

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**INTEROFFICE COMMUNICATION**

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OPERATIONAL MEMO 115-13

April 26, 1999

TO: Waste Management Division Supervisors  
FROM: Jim Sygo, Chief, Waste Management Division  
SUBJECT: Analysis of Metals from Groundwater Monitoring Wells

This Operational Memo replaces the April 1, 1994, Operational Memo 641-13 on the above subject.

Section 11515(2) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, (NREPA) states:

The department shall not license a landfill facility operating without an approved hydrogeologic monitoring program until the department receives a hydrogeologic monitoring program and the results of the program. The director shall use this information in conjunction with other information required by this act or the rules promulgated pursuant to this act to determine a course of action regarding licensing of the facility consistent with Section 4005 of title 2 of the solid waste disposal act, 42 U.S.C. 6945, and with this act and the rules promulgated pursuant to this act.

The provisions of 40 CFR 258.53(b) promulgated under the Solid Waste Disposal Act states in part, "Groundwater samples shall not be field-filtered prior to analysis."

Rule 299.4907(2) states, in part:

Groundwater samples for metals shall be field-filtered prior to laboratory analysis, unless filtered metals alone will not accurately measure the concentration of metals in the given geologic setting . . .

In approving Michigan's solid waste program, the U.S. Environmental Protection Agency (U.S. EPA) states in the March 10, 1994 Federal Register, regarding ban on filtering samples:

The U.S. EPA intends to revisit this issue during a proposed rulemaking. If the U.S. EPA determines the ban should be upheld, Michigan will be required to come into compliance with the provisions of 40 CFR 258.53(b). In the meantime, the state will not be given approval of this requirement.

In order to ensure compliance with the requirements of Section 11515(2) of NREPA, District Geologists should use the following procedures when reviewing hydrogeological monitoring plans for Type II landfills:

1. Ensure that all wells identified in the plan are sampled and analyzed for filtered metals or that frequency specified by the rules.
2. Ensure that at least one background well and one downgradient well identified in the plan are selected to comply with 40 CFR 258.53(b). Selected wells shall comply with 40 CFR 258.51.
3. Ensure that upon the effective date of rules for that unit, unfiltered samples from selected wells are analyzed for metals on the following frequency:
  - a. For units where all portions of the unit comply with the leakage control criteria of Rule 299.4422, annually. These units will be deemed to meet the criteria for alternate frequency specified in 40 CFR 258.53(b) for unfiltered metals.
  - b. For units where all or portions of the unit do not comply with Rule 299.4422, semi-annually.
4. Approved hydrogeological monitoring plans may provide for elimination of unfiltered samples in the event 40 CFR 258.53(b) is amended to eliminate this requirement, unless unfiltered samples are required pursuant to Rule 299.4307(2) based on the geologic setting.