

Privy/Outhouse Information Sheet:

Privy: a non-dwelling structure containing a toilet waste treatment device. Per Article III of the Lake County SSTS Ordinance, All sewage generated in unsewered areas of the County shall be treated and dispersed by an approved SSTS that is sited, designed, installed, operated, and maintained in accordance with the provisions of this Ordinance or by a system that has been permitted by the MPCA.



A pit privy must be constructed to meet the following minimum standards:

1. Pit privies must have at least 25 cubic feet of capacity. (Example: 3' x 3' x 3' = 27 cubic feet)
2. Privies must be adequately vented.
3. Sides of the pit must be curbed to prevent cave-in.
4. The privy must be easily maintained and insect proof.
 - a. The door and seat must be self-closing.
 - b. All exterior openings, including vent openings, shall be screened.
5. Call 218-834-8327 for Inspection upon completion (Shoreland Only) to receive Certificate of Compliance.

Design and Setbacks per MN Rules 7080.2280

Suggested specifications for the outer portion of an outhouse are provided in the figures on the next page. There are two options for the design of a privy:

1. A pit can be dug that meets the 3-foot separation requirement. This means that the soil beneath the bottom of the pit has 3 vertical feet dry soil to the saturated soil or bedrock. Pits or vaults must have sufficient capacity for the dwelling they serve but must have at least 25 cubic feet of capacity. The sides of the pit must be curbed to prevent cave in.
2. A watertight holding tank (vault privy) meeting applicable requirements can be used instead of a pit.

The pit or tank must meet the same setbacks as septic tanks or structures, whichever is greater:

SETBACKS	Structures	Well (Casing depth 50' or >)	Top of Bluff	Property Lines	Lake/River
Vault Privy	10'	50'	30'	Depends on zoning district	Depends on the Classification
Pit Privy	20'	50' (100' if casing depth <50')	30'		

Ventilation:

Privies must be adequately vented. To minimize odors in the upper part of the privy a vent should extend from the underside of the seat board through the roof or up to a horizontal vent open to the sides of the toilet. The vent must be flush with the underside of the seat board and must not extend down into the pit. Gases which cause odors are lighter than air, and if the vent extends down below the seat board, these gasses will collect under the seat board to be released upward into the privy when the seat cover is opened. At the top of the privy there should be a screened opening on each side or, preferably, all the way around the top to allow air to pass through and carry away any odors which may seep into the upper part of the structure.

Privy must be easily maintained and insect proof. The door and seat must be self-closing. All exterior openings, including vent openings, shall be screened.

All vent openings to the outside should be properly screened to keep out insects. Insect-proof openings should be placed in the walls below the seat. The opening in the seat board must have a tight-fitting cover. The type of seat and cover used on a flush toilet is not satisfactory unless weather stripping is added. The cover should be kept in place when the privy is not in use, and can be hinged to close automatically. A tight-fitting door, preferably with a self-closing feature, such as a spring, should be used to minimize the number of insects that get into the privy. (A crescent-shaped window, also screened, may be cut into the door so that the utility of the structure will be recognized.)

Odor Control

An outdoor toilet can be kept relatively odor-free and can be constructed for year-round use. An improperly constructed and maintained privy can be an abomination to both eyes and nose. Several methods can be used to minimize the sanitary privy odor problem caused by decomposition of the organic matter in the pit:

- Use chemical compounds to change the bacterial action to reduce odor generation.
- Vent both the pit and the upper part of the structure.
- Place tight-fitting covers on the seat openings.
- Finally, the inside of the structure should be painted with a polyurethane-type paint to minimize the penetration of odors into the wood.

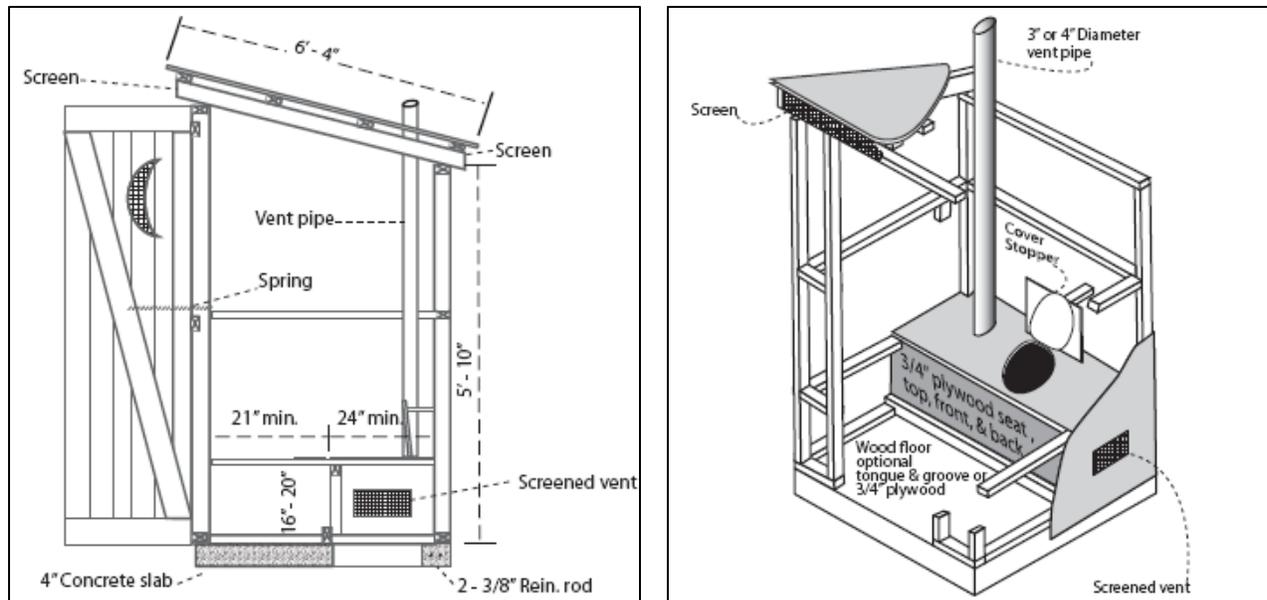
Odor Control Products

A number of products on the market claim to minimize odors in a sanitary privy. One that is reasonably effective is hydrated lime. Associated compounds containing the same chemical are slaked lime, quicklime, hot lime, chloride of lime, and pebbled lime. Approximately one cup of hydrated lime sprinkled over the solids in the pit will minimize odors and aid in decomposition. As the odors again become objectionable, another cup of lime should be added. Excess amounts of hydrated lime will slow decomposition, however, rather than promote it, although the generation of odors will be inhibited. Caution should be used to keep the hydrated lime dust out of eyes and nostrils. Commercial compounds are available and may be tried by the individual owner in order to determine their effectiveness. Some of them are odor suppressants while others change the bacterial environment within the pit.

Keeping wood odor-free

Any odors which in the past have risen into the structure of an old privy have probably become entrapped in the pores of the wood. To remove these odors, make a solution of disinfectant and tri-sodium phosphate, and scrub the inside walls and all other inside surfaces of the privy. This solution will remove odors from the pores of the wood. After the wood has dried, paint the inside of the privy with a polyurethane compound to prevent any additional odors from penetrating the wood. These techniques should minimize the odor that collects in the structure of a sanitary privy. Proper air circulation can be very helpful in carrying away any odors, so proper venting of the structure is absolutely essential.

Example Pit Privy Construction Diagram



Lake County Privy Permitting Requirements Summary:

Non-Shoreland Pit Privy

- Approved Privy Application

Shoreland Pit Privy

- Soils evaluation by SSTS Designer to show 3' vertical separation from bottom of pit to saturated soils.
- Approved Privy Application
- SSTS Inspection after installation by County for Certificate of Compliance
- Future SSTS Compliance Inspections per Lake County SSTS Ordinance 11, Article VIII, Section 1.03

Vault Privy

- Approved Privy Application
- Operating Permit, Pumping Contract, and Management Plan
- SSTS Inspection during installation by County
- Future SSTS Compliance Inspections per Lake County SSTS Ordinance 11, Article VIII, Section 1.03