exception if a well owner demonstrated satisfactorily that an alternative method or material would fulfil the intent of the requirements. The requirements are as follows:

- A well would have to be drilled, cased, and sealed so as to prevent contaminants from moving to a subsurface stratum or from one subsurface stratum to another, and to prevent groundwater from flowing into another stratum or on to the ground surface.
- Drilling, operating, and construction equipment and materials would have to be free of materials that could cause soil or groundwater contamination.
- Potable water would have to be used for well drilling and construction, and only water from a municipal water supply system could be used for surface water.
- Drill cuttings would have to be handled and disposed of so as not to cause soil, surface water, or groundwater contamination.
- A well that had not been plugged immediately after drilling was finished would have to be cased and sealed in accordance with provisions specified under the bill.
- The top of a well casing would have to be sealed so as to prevent precipitation, surface water, dirt, or other foreign materials from entering.

- Appropriate measures would have to be taken to protect the top of a well casing from damage.
- A well casing would have to be secured so as to prevent unauthorized entry.

Well Plugging. Under the bill, a geotechnical well would have to be plugged within 90 days after it ceased to be used for its intended purpose, in compliance with certain requirements, although the DEQ could grant an exception if a well owner demonstrated satisfactorily that an alternative method or material could fulfil the intent of these requirements:

\*\* A well would have to be plugged so as to prevent contaminants, or other injurious substances, from moving to a subsurface stratum or from one subsurface stratum to another, and to prevent groundwater from flowing into another stratum or onto the ground surface.

\*\* A well that did not penetrate bedrock would have to be plugged by filling it with cement grout, concrete grout, bentonite grout, or bentonite pellets or chips. However, a well that did not reach the water table and did not encounter silt or clay could be plugged by filling with native materials mixed with 50 percent bentonite granules, pellets, or chips.

\*\* The section of a well that penetrated bedrock would have to be plugged by filling with cement grout or concrete grout to at least 20 feet above the top of the bedrock or to the surface of the ground. The section of the well from 20 feet above the bedrock to the ground surface would have to be plugged in the same manner as prescribed for a well that did not penetrate bedrock.

\*\* Gravel, sand, or stone aggregate could be used to plug that portion of a well that penetrated lost circulation zones.

\*\* Only cement or concrete grout could be used to plug wells that discharged gases from the subsurface.

\*\* Plugging materials for wells would have to be placed according to certain conditions prescribed in the bill.

\*\* After plugging, there could be no open unplugged annular space between casings, or between a casing and the borehole, inside a casing, or in the borehole.

House Bill 6213 would specify, however, that casings could be removed from a well if all these provisions were met.

Notice of Determination. If the DEQ determined that an owner had failed to case, seal, operate, repair, or plug a well as prescribed under Part 141, or under its rules, then it would be required to give notice of the determination to the owner. Should the owner fail to correct the conditions within 60 days, the department could enter into or upon any private or public property on which the well was located, or across any private or public property to reach it, and repair or correct the problem. The owner would be liable for all expenses incurred, and would have to pay

them within 30 days. Otherwise, the DEQ could bring suit in the Ingham County Circuit Court to collect expenses.

Geotechnical Well Reporting Form. The DEQ would be required to prepare and provide geotechnical well reporting forms that required all of the following information: the location of the well; the depth to, and thickness of, soil and rock strata penetrated; an accurate and complete lithologic description, including color, hardness, and the rock or soil character; water levels, if available; hole sizes; casing used, including the size materials, and depth set; the amount and type of grout used and the interval where it was to be placed; and the date of expected plugging of the well. In addition, the bill would require that all geotechnical well reporting forms be kept confidential by the department's Geologic Survey Division, unless the department determined that the well posed a threat to the public health or the environment. The forms would not be subject to disclosure under the Freedom of Information Act (FOIA), unless otherwise specified by rules promulgated under the act.

In a situation involving a well drilled on or after the effective date of the bill, the person drilling the well would have to prepare and submit a geotechnical well reporting form if both the following conditions existed: the drilling of the well had not been reported to the DEQ under other applicable law; and the well exceeded a depth of 25 feet or penetrated a saturated zone or bedrock. (Note: under the bill, "saturated zone" would mean the subsurface zone in which all rock or soil pore space was filled with water.)

Penalties and Fines. A violation of the provisions of Part 141 would be considered a misdemeanor, punishable by imprisonment for up to 90 days, a fine of up to \$2,500, or both. Also, a person would be responsible for a civil fine of up to \$1,000. In addition, a person who failed to file a geological well reporting form would be responsible for a civil fine of up to \$2,000. The bill would also specify that a default in the payment, or installment payment, of a civil fine or costs could be remedied by any means authorized under the Revised Judicature Act (MCL 600.101 et al.). Civil fines collected under these provisions would be deposited into a new Geotechnical Well Oversight Fund established under the bill.

MCL 324.14101

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■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.