Bay Mills Indian Community
EPA 319 program
Onsite Waste inventory
by Dan Tadgerson
REHS/RS
Bay Mills Indian Community

- Located on Eastern end of Lake Superior
- Population of 1,820 with a land base of 3,444 with almost ½ living on the reservation.
- 33% of the land base is wetland or surface water
- 51% forested.
- EPA approved Assessment and Management plan
The two areas are in very different locations. The north site is in sandy soils and the southern areas are in heavy soils with high ground water.
ILLUSTRATION OF ONSITE SEPTIC

NOTICE PROXIMITY TO SURFACE WATERS AND RECREATIONAL SWIMMING AREAS.
GIS DATA SETS

- State Data
  - Geographic Data
- Federal Data
  - Indian Health Service
  - NRCS soils data
  - NWI data
  - USGS topographic Data
- Private data
  - Four different firms
### ARC MAP DATA TABLE

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REPLACEMENT DRAINFIELD INFILTERATORS

INSTALL NEW EFFLUENT FILTER

W. LAKESHORE DR

TECHNICAL MAINTENANCE
BY IMS OFFICE

NOTES:
1. SURFACE WATER MUST BE DIVERTED AWAY FROM DRAINFIELD
2. MINIMUM OF 10 FT FROM PROPERTY LINES FOR ALL CONSTRUCTION
SEPTIC INSPECTIONS
SEPTIC TANK

inlet

inspection port

access port

inspection port

outlet

inlet baffle

scum & grease

sludge

outlet "Tee"
THINGS TO LOOK FOR

1. Watertight
   - Solid
   - Walls
   - Bottom
   - Side seepage
   - Penetrations

2. Baffles
   - Type
   - Connected
   - Clear
   - Depth
   - Odors

3. Surface Water
   - Lid
   - Inspection pipes
   - Landscaping

4. System Performance
   - Sludge
   - Sour
   - Over-full
   - Run-back
   - Sludge flow-through

5. Structural Integrity
   - Cast iron
   - 3034 plastic
THINGS TO LOOK FOR ARE

- Green grass
- AREAS
- Wet areas
- Black, Water Surfacing
- Cracked Lids
- Tank Capacity
- Washouts
THINGS TO LOOK

Leaking, ponding, black water, stressed areas, green areas.
NEW POWTS PROGRAM

We were just notified of this so ideas proposed
PRIVATE ONSITE WASTEWATER SYSTEM (POWTS)

- Homeowner Awareness Model - in areas of low environmental sensitivity
- Maintenance Contract Model - in cluster, systems or mechanical components or in more sensitive areas
- Operating Permit - in critical areas, larger systems, or systems treating higher strength waste.
- Responsible Management Entity with Operation and Maintenance Model - owners pay an entity to care for the system
- Responsible Management Entity Ownership Model - like most Housing authorities operate and maintain systems.
POWTS MODELS

HOUSING AUTHORITY, UTILITIES, AND HOME OWNER
A Guide to Your Septic System

Read and follow the Dos and Don’ts list provided herein:

**DO**
- Conserve water to reduce the amount of wastewater that must be treated and disposed.
- Repair leaking faucets and toilets promptly.
- Only discharge biodegradable wastes into system.
- Divert down spouts and other surface water away from your soil treatment area.
- Keep your septic tank cover accessible for tank inspections and pumping.
- Have your effluent screen inspected and cleaned once a year.
- Have your septic tank pumped regularly inspected for leaks and cracks.
- Call a professional when you have problems.
- Compost your garbage or put it in the trash instead of putting it down the sink.
- Make sure any water conditioning or softening equipment is approved for use with your system and that it is properly set for your water conditioning/softening needs and operating correctly.

**DON’T**
- Flush sanitary napkins, tampons, disposable diapers, condoms, wipes, cat litter and such products into your system.
- Dump solvents, oils, paints, thinners, disinfectants, pesticides or pyrethrum down the drain; these can disrupt the treatment process and contaminate ground-water.
- Dig in your soil treatment area or build anything over it.
- Plant anything over your soil treatment area except grass.
- Drive over your soil treatment area or compact the soil in any way.
- Use a garbage disposal unless your septic tank was sized to handle the required sludge storage volume.

**SAFETY FIRST!**
- NEVER physically enter a septic tank or other parts of the treatment system. Call your service provider!
- Keep access areas locked at all times to prevent unauthorized entry.

Your Local Service Provider is:

NOWRA
National Onsite Wastewater Recycling Association
www.nowra.org • 800-966-2912

To locate a service provider or other wastewater treatment professional in your area, go to www.SepticLocator.com
Homeowner’s Onsite System Guide and Record Keeping Folder

This folder provides you with essential information about your onsite wastewater treatment system and guidelines for operation and maintenance to keep your system working effectively and trouble-free while protecting water quality and the environment. It also provides a place to keep all documents, records, and other information about your onsite wastewater treatment system including your permit, site drawings, records of maintenance and repairs performed, and other information.

System Permit:
Issued to: __________________________ Date Issued: __________
Address: __________________________
Legal Description: __________________

System Description:
Design Flow (gpd) or Number of Bathrooms: __________________
Septic Tank volume (gallons): __________________
Dosing Tank or Pump Compartment capacity (gallons): __________________
Tank(s) Manufacturer(s): __________________
Advanced pretreatment Device: ☐ Yes ☐ No ☐ Brand: __________________

System Accessories:
☐ Effluent screen ☐ Diversion or Alternating Valve ☐ Control Panel with audible/visible alarm
☐ Pump or siphon ☐ Distribution box or Drop box ☐ Other: __________________
☐ Other: __________________

Dispersal Method:
☐ Troches or bed (and number): __________________
☐ Type of dispersal media (e.g., rock/gravel, fabric-wrapped pipe, chambers, polyethylene socks, etc.):
☐ Drop Disposal ☐ At-Grade ☐ Lagoon
☐ Spray Irrigation ☐ Mound ☐ Discharge to lake/river
☐ Other: __________________

Dispersal Field Dimensions:

Installation Contractor:
Address: __________________________ Telephone: __________________

Service Provider:
Address: __________________________ Telephone: __________________
Service Contract: ☐ Yes ☐ No

Pumper:
Address: __________________________ Telephone: __________________
Service Contract: ☐ Yes ☐ No
THANK YOU
HOPE THIS HELPED