

Holding Tank Design

1. Contact Information

v 04.02.2024

Property Owner/Client:		Date Completed:	
Site Address:		Project ID:	
Email:		Phone:	
Mailing Address:		Alt Phone:	
Legal Description:			
Parcel ID:	SEC:	TWP:	RNG:

2. Flow and General System Information
A. Client-Provided Information

 Project Type: New Construction Replacement Expansion Repair

 Project Use: Residential Other:

<input type="checkbox"/> Residential	<input type="checkbox"/> Other:	
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 Residential use: # Bedrooms: Dwelling sq.ft.: Unfinished sq.ft.:

 # Adults: # Children: # Teenagers:

 In-home business (Y/N): If yes, describe:
 Garbage Disposal/Grinder Dishwasher Hot Tub*

 Water-using devices: Sewage pump in basement Water Softener* Sump Pump*

 (check all that apply) Large Bathtub >40 gallons Iron Filter* Self-Cleaning Humidifier*

 Clothes Washing Machine High Eff. Furnace* Other:

* Clear water source - should not go into system

 Additional current or future uses:

 Anticipated non-domestic waste:

 The above is complete & accurate:

Client signature & date

B. Designer-determined Flow and Anticipated Waste Strength Information

Attach additional information as necessary.

 Anticipated Waste Type:

Residential or Other (describe)

 Design Flow: GPD

 Maximum Concentration BOD: mg/L TSS: mg/L Oil & Grease: mg/L

3. Preliminary Site Information
A. Water Supply Wells

#	Description	Mn. ID#	Well Depth (ft.)	Casing Depth (ft.)	Confining Layer	STA Setback	Source
1							
2							
3							
4							

 Additional Well Information:

Holding Tank Design

Site within 200' of noncommunity transient well (Y/N)	<input type="checkbox"/>	Yes, source: <input type="text"/>	
Site within a drinking water supply management area (Y/N)	<input type="checkbox"/>	Yes, source: <input type="text"/>	
Site in Well Head Protection inner wellhead management zone (Y/N)	<input type="checkbox"/>	Yes, source: <input type="text"/>	
Buried water supply pipes within 50 ft of proposed system (Y/N)	<input type="checkbox"/>		
B. Site located in a shoreland district/area?		Yes, name: <input type="text"/>	
Classification: <input type="text"/>		Elevation of ordinary high water level: <input type="text"/> ft	Source: <input type="text"/>
		Tank Setback: <input type="text"/> ft	STA Setback: <input type="text"/> ft.
C. Site located in a floodplain?		<input type="checkbox"/>	Yes, Type(s): <input type="text"/>
Floodplain designation/elevation (10 Year):		<input type="text"/> ft	Source: <input type="text"/>
Floodplain designation/elevation (100 Year):		<input type="text"/> ft	Source: <input type="text"/>
D. Property Line Id / Source: <input type="checkbox"/> Owner <input type="checkbox"/> Survey <input type="checkbox"/> County GIS <input type="checkbox"/> Plat Map <input type="checkbox"/> Other: <input type="text"/>			
E. ID distance of relevant setbacks on map: <input type="checkbox"/> Water <input type="checkbox"/> Easements <input type="checkbox"/> Well(s) <input type="checkbox"/> Building(s) <input type="checkbox"/> Property Lines <input type="checkbox"/> OHWL <input type="checkbox"/> Other: <input type="text"/>			

Comments:

