



Appendix B Alaska Department of Environmental Conservation Water Program Guide

Pit Privy Design, Operation and Closure

This step by step guide provides information to assist remote camp operators and others locate, operate, and close a pit privy so that it meets the requirements for proper disposal of human wastes (urine and excrement) at your camp or facility so that human health and the environment are protected.

STEP ONE: Decide where to locate the pit privy.

- Find a site where the groundwater table is deep enough to ensure a 4-foot minimum vertical separation between the bottom of the pit and the groundwater.
- Locate the pit privy in an area where the water will drain away from the pit. Make sure the pit is in an area that is not subject to flooding.
- The pit privy must meet the following minimum separation distances (setbacks).

MINIMUM REQUIRED SEPARATION DISTANCES Measured Horizontally or Vertically	
100 feet	Surface water, wetlands, sloughs, swamps and from any drinking water source serving a single family or duplex residence
150 feet	A water source serving a facility that qualifies to be covered under this Temporary Camp Application, such as that supplying a small temporary camp.
200 feet	Any water source used to supply a public water system serving at least 25 people for more than 60 days.
25 feet	Any property line or Right-of-Way (ROW)
20 feet	Any structure, whether permanent or not, at your facility
20 feet	Any other graywater treatment or disposal system
4 feet	Vertical distance between the bottom of the pit privy and seasonal high groundwater table

If you cannot meet these setback requirements, contact the DEC Temporary Camp Coordinator at the location on the cover sheet of this packet for further assistance. You may be required to provide to DEC site-specific information that documents your facility's particular circumstances, or you may not be eligible for coverage under this application.

STEP TWO: Dig the pit.

- Dig a pit deep enough to provide capacity for the amount of waste anticipated. When sizing the pit, include the estimated amount of ash from burnable solid waste if you intend to dispose of the ash in the pit privy.
- As noted above, dig the pit so that the bottom of the pit is at least 4 feet above the groundwater table to prevent flooding of the pit and provide adequate treatment of the waste.
- Construct the pit to prevent cave-ins. If necessary, cribbing can be used to shore up the sides of the pit. Cribbing should fit firmly against the earthen walls on all sides. Cribbing should descend the full depth of the pit and rise flush with the ground level. Use only untreated lumber for the cribbing.
- Construct the pit so water drains away from the opening and not into the pit. Use the excavated soil to berm up around the pit.

STEP THREE: Construct the privy.

- There need not be a “house” associated with a pit privy as long as the opening of the pit is protected from rain and snow. This prevents the pit from filling with extra liquids.
- There must be a covering over the pit that prevents insects, vermin (voles, shrews, etc.) and other animals from entering the pit. A bench must be constructed over the pit that has a closing lid. If you use a commercial toilet seat, remove the knobs from the underside of the seat and seal the toilet seat to the bench.
- Use durable and cleanable materials. Painted or stained wood surfaces are acceptable.
- If you construct a structure that includes ventilation, screening with openings no greater than 1/16 inch should be used to cover the vent opening.
- Insure that all possible accesses into the pit are sealed to prevent small insects from entering the pit.

STEP FOUR: Operate the pit properly.

- Use lime to control odors. Apply as frequently as needed.
- Use extreme caution when working with strong disinfectants such as lime. Be careful to not spill the lime or allow it to remain on the seat of the privy. Lime may cause chemical burns to the skin.
- Do not dump graywater, garbage, oil, hazardous substances, toxic waste, or un-burned solid waste into a pit privy.
- Ash from burnable solid waste can be dumped into a pit privy.
- A pit privy must be closed down when it fills to within two feet of ground level. See Step Six for instructions on abandoning a pit privy.

STEP FIVE: Provide for temporary or seasonal closure.

- If the privy is used yearly, but closed seasonally, apply lime to the pit prior to the seasonal closure.
- Secure the pit against rain, snow, vermin and other animals. For example - if a toilet seat is used, it should be removed and the hole covered with a board secured to the bench with nails or screws. A tarp may be needed over the bench to further guard against snow and rain filling the pit.
- Ensure that the structure is secured to keep out precipitation, vermin, and other animals.
- When you no longer will be using the pit privy but others may use the facility site in the future, a pit privy may be left in a temporarily secured closure condition if the private landowner or public land manager approves.

STEP SIX: Abandon the pit privy properly when permanently closing down your camp or when the pit becomes full. It is full when solids are two feet from the ground level.

- Remove any structure erected over the pit.
- Apply lime to the pit.
- Cover with a minimum of 2 feet of compacted soil.
- Contour the soil so there is a mound that will ensure drainage away from the pit and to allow of settling of the soil.
- Mark the pit location so that future camp operators avoid digging a new pit into a previously abandoned pit.

 Remember the pit privy must be maintained and operated so it is not a threat to public health or the environment.

For more information or if you have questions, contact:

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