ON-SITE WASTEWATER TREATMENT
IN MICHIGAN
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FIRST SYSTEMS
IN MICHIGAN
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CIRCA 1900

ORIGINAL TECHNOLOGY CONTINUES TO BE SUCCESSFULLY UTILIZED

The first septic tanks appeared in the United States about 1883, when a two-chamber, round, vertical tank equipped with a dosing siphon for discharge was designed by Edward S. Phillips of Boston, Mass.

POLICY STATEMENT
of the Water Resources Commission
for New Uses of the Waters of the State for Underground Disposal of Sanitary Sewage

This Policy supersedes a similar policy adopted by the Water Resources Commission at its meeting on September 21-22, 1972.

The following Policy of the Michigan Water Resources Commission will apply to all new uses of the waters of the State of Michigan for underground disposal of sanitary sewage through the use of subsurface soil absorption systems:

1. Private residential, single and two family sanitary waste disposal systems are not considered to be significant users of the waters of the state and do not require submission of an application for a permit to discharge under the provisions of Section 8(b), Act 245, Public Acts of 1929, as amended.
**LHD Codes**
- 44 LHDs w/codes that apply to single & two family homes

**Michigan Criteria**
- Statewide other than single & two family < 10,000 gpd

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**“Michigan Criteria for On-Site Wastewater Treatment”**
- Emphasis on the need for professional competence
- Treatment selection based upon risk
- Requirements for long term operation and maintenance are also stressed.
- Separate guidance to provide direction on topics of a non-proprietary nature which will be developed as needed over time with input of other on-site wastewater professionals from local health, academia and the private sector.
- Reference to national standards as appropriate
Response to Congress On Use of Decentralized Wastewater Treatment Systems

Adequately managed decentralized wastewater systems are a cost-effective and long-term option for meeting public health and water quality goals, particularly in less densely populated areas.

Relative # of On-Site Systems by County

Map showing the relative number of on-site systems by county in Oakland County, with 85,000 systems.
Management of Operating Systems
(2004 Whitepaper State Code)

- Variable degree of oversight for all systems based on complexity and relative risk
- Minimum frequency of 10 years by statute
- Statewide data management system will be important to successful management
- Range of options may be considered for conventional systems include Point of Sale, Change in use & mandatory inspection at time of maintenance event

Steel Tanks

![Steel Tanks Image]

![Steel Tanks Image]
ENHANCED MANAGEMENT BY LOCAL HEALTH DEPARTMENTS

- Point of sale programs for eleven counties
  - Benzie Co.
  - Washtenaw Co.
  - Wayne Co.
  - Shiawassee Co.
  - Macomb Co.
  - Ottawa Co.
  - Ingham Co.
  - Barry/Eaton DHD
  - Kalkaska Co.
  - Manistee Co.

BEDHD TOST

Results are Variable
  e.g. 2010 Kalkaska/Manistee

Door Co. Wisconsin Pass/Fail History %
DEVELOPING POLITICAL /PUBLIC SUPPORT IS CHALLENGING

Residuals Management?

Septage Program Trends

Septage Waste Volume Pumped

- Volume Total
- Volume Land
- Volume Storm
Twenty Five Mile Radius

POTW's Accepting Septage Waste and Land Disposal Sites

- Disposal locations
- Receiving station
- 25 mile radius from receiving station

COMMENTS/QUESTIONS