5. Local Government Unit Information

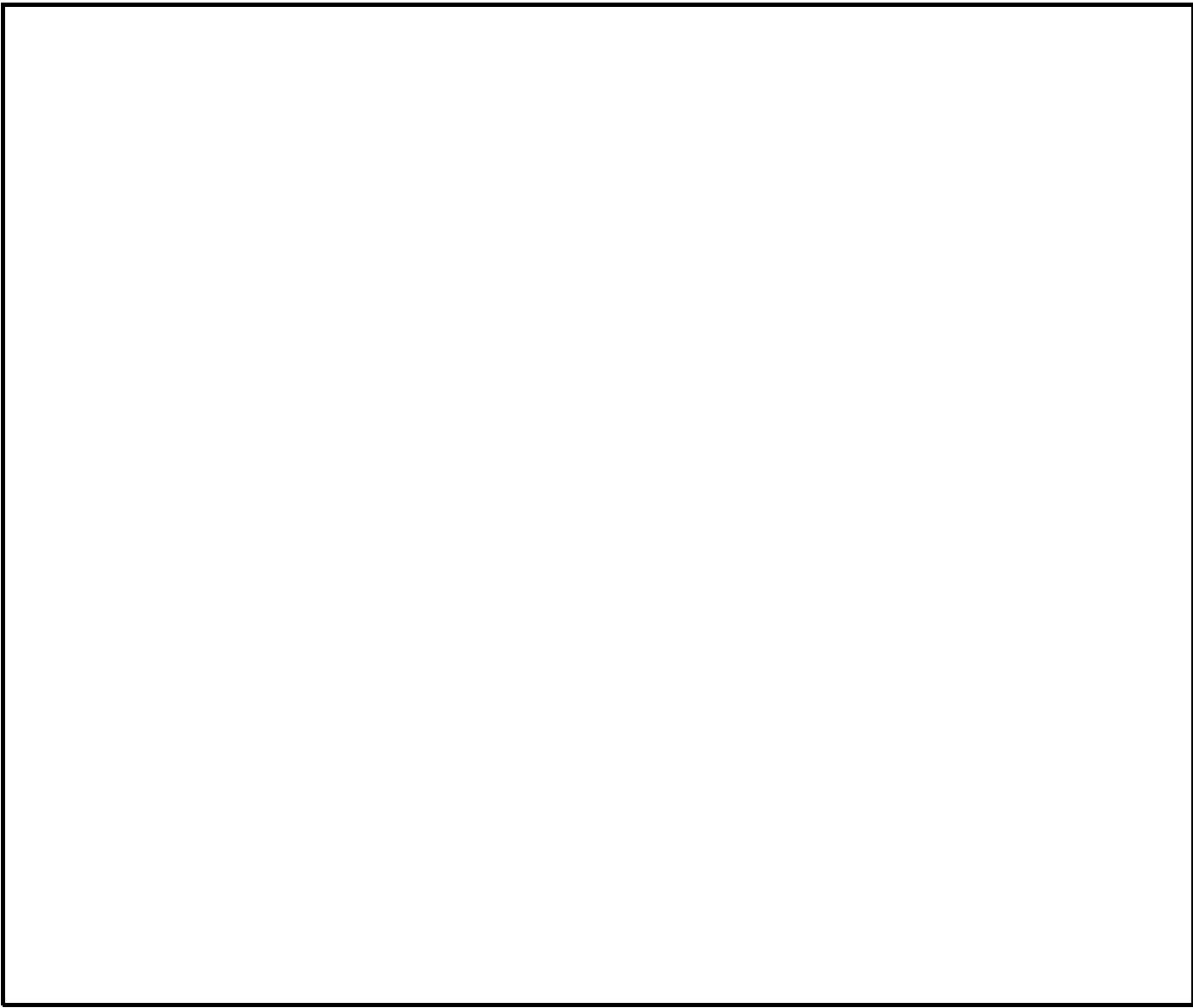
Name of LGU:	<input type="text"/>
LGU Contact:	<input type="text"/>
LGU-specific setbacks:	<input type="text"/>
LGU-specific design requirements:	<input type="text"/>
LGU-specific installation requirements:	<input type="text"/>
Notes:	<input type="text"/>

