



# ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## WASTEWATER PROGRAM FACT SHEET:

### PIT PRIVY DESIGN AND OPERATION

July 2017

## These guidelines are for pit privy design, operation and closure

### STEP ONE: Decide where to locate the pit

- Find a site where the groundwater table is deep enough to insure the 4-foot minimum vertical separation between the bottom of the pit and the groundwater.
- Locate the pit privy in area where the water will drain away from pit. A pit privy shall not be installed in an area that is subject to flooding
- Pit privies meeting the below requirements are not required to be approved by or registered with the Department. Check with local government for additional restrictions or requirements.
- The pit privy must meet the following minimum separation distances (set backs).

<b>MINIMUM REQUIRED SEPARATION DISTANCES</b> <b>Measured Horizontally or Vertically</b>	
100 feet	Surface water, wetlands, sloughs, swamps and from any potable water system that is not a public water system
200 feet	Any water source used to supply a public water system serving at least 25 people for more than 60 days
6 feet	From the edge of the pit privy to any other soil absorption fields
4 feet	The distance between the bottom of the pