



330030000-2025



Becker County Planning & Zoning
915 Lake Ave
Detroit Lakes, MN 56501
(218) 846-7314
www.co.becker.mn.us

Certificate of Compliance

Inspection Report - Permit #: SS2025-2366

Owner & Property Information

Owner Name:	KARL A & CAMAY A BLAKELY	Site Address:	43265 218TH ST
Mailing Address:	KARL A & CAMAY A BLAKELY 6307 PAINTED TURTLE RD LINO LAKES MN 55014	Township - Sec/Twp/Rng:	TOAD LAKE - 04/139/038
Parcel #:	330030000	Legal Description:	4-139-38 PT GOVT LOT 5: COMM SHORE TOAD LK 160' E W LN GOVT LOT 4, N 250', E 50', S 250', W AL LK TO POB. & PT COMM: MEANDER LN TOAD LK 210' W OF W LN GOVT LOT 5, E 100', N TO S LN RD, E 100', S TO LK, W TO POB. & PT COMM MEANDER LN TOAD LK, 210' E W LN GOVT LOT 4, N TO S LN RD AND POB; E 100', N 250', W 100', S TO POB.
Secondary Parcel #:		Designer:	Cubed B LLC, L4142 (Brant Bigger)
		Installer:	Graham Septic LLC, L4132 (Timothy M Graham and Timothy L Graham)

Inspector Verified Specifications

Insp- Effluent Screen Installed:	No	Insp- Tank Nbr/Size:	1/1600 lo pro
Insp- Alarm Required:	Yes	Insp- Drainfield Type:	No Drainfield
Insp- Lift Pump in System:	No	Insp- Drainfield Size:	NA
Insp- Number of Bedrooms:	0	Insp- Soil Verification:	#1:NA #2:N/A #3:N/A

Inspector Verified Setbacks

Insp- Tank Dist to Road	10	Insp- Drainfield Dist to Road	NA
Insp- Tank Dist to Nearest Prop Line	10	Insp- Drainfield Dist to Nearest Prop Line	NA
Insp- Tank Dist to Nearest Structure	10	Insp- Drainfield Dist to Nearest Structure	NA
Insp- Tank Dist to Well	50+	Insp- Drainfield Dist to Well	NA
Insp- Tank Dist to OHW	75+	Insp- Drainfield Dist to OHW	NA
Insp- Tank Dist to Pond/Wetland	NA	Insp- Drainfield Dist to Pond/Wetland	NA
Insp- Tank Dist to Pressure Line		Insp- Drainfield Dist to Pressure Line	

Certificate of Compliance

(Yes) Certificate is hereby granted based upon the application, addendum from, plans, specifications and all other supporting data. With proper maintenance, this system can be expected to function satisfactory, however this is not a guarantee.

Certification Date: 06/16/2025

Zoning Office Signature:

Jeff Rusness - ISTS Inspector

* Certificate of Compliance is not valid unless signed by a Registered Qualified Employee *

Field Review Form

Permit # SS2025-2366

Property and Owner

Owner: **KARL A & CAMAY A BLAKELY**

Parcel Number: **330030000**

Site Address: **43265 218TH ST**

Secondary Parcel:

Home Information

Does the structure contain any of the following elements?

Designer submitted

Inspector verified

Garbage disposal: No
Dishwasher:
Grinder pump:
Lift pump in bsmt:

Garbage disposal? Y N
Dishwasher? Y N
Grinder pump? Y N
Lift pump in basement? Y N

Number of bedrooms: **0**

Review - Number of bedrooms: **0**

Effluent screen

Effluent screen installed? Y N Mfr:

Alarm: **Yes** Type: **manual float**

Review - Alarm? Y N Type & Mfr: **Manual Float**

Lift pump in system: **No**

Review - Lift pump in system? Y N Mfr:

Component Information

Tank size: **1600 gallons**

Review - Tank nbr: / size: **1500/2 LP** Mfr: **Phenix**

Drainfield type:

Review - Drainfield type: **NA**

Drainfield size: Full size -
Reduced/warr. size -

Review - Drainfield status: none / installed / next spring
Review - Drainfield size:

Absorption area size:

Review - Absorption area size:

Chamber type/num:
Trench sqft/chamber -

Review - Chamber type: Num:
Review - Trench sqft/chamber:

Drainfield rock depth:

Review - Rock depth:

Soil Verification

Vertical separation verified

Boring #1: **NA**
Boring #2:
Boring #3:

Setback Verification

Distance to...	Designer submitted		Inspector verified	
	Tank	Drainfield	Tank	Drainfield
Road	>10' from ROW	NA	10	NA
Nearest prop line	>10'		10	
Nearest structure	>10'		10	
Well	>50'	N/A	50	
OHW	>75'		75+	
Pond/Wetland			NA	
Pressure line			NA	

Date System Installed: **6-12-2025**

Installer: **Graham Septic**

Inspector: **[Signature]**



Preliminary Evaluation Worksheet



1. Contact Information

v 04.07.2025

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 Establishment:

Residential use: # Bedrooms: Dwelling sq.ft.: Unfinished sq.ft.:

Adults: # Children: # Teenagers:

In-home business (Y/N): If yes, describe:

Water-using devices: (check all that apply)

<input type="checkbox"/> Garbage Disposal/Grinder	<input type="checkbox"/> Dishwasher	<input type="checkbox"/> Hot Tub*
<input type="checkbox"/> Sewage pump in basement	<input type="checkbox"/> Water Softener*	<input type="checkbox"/> Sump Pump*
<input type="checkbox"/> Large Bathtub >40 gallons	<input type="checkbox"/> Iron Filter*	<input type="checkbox"/> Self-Cleaning Humidifier*
<input type="checkbox"/> Clothes Washing Machine	<input type="checkbox"/> High Eff. Furnace*	<input type="checkbox"/> Other: <input type="text"/>

* 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.

Design Flow: GPD Anticipated Waste Type:

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	shallow wells						
2							
3							
4							

Additional Well Information:



Preliminary Evaluation Worksheet



Site within 200' of noncommunity transient well (Y/N)	No	Yes, source: <input style="width: 80%;" type="text"/>
Site within a drinking water supply management area (Y/N)	No	Yes, source: <input style="width: 80%;" type="text"/>
Site in Well Head Protection inner wellhead management zone (Y/N)	No	Yes, source: <input style="width: 80%;" type="text"/>
Buried water supply pipes within 50 ft of proposed system (Y/N)	No	

Water Supply Pipe Comments:

B. Site located in a shoreland district/area? Yes, name:

Elevation of ordinary high water level: ft Source:

Classification: Tank Setback: ft. STA Setback: ft.

C. Site located in a floodplain? Yes, Type(s):

Floodplain designation/elevation (10 Year): ft Source:

Floodplain designation/elevation (100 Year): ft Source:

D. Property Line Id / Source: Owner Survey County GIS Plat Map Other:

E. ID distance of relevant setbacks on map: Water Easements Well(s)

Building(s) Property Lines OHWL Other:

4. Preliminary Soil Profile Information From Web Soil Survey (attach map & description)

Map Units: Slope Range: %

List landforms:

Landform position(s):

Parent materials:

Depth to Bedrock/Restrictive Feature: in Depth to Watertable: in

Map Unit Ratings

Septic Tank Absorption Field- At-grade:	<input style="width: 400px;" type="text"/>
Septic Tank Absorption Field- Mound:	<input style="width: 400px;" type="text"/>
Septic Tank Absorption Field- Trench:	<input style="width: 400px;" type="text"/>

5. Local Government Unit Information

Name of LGU:

LGU Contact:

LGU-specific setbacks:

LGU-specific design requirements:

LGU-specific installation requirements:

Notes:

1. Tank Specifications

Project ID:

v 04.07.2025

A. Tank Manufacturer: Tank Model:

B. Outside Tank Dimensions and Specifications: Tank Use:

Length: in Width: in Height: in Diameter: in

Length: ft Width: ft Height: ft Radius of Tank: in

2. Outside Volume of Tank

Rectangular Tank	Circular Tank
A. Area of Tank = Length (ft) X Width (ft) <input type="text" value="14.8"/> ft X <input type="text" value="7.0"/> ft = <input type="text" value="103.8"/> sq.ft	A. Area of Tank = $\pi r^2 = (3.14 \times (\text{Radius of Tank})^2)$ 3.14 X (<input type="text" value=""/> ft) ² = <input type="text" value=""/> sq.ft
B. Volume of Tank = Area of Tank (2.A) X Height (ft) <input type="text" value="103.8"/> sq.ft X <input type="text" value="4.1"/> ft = <input type="text" value="424.0"/> cu.ft	B. Volume of Tank = Area of Tank X Height (ft) <input type="text" value=""/> sq.ft X <input type="text" value=""/> ft = <input type="text" value=""/> cu.ft

3. Force of Tank Weight (F_{TW})

Weight of Tank (provided by manufacturer) lbs

4. Force of Soil Weight Over Tank (F_{SW})

A. Depth of Cover Over Tank: in ft

B. Weight of Soil Per Cubic Foot: lbs/cu.ft

C. Volume of Soil Over Tank = Depth of Cover(4A) (ft) X Area of Tank(2A) (ft²)
 ft X sq.ft = cu.ft

D. Weight of Soil Over Tank = Volume of Soil Over Tank(4C) X Weight of Soil Per Cubic Foot
 cu.ft X lbs/cu.ft = lbs

Note: Assumes saturation does not get over the lid of the tank

Soil Type	Weight of Soil (lbs/ft ³)
Sandy	120
Loamy	100
Clay	90

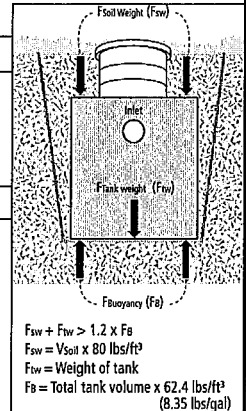
5. Buoyant Force (F_B)

Buoyant Force (F_B) = Outside Volume of Tank(2B) X Weight of Water Per Cubic Foot (62.4 lbs/ft³) X 1.2 (Safety Factor)
 X 62.4 lbs/cu.ft X 1.2 = lbs

6. Evaluation of Net Forces

A. Downward Force = Force of Tank Weight (F_{TW})(3.) + Force of Soil Weight of Soil (F_{SW})(4D.)
 lbs + lbs = lbs

B. Net Difference = Downward Force(6A) - Buoyant Force Including Safety Factor (5.)
 lbs - lbs = lbs



If the Net Difference is negative, counter measures will need to be taken to prevent the tank from floating out of the ground.

C. Feet of soil as counter measure = Net difference (6B)(if negative)(as absolute number) ÷ Weight of Soil ÷ Area of Tank (2A)
 lbs ÷ lbs/ft³ ÷ (ft²) = ft of Soil Needed (minimum)

Comments/Solution:

Minimum of 14" of sandy soil cover is needed to ensure tank will not float.



Design Summary Page



1. PROJECT INFORMATION		v 04.07.2025
Property Owner/Client:	<input type="text" value="Karl Blakely"/>	Project ID: <input type="text"/>
Site Address:	<input type="text" value="43265 218TH ST, OSAGE MN 56570"/>	Date: <input type="text" value="06/06/25"/>
Email Address:	<input type="text" value="karl6307@comcast.net"/>	Phone: <input type="text" value="651-300-4113"/>
2. DESIGN FLOW & WASTE STRENGTH		
Design Flow:	<input type="text" value="150"/> GPD	Anticipated Waste Type: <input type="text" value="Other Est. - Resid."/>
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 Tank Sizing: see 7080.2290</i>		
Code Minimum Holding Tank Capacity:	<input type="text" value="1000"/> Gallons	with <input type="text" value="1"/> Tanks or Compartments
Recommended Holding Tank Capacity:	<input type="text" value="1600"/> Gallons	with <input type="text" value="2"/> Tanks or Compartments
The holding tank(s) will be:	<input type="text" value="All New"/>	<i>Existing tank reuse requires a tank integrity assessment</i>
Type of High Level Alarm:	<input type="text" value="manual float"/>	
	(Alarm Set @ 75% tank capacity measured from inlet to bottom)	
Comments:	<input type="text"/>	
4. SEPTIC TANK SIZING <i>Sizing: See 7080.1930</i>		
A. Residential dwellings:		
Number of Bedrooms (Residential):	<input type="text"/>	
Code Minimum Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
Recommended Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
The septic tank(s) will be:	<input type="text"/>	<i>Existing tank reuse requires a tank integrity assessment</i>
Comments:	<input type="text"/>	
Effluent Screen & Alarm (Y/N):	<input type="text"/>	Model/Type: <input type="text"/>
B. Other Establishments:		
Waste received by:	<input type="text"/> <input type="text"/> GPD x <input type="text"/> Days Hyd. Retention Time	
7080 Minimum Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
Designed Septic Tank Capacity:	<input type="text"/> Gallons	with <input type="text"/> Tanks or Compartments
The septic tank(s) will be:	<input type="text"/>	<i>Existing tank reuse requires a tank integrity assessment</i>
Comments:	<input type="text"/>	
Effluent Screen & Alarm (Y/N):	<input type="text"/>	Model/Type: <input type="text"/>
* Other Establishments Require Department of Labor and Industry Approval and Inspection for Building Sewer *		



5. PUMP TANK SIZING *Sizing: see 7080.2100*

Soil Treatment Dosing Tank

Pump Tank Capacity (7080 Minimum): Gal
 Pump Tank Capacity (Designed): Gal
 Pump Req: GPM Total Head ft
 Supply Pipe Dia. in Dose Vol: gal

Other Component Dosing Tank:

Pump Tank Capacity (7080 Minimum): Gal
 Pump Tank Capacity (Designed): Gal
 Pump Req: GPM Total Head ft
 Supply Pipe Dia. in Dose Vol: Gal

* Flow measurement device must be incorporated for any system with a pump *

6. SYSTEM AND DISTRIBUTION TYPE

Project ID:

Soil Treatment Type: Distribution Type:
 Elevation Benchmark: ft Benchmark Location:
 MPCA System Type: Distribution Media:
 Type III/IV/V Details:

7. SITE EVALUATION SUMMARY:

Describe Limiting Condition:

Layers with >35% Rock Fragments? (yes/no) If yes, describe below: % rock and layer thickness, amount of soil credit and any additional information for addressing the rock fragments in this design.

Note:

Limiting Condition:	<input type="text"/> inches	<input type="text"/> ft	<input type="text"/> ft	<i>Elevations are critical for system compliance.</i>
Minimum Req'd Separation:	<input type="text"/> inches	<input type="text"/> ft	Mound Minimum Sand Depth:	<input type="text"/> inches
Designed Distribution Media Bottom Elevation*:	<input type="text"/> ft	Designed Separation:	<input type="text"/> inches	

*This is the minimum elevation of the bottom of the distribution media for required separation related to the established benchmark

A. Soil Texture:

B. Soil Hyd. Loading Rate: GPD/ft²

C. Percolation Rate: MPI

D. Contour Loading Rate:

Note:

E. Measured Land Slope: %

Note:

Comments:

8. SOIL TREATMENT AREA DESIGN SUMMARY

Trench:

Dispersal Area	<input type="text"/> sq.ft	Sidewall Depth	<input type="text"/> in	Trench Width	<input type="text"/> ft
Total Lineal Feet	<input type="text"/> ft	No. of Trenches	<input type="text"/>	Code Max. Trench Depth	<input type="text"/> in
Contour Loading Rate	<input type="text"/> ft	Minimum Length	<input type="text"/> ft	Designed Trench Depth	<input type="text"/> in

Bed:

Dispersal Area	<input type="text"/> sq.ft	Sidewall Depth	<input type="text"/> in	Maximum Bed Depth	<input type="text"/> in
Bed Width	<input type="text"/> ft	Bed Length	<input type="text"/> ft	Designed Bed Depth	<input type="text"/> in

Project ID: _____

Mound:

Dispersal Area sq.ft Media Length ft Media Width ft
 Absorption Width ft Clean Sand Lift ft Berm Width (0-1%) ft
 Upslope Berm Width ft Downslope Berm ft Endslope Berm Width ft
 Total System Length ft System Width ft Contour Loading Rate gal/ft

At-Grade:

Dispersal Area sq.ft Bed Length ft Bed Width ft
 Upslope Berm ft Downslope Berm ft Finished Height ft
 System Length ft Endslope Berm ft System Width ft

Level & Equal Pressure Distribution Soil Treatment Area

No. of Laterals Lateral Diameter in Lateral Spacing ft
 Perforation Spacing ft Perforation Diameter in Drainback Volume gal
 Min Dose Volume gal Max Dose Volume gal Total Dosing Volume gal

Non-Level and Unequal Pressure Distribution Soil Treatment Area

	Elevation (ft)	Pipe Size (in)	Pipe Volume (gal/ft)	Pipe Length (ft)	Perf Size (in)	Spacing (ft)	Spacing (in)	Minimum Dose Volume <input type="text"/> gal
Lateral 1								
Lateral 2								Maximum Dose Volume
Lateral 3								<input type="text"/> gal
Lateral 4								Total Dosing Volume
Lateral 5								<input type="text"/> gal
Lateral 6								<input type="text"/> gal

9. Organic Loading and Additional Info for HSW or Type IV/V Design - See Organic Loading tab

Organic Loading to Soil Treatment (Based on Waste Strength Data and Organic Loading Design)

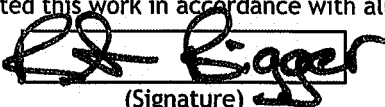
A. Organic Loading Based on: B. Minimum required area sq.ft

Technology Strength Reduction (Treatment Level or HSW)

A. Starting Waste Strength Treatment designed to meet:
 Pretreatment Technology: *Must Meet or Exceed Target Level
 Model: Units:
 Disinfection Technology: *Required for Levels A & B
 Model: Units:

10. Comments/Special Design Considerations:

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

Brant Bigger - Cubed B LLC (Designer)	 (Signature)	L4142 (License #)	6-Jun-25 (Date)
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Septic System Management Plan for Holding Tank Systems

The goal of a septic system is to protect human health and the environment by properly treating wastewater before returning it to the environment. Your holding tank system is designed to store your used water before it is recycled back into our lakes, streams and groundwater.

This **management plan** will identify the operation and maintenance activities necessary to ensure compliance with applicable rules and regulations. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic maintainer. However, it is YOUR responsibility to make sure all tasks get accomplished in a timely manner.

The University of Minnesota's *Septic System Owner's Guide* contains additional tips and recommendations designed to extend the effective life of your system and save you money over time.

Proper septic system design, installation, operation and maintenance means safe and clean water!

Property Owner: **Karl Blakely**

Property Address: **43265 218TH ST, OSAGE MN 56570** Property ID: **330030000**

System Designer: **Cubed B LLC**

License #: **L4142**

System Installer: **Graham Septic LLC**

License #: **L4132**

Service Provider/Maintainer:

Phone:

Permitting Authority: **Becker County**

Phone: **218-846-7314**

Permit #: **SS2025-432096**

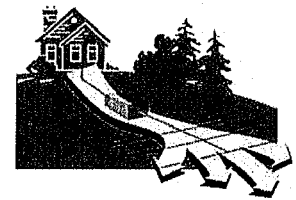
Date Inspected:

Keep this Management Plan with your Septic System Owner's Guide. The Septic System Owner's Guide includes a folder to hold maintenance records including pumping, inspection and evaluation reports. Ask your septic professional to also:

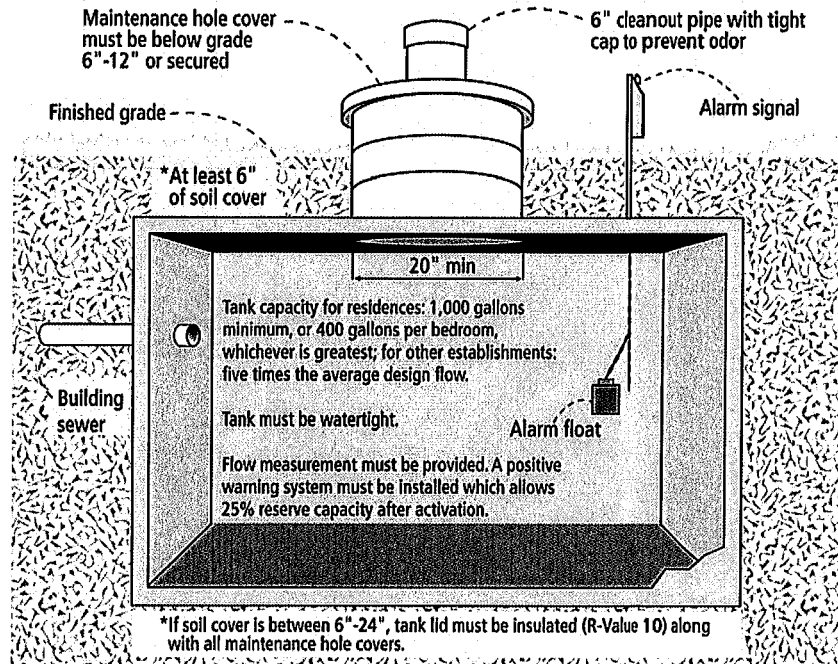
- Attach permit information, designer drawings and as-builts of your system, if they are available.
- Keep copies of all pumping records and other maintenance and repair invoices with this document.
- Review this document with your maintenance professional at each visit; discuss any changes in product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

<http://septic.umn.edu>

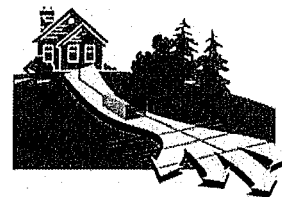


Your Holding Tank



Dwelling Type	Well Construction
Number of bedrooms: <u>n/a - shop/garage</u>	Well depth (ft): <u>shallow wells</u>
System capacity/ design flow (gpd): <u>75</u>	<input type="checkbox"/> Cased well Casing depth: _____
Anticipated average daily flow (gpd): <u>50</u>	<input type="checkbox"/> Other (specify): _____
Comments _____	Distance from septic (ft): <u>>50'</u>
In-home business? <input type="checkbox"/> What type? _____	Is the well on the design drawing? <input checked="" type="radio"/> Y <input type="radio"/> N
Number of occupants <u>n/a</u>	

Holding Tank	
<input checked="" type="radio"/> One tank: Tank volume: <u>1600</u> gallons	<input type="checkbox"/> Flow measurement device: _____
<input type="radio"/> Two tanks: Tank volume: _____ gallons	<input type="checkbox"/> Location: _____
<input type="checkbox"/> Tank is constructed of <u>concrete</u>	<input type="checkbox"/> Alarm <input checked="" type="checkbox"/> visual <input type="checkbox"/> audible
	<input type="checkbox"/> Reserve %: <u>25</u>
<input type="checkbox"/> Service contract held by: _____	
<input type="checkbox"/> Service contract is attached to this management plan	



Homeowner Management Tasks

These *operation and maintenance* activities are your responsibility. Use the chart on page 6 to track your activities.

Identify the service intervals recommended by your system designer and your local government. The tank assessment for your system will be the **shortest interval of these three intervals**. Your pumper/maintainer will determine if your tank needs to be pumped.

Tank capacity ÷ (# of occupants X 50 Gallons/day) = # of days between cleaning

OR

Within 24 hours of alarm signal

System Designer: check every 30 days

Local Government: check every _____ days

My tank needs to be emptied
every 365 days

Seasonally

- Monitor alarm daily* – make sure the alarm has not signaled. Alarms signal when your holding tank is nearly full; contact your maintainer.
- Measure* and note your average daily water usage on page 5. Conserving water saves you money!
- Leaks*. Check (listen, look) for leaks in toilets and dripping faucets. Repair leaks promptly.

Annually

- Establish a contract for tank cleaning services with a state licensed maintenance business.
- Caps*. Make sure that all caps and lids are intact and in place. Inspect for damaged caps at least every fall. Fix or replace damaged caps before winter to help prevent freezing issues.
- Water conditioning devices*. See Page 5 for a list of devices. When possible, discharge clear water sources to another location. Program the recharge frequency based on *water demand (gallons)* rather than *time (days)*. Recharging too frequently will result in increased pumping costs.
- Review your water usage rate*. Review the Water Use Appliance chart on Page 5. Discuss any major changes with your pumper/maintainer.

During each visit by a pumper/maintainer

- Ask if your pumper/maintainer is licensed in Minnesota.
- Make sure that your pumper/maintainer has clear access to the holding tank and completely empties the tank
- Ask your pumper/maintainer to accomplish the tasks listed on the Professional Tasks on Page 4.



Professional Management Tasks

These are the operation and maintenance activities that a pumper/maintainer performs to help ensure long-term performance of your system. Professionals should refer to the O/M Manual for detailed checklists for tanks, pumps, alarms and other components. Call 800-322-8642 for more details.

- Written record provided to homeowner after each visit.

Plumbing/Source of Wastewater

- Review the Water Use Appliance Chart on Page 5 with homeowner. Discuss any changes in water use and the impact those changes may have on the frequency of maintenance.
- Review and document water usage rates with homeowner.

Holding Tanks

- Maintenance hole lid.* A riser is recommended if the lid is not accessible from the ground surface. Insulate the riser cover for frost protection.
- Liquid level.* Check to make sure the tank is not leaking.
- Inspection pipes.* Replace damaged caps.
- Alarm.* Verify that the alarm works and that there is at least 25% reserve capacity.
- End of year seasonal property pumping.* Remind homeowner of most frequent causes of tank and building sewer freeze-ups. Ensure that there are no "micro-sources" of water such as a high efficiency furnace or other dripping devices. Determine a logical winter water use plan that will not result in need for emergency visit(s).

All other components – inspect as listed here:



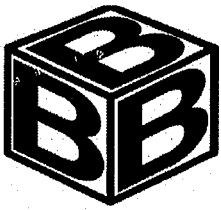
Water-Use Appliances and Equipment in the Home

Appliance	Impacts on Holding Tank	Management Tips
Garbage disposal	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Use of a garbage disposal is not recommended. • Minimize garbage disposal use. Compost instead.
Washing machine	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Choose a front-loader or water-saving top-loader, these units use less water than older models. • Wash only full loads. • Do laundry off site.
Dishwasher	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Wash only full loads.
Large bathtub (whirlpool)	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • Take short showers to conserve water.
Clear Water Uses	Impacts on Holding Tank	Management Tips
High-efficiency furnace	<ul style="list-style-type: none"> • Drip may result in frozen pipes during cold weather. 	<ul style="list-style-type: none"> • Re-route water into a sump pump or directly out of the house. Do not route furnace recharge to your holding tank.
Water softener Iron filter Reverse osmosis	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • These sources produce water that is not sewage and should not go into your holding tank. • Reroute water from these sources to another outlet, such as a dry well, drain tile or old drainfield.
Surface drainage Footing drains	<ul style="list-style-type: none"> • Uses water and increases pumping frequency and expense. 	<ul style="list-style-type: none"> • When replacing, consider using a demand-based recharge vs. a time-based recharge. • Check valves to ensure proper operation; have unit serviced per manufacturer directions

Maintenance Log

Track maintenance activities here for easy reference. See list of management tasks on pages 3 and 4.

Activity	Date accomplished/measured water usage									
Check daily for a period of time and weekly once average use is determined:										
Water usage rate (gallons per day)										
Leaks: check for plumbing leaks										
Annually:										
Establish and maintain contract for holding tank pumping services										
Water use appliances – review use										



BRANT B. BIGGER

Owner

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Cubed B LLC
SEPTIC SYSTEM DESIGN
& INSPECTION

330030000
06 Jun 2025

Type II Holding Tank

- 1,600-gallon low-pro tank
- manual float alarm

Scale: 1" = 32'