1. PROJECT INFORMATION		v 04.02.2024	
Property Owner/Client: <input type="text"/>		Project ID: <input type="text"/>	
Site Address: <input type="text"/>		Date: <input type="text"/>	
Email Address: <input type="text"/>		Phone: <input type="text"/>	
2. DESIGN FLOW & WASTE STRENGTH			
Design Flow: <input type="text"/> GPD		Anticipated Waste Type: <input type="text"/>	
BOD: <input type="text"/> mg/L TSS: <input type="text"/> mg/L		Oil & Grease: <input type="text"/> mg/L	
Treatment Level: <input type="text"/> <i>Select Treatment Level C for residential septic tank effluent</i>			
3. HOLDING TANK SIZING		<i>Holding Tanks: see 7080.2290</i>	
A. Residential Dwellings & Accessory Structures:			
<i>*In Morrison County, all holding tanks shall have a minimum capacity of 1500 gallons or 400 gallons per bedroom, whichever is greater*</i>			
Code Minimum Holding Tank Capacity: <input type="text"/> Gallons with <input type="text"/> Tanks or Compartments			
Recommended Holding Tank Capacity: <input type="text"/> Gallons with <input type="text"/> Tanks or Compartments			
The holding tank(s) will be: <input type="text"/> <i>New, Existing, or Both (existing tank reuse requires a tank integrity assessment)</i>			
Type of High Level Alarm: <input type="text"/> <i>(Alarm set at 75% tank capacity measured from inlet to bottom)</i>			
Comments:			
B. Other Establishments:			
<i>*Other Establishment design flow should be determined using estimates in 7081.0130; describe in comment section below*</i>			
Design Flow: <input type="text"/> GPD x 5 = <input type="text"/> GPD <i>(per 7080.2290, item D)</i>			
Code Minimum Holding Tank Capacity: <input type="text"/> Gallons with <input type="text"/> Tanks or Compartments			
Recommended Holding Tank Capacity: <input type="text"/> Gallons with <input type="text"/> Tanks or Compartments			
The holding tank(s) will be: <input type="text"/> <i>New, Existing, or Both (existing tank reuse requires a tank integrity assessment)</i>			
Type of High Level Alarm: <input type="text"/> <i>(Alarm set at 75% tank capacity measured from inlet to bottom)</i>			
Comments:			
<i>* Other Establishments Require Department of Labor and Industry Approval and Inspection for Building Sewer *</i>			
<i>I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.</i>			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(Designer)	(Signature)	(License #)	(Date)

Project ID:

v 04.02.2024

Property Owner/Client:



Mapping Checklist

- Indicate North
- Show slope/contours

Easements

- Phone
- Electric
- Gas
- Other: _____
- Other: _____

Locate

- Lot Dimensions/Property Lines
- Dwellings and Other Improvements
- Existing or Proposed System(s)
- Replacement Area
- Unsuitable Area(s)
- Public Water Supply Wells
- Pumping Access
- Inner Wellhead Zone
- Other: _____
- Other: _____

Setbacks

- Building
- All water wells within 100 feet
- Pressure Pipe
- Water Suction
- Streams, Lakes
- Floodway and Fringe
- Other: _____
- Other: _____
- Other: _____



MORRISON COUNTY

Holding Tank

Monitoring & Disposal Contract

Property Owner: _____ Parcel Number: _____

Property address: _____

Holding tanks may be allowed for the following applications with determination by a licensed SSTS professional **and approval by the County**. Please check one:

- Temporary solution for a noncompliant system
- Lot is too small for a full system
- Dwelling is seasonal in nature*
- Accessory building with a design flow \leq 200 gpd
- Other use with a design flow \leq 200 gpd

We the undersigned agree to remove the contents of the holding tank at the location identified above prior to overflow, or any discharge or backup into the building. We also agree to abide by the rules and regulations of MN Rule Chapter 7080 of the Minnesota Pollution Control Agency.

* I hereby certify that the dwelling or building indicated above is seasonal in nature, which Morrison County defines as occupied for fewer than 180 days per year and fewer than 120 consecutive days, and that if at some time the use of the dwelling or building is utilized more than on a seasonal basis, a complete drainfield will be installed prior to the change.

Property owner must retain all holding tank pumping/maintenance records for the above parcel and provide them to the Planning and Zoning office upon request.

Property Owner Signature

Date

Licensed Maintainer Business Name

MPCA License #

Maintainer Signature

Date

Morrison County Approval Signature

Date



MORRISON COUNTY

Subsurface Sewage Treatment System Management Plan

Property Owner _____ Parcel Number _____

Site address _____ Date _____

Valuable information about your system you should keep:

- Attach permit information, designer drawings and as-builts of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product use, activities, or water-use appliances.

For a copy of the *Septic System Owner's Guide*, call 1-800-876-8636 or go to <http://shop.extension.umn.edu>

System Type: I II III IV V (Based on MN Rules Chapter 7080.2200 – 2400)

Dwelling Type: Number of Bedrooms _____ Design Flow (gpd): _____ Business? What Type? _____

Septic Tank: One Tank Tank Volume _____ How Many Compartments _____ Effluent Screen
Two Tanks Tank Volume _____ How Many Compartments _____ **Holding Tank**

Tanks are constructed of: _____

Pump Tank: Tank Volume _____

Effluent Pump: Pump Capacity _____ GPM _____ TDH _____ Horsepower _____

Alarm: Electric Manual Location _____
 Measurement Device Type _____

Trenches: Total Lineal Feet _____ Number of Trenches: _____ at _____ Feet Each
Gravity Pressure Cleanouts Inspection Ports Chambers

Mound/At Grade/Pressure Bed: (Circle One) Rock Bed Size (Width x Length) _____ Ft x _____ Ft Cleanouts
Inspection Ports

Location of Additional Soil Treatment Area: _____ Additional Site NA

Tasks to be completed by a Professional

- Check to make sure tank is not leaking. The liquid level should be level with the bottom of the outlet pipe. (If the water level is below the bottom of the outlet pipe, the tank may not be watertight. If the water level is higher than the bottom of the outlet pipe of the tank, the effluent screen may need cleaning, or there may be ponding in the soil treatment area)
- Check if the manhole lid is accessible and safe.
- Check and clean the in-tank effluent filter
- Check the sludge/scum layer levels in all septic tanks
- Check inlet and outlet baffles in the tank
- Check the pump and alarm system functions
- Check wiring for corrosion and function
- Check the drainfield effluent levels in the rock layer and replace any inspection pipes that are damaged.
- Flush and clean laterals if cleanouts exist and look for any surfacing effluent
- Check to see that good growth of vegetation is covering the system
- Provide homeowner with list of results and any action to be taken

Homeowner Management Tasks

Leaks – Check (look, listen) for leaks in toilets and dripping faucets. Repair leaks promptly.

Surfacing sewage – Regularly check for wet or spongy soil around your soil treatment area. If surfaced sewage or strong odors are not corrected by pumping the tank or fixing broken caps and leaks, call your service professional. Untreated sewage may make humans and animals sick. Keep bikes, snowmobiles and other traffic off and control borrowing animals.

Effluent filter – Inspect and clean twice a year or more.

Alarms – Alarm signals when there is a problem. Contact a service provider any time an alarm signals.

Event counter or water meter – Record your water use.

-recommend meter readings be conducted (circle one: DAILY WEEKLY MONTHLY)

My System needs to be checked every _____ months.

Maintenance Log

Activity	Date Accomplished							
<i>Check frequently:</i>								
Leaks: check for plumbing leaks								
Soil treatment area check for surfacing								
Lint filter: check, clean if needed								
Effluent screen: if owner-maintained								
Water usage rate (monitor frequency _____)								
<i>Check annually:</i>								
Caps: inspect, replace if needed								
Sludge & Scum/Pump								
Inlet & Outlet baffles								
Drainfield effluent leaks								
Pump, alarm, wiring								
Flush & clean laterals if cleanouts exists								
Other: _____								

Notes: _____

Designer Information:

Name _____ License Number _____
Address _____
Phone Number _____
Designer Signature _____ Date _____

If any of the requirements of this plan are not met, the landowner is to notify Morrison County