



# LMAS DISTRICT HEALTH DEPARTMENT

Environmental Health    Personal & Family Health    Emergency Preparedness

[www.lmasdhd.org](http://www.lmasdhd.org)

**Luce County  
& Administrative Office**  
14150 Hamilton Lake Road  
Newberry, MI 49868  
Ph: (906) 293-5107  
Fax: (906) 293-5453

**Mackinac County**  
749 Hombach Street  
St. Ignace, MI 49781  
Ph: (906) 643-1100  
Fax: (906) 643-0239

**Alger County**  
E9526 Prospect Street  
Munising, MI 49862  
Ph: (906) 387-2297  
Fax: (906) 387-2224

**Schoolcraft County**  
300 Walnut Street, Room 155  
Manistique, MI 49854  
Ph: (906) 341-6951  
Fax: (906) 341-5230

## Onsite Sewage Disposal System Construction Permit Application (Other than single family residential and less than 10,000 gallons/day capacity)

*Note: There is a \$26.00 additional charge, per request, for services requiring travel to an island.*

To obtain a construction permit, submit the following:

1. Detailed site and system construction plans;
2. Enclosed requested details (information on plans need not be duplicated in this application);
3. Other – if applicable
4. Application fee: < 2000 gallons/day \$458.00  
> 2000 gallons/day \$577.00

### Important Notes:

1. Sewage volume determination, site condition requirements and minimum disposal system specifications are contained in "Michigan Guidelines for Subsurface Sewage Disposal", Michigan Department of Public Health, publication D-48, Rev. 6/89.
2. For systems exceeding 10,000 gallons/day, submit plans to Michigan Department of Environmental Quality (DEQ) for review and approval.

For systems with flows of 2,000-10,000 gallons/day including systems with a sewage output less than 2,000 gallons/day, detailed construction plans, prepared by a Michigan registered professional engineer, are required. The requirement for submittal of plans may be waived at the discretion of the health officer for small systems with flows less than 1,000 gallons per day (provided the cost of such system is less than \$15,000).

3. It is recommended that your consultant make a preliminary site evaluation before any extensive engineering design work commences. If the site is unsuitable, such identification will eliminate unnecessary costs for engineering planning and design. If you desire, this department can conduct a pre-preliminary site evaluation to help identify unsuitable building sites. There is a \$182.00 site evaluation fee for this purpose and the applicant must provide backhoe cut(s) to a depth of 6' for soil evaluation. Note that site evaluations are generally conducted weather permitting (i.e., no snow on the ground), usually May through October.

# Commercial Sewage System Application

Office Use Only	
CLIENT ID #:	_____
Fees Paid	_____
Date	_____
Check #	_____
Receipt#	_____

## I. PROJECT IDENTIFICATION

1. Type: \_\_\_\_\_ vacant land \_\_\_\_\_ existing development

2. Establishment name \_\_\_\_\_

3. Business type (use) \_\_\_\_\_

4. Applicant \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

5. Location:

County \_\_\_\_\_

T \_\_\_\_\_ N, R \_\_\_\_\_ W, Section \_\_\_\_\_

Property Description number \_\_\_\_\_

6. Detailed directions to project site:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## II. SITE REPORT

1. Lot/parcel: length \_\_\_\_\_, width \_\_\_\_\_, # of acres \_\_\_\_\_

2. Soil profile data – record on plans or attach addition sheets. Use United States Department of Agriculture soil classification scheme. Record to six feet. Include actual and seasonal high water table elevation if less than six feet below grade.

3. Percent (%) slope of steepest grades on property \_\_\_\_\_ Is any cutting of filling of land anticipated? yes \_\_\_\_\_ no \_\_\_\_\_

Type of fill material to be used \_\_\_\_\_

Fill depth \_\_\_\_\_ (feet); Fill area: width \_\_\_\_\_ (feet); length \_\_\_\_\_ (feet)

Mound side slope ratio \_\_\_\_\_ (vertical dimension): \_\_\_\_\_ (horizontal) Minimum isolation

distance provided to: well(s) \_\_\_\_\_ (feet), surface water \_\_\_\_\_ (feet), lot lines \_\_\_\_\_ (feet).

4. Complete "SITE EVALUTATION" on next page

# Site Evaluation

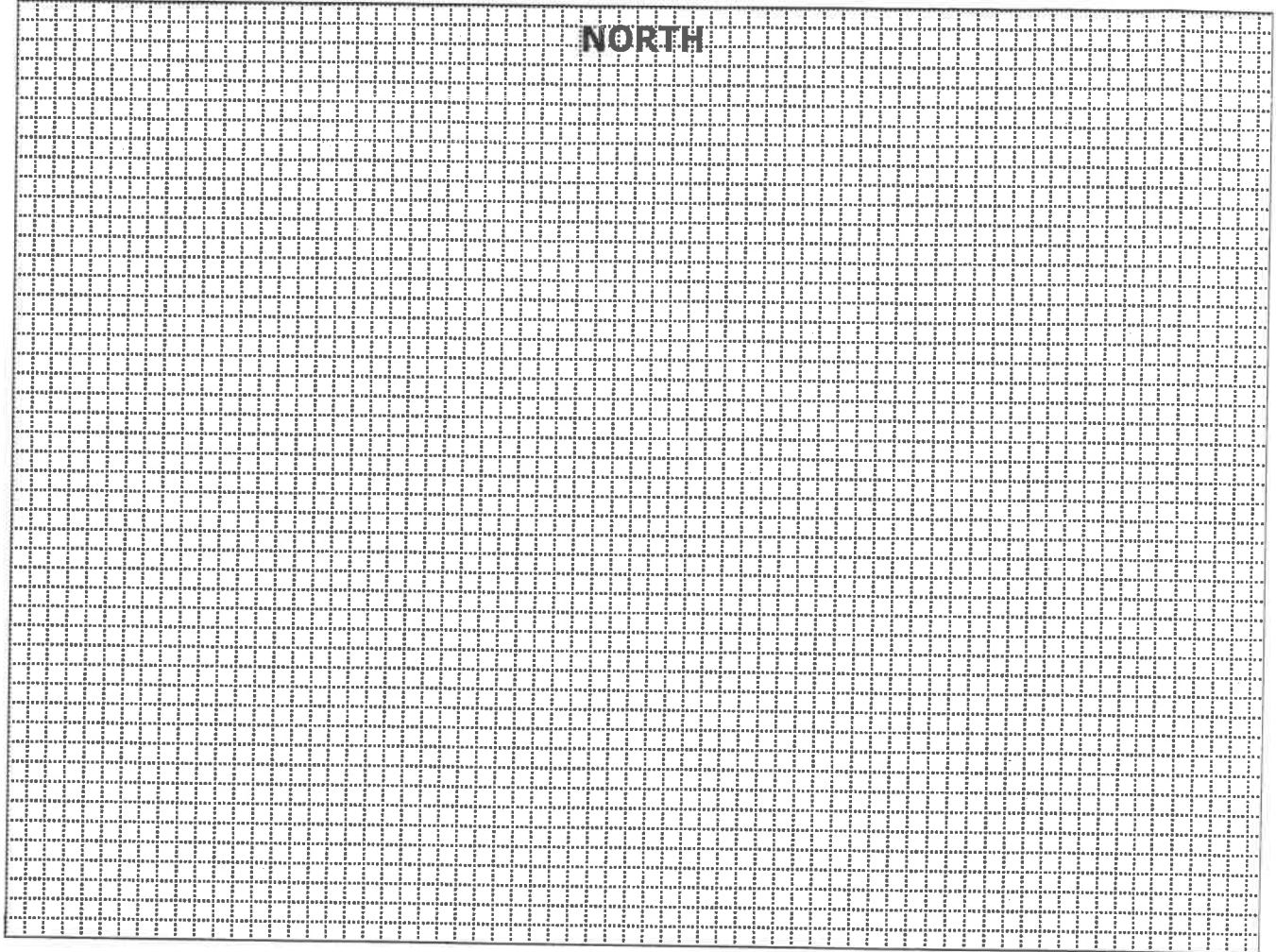
Property ID: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ SEC. \_\_\_\_\_

Owners Name \_\_\_\_\_

Property Size: \_\_\_\_\_ (Dimension or Acreage)

**INCLUDE IN DRAWING:**

- Property Dimensions \_\_\_\_\_
- Well(s) \_\_\_\_\_
- All Structures with Dimensions \_\_\_\_\_
- Easements \_\_\_\_\_
- Roads \_\_\_\_\_
- Driveways \_\_\_\_\_
- Surface water (lakes, streams, rivers, pond) \_\_\_\_\_
- Existing Septic System (if applicable) \_\_\_\_\_
- Fuel Tanks \_\_\_\_\_
- Utilities \_\_\_\_\_
- Distances between all of the above \_\_\_\_\_
- Test Hole Location(s) \_\_\_\_\_
- Replacement Area (RA) \_\_\_\_\_



Soils consistent across site: Y N

Topography: \_\_\_ Slight \_\_\_ Moderate \_\_\_ Severe

Existing well? Y N

Replacement area available: Y N

Benchmark(s): \_\_\_\_\_

To be Abandoned? Y N

Municipal Water? Y N

Excavation #1		
GPS: X _____ Y _____		
Depth to Bottom of Stratum	Thickness of Stratum	Soil Texture
Depth to Limiting Layer _____ ft. No Evidence of water table <input type="checkbox"/>		

Excavation #2		
GPS: X _____ Y _____		
Depth to Bottom of Stratum	Thickness of Stratum	Soil Texture
Depth to Limiting Layer _____ ft. No Evidence of water table <input type="checkbox"/>		

Excavation #3		
GPS: X _____ Y _____		
Depth to Bottom of Stratum	Thickness of Stratum	Soil Texture
Depth to Limiting Layer _____ ft. No Evidence of water table <input type="checkbox"/>		

Comments: \_\_\_\_\_

III. DESIGN DATA

1. Volume of flow (gallons/day) \_\_\_\_\_
2. Basis for flow determination \_\_\_\_\_
3. Loading rate \_\_\_\_\_ gal./sq. ft./day
4. Use: \_\_\_\_ year-round \_\_\_\_\_ seasonal (from \_\_\_\_\_ to \_\_\_\_\_)

IV. SEPTIC TANK

1. Number and size of tanks \_\_\_\_\_
2. Material construction \_\_\_\_\_
3. Effluent filter \_\_\_\_\_ yes \_\_\_\_\_ no

V. GREASE TRAP (REQUIRED AT FOOD SERVICE ESTABLISHMENTS)

1. Tank material \_\_\_\_\_
2. Tank size \_\_\_\_\_
3. # of tanks \_\_\_\_\_

VI. OTHER TREATMENT DEVICES (ATTACH SPECIFICATIONS)

VII. EFFLUENT DOSING

Note: Systems exceeding 2,000 gallons/day shall be dosed.

1. Dose volume = \_\_\_\_ sewage flow (gpd) / 4 doses per day = \_\_\_\_\_ gal./dose

2. Pump design: total dynamic head (TDH) = elevation head + friction head loss

- a. elevation head:
- |            |                               |
|------------|-------------------------------|
| drain tile | <u>Elevation</u><br>_____ ft. |
| pump       | _____ ft.                     |
| total      | _____ ft.                     |

- b. friction head loss:

fittings: \_\_\_\_ # elbows (size \_\_\_\_') X \_\_\_\_ ft./elbow (equivalent length of straight pipe) = \_\_\_\_ ft.

pipe: \_\_\_\_ ft. pipe length (size \_\_\_\_") X \_\_\_\_ ft. friction loss/100' pipe = \_\_\_\_ ft.

friction head loss = \_\_\_\_ ft. (fittings equivalent length of straight pipe) + \_\_\_\_ ft. pipe = \_\_\_\_ ft.

**Total dynamic head loss = \_\_\_\_ ft. elevation head + \_\_\_\_ ft. pipe = \_\_\_\_ ft.**

3. Pumping specifications

- a. dosing volume \_\_\_\_\_ (gal./dose)
- b. dosing time \_\_\_\_\_ (min.)
- c. pump duty point \_\_\_\_\_ gpm at \_\_\_\_\_ feet TDH (attach copy of pump performance curve)
- d. pump make \_\_\_\_\_  
pump model \_\_\_\_\_  
hp \_\_\_\_\_
- f. pump/pump chamber – misc.

- | <u>yes</u> | <u>no</u> |   |
|------------|-----------|---|
| ___        | ___       | dual alternating pumps?                 |
| ___        | ___       | audio/visual alarm?                     |
| ___        | ___       | pumps accessible?                       |
| ___        | ___       | explosive proof design?                 |
| ___        | ___       | emergency power source provided?        |
| ___        | ___       | each pump sized for peak flow?          |
| ___        | ___       | waterproof junction box for disconnect? |
| ___        | ___       | wet well vented?                        |

VIII. DRAINFIELD

- 1. Type: bed \_\_\_ trench \_\_\_ other (list) \_\_\_\_\_
- 2. Amount of Fill \_\_\_\_\_ inches. Fill Type: \_\_\_\_\_
- 3. Linear feet of pipe \_\_\_\_\_
- 4. Pipe material \_\_\_\_\_
- 5. Pipe: diameter \_\_\_\_\_ in. volume \_\_\_\_\_ (gal./ft.)  
Note: total pipe volume must equal or exceed the dose volume
- 6. Effective seepage area \_\_\_\_\_ (square feet)
- 7. Pipe spacing \_\_\_\_\_ (feet on center)
- 8. Aggregate: size \_\_\_\_\_ ; depth \_\_\_\_\_ (inches)
- 9. Aggregate cover type – geotextile material required
- 10. Depth of earth cover \_\_\_\_\_ (inches)
- 11. Berm beyond the edge of stone \_\_\_\_\_ ft
- 12. Side slopes from berm edge \_\_\_\_\_ on \_\_\_\_\_

IX. CONSULTANT CERTIFICATION

- 1. Prepared by \_\_\_\_\_
- 2. Firm \_\_\_\_\_
- 3. Address \_\_\_\_\_
- 4. Phone \_\_\_\_\_
- 5. Registration number \_\_\_\_\_
- 6. \_\_\_\_\_

Signature

Date

.....  
OFFICE USE ONLY

1. Application is approved \_\_\_\_\_, not approved \_\_\_\_\_

2. Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. \_\_\_\_\_  
Sanitarian Date

4. Sewage disposal construction permit number \_\_\_\_\_  
Well construction permit number \_\_\_\_\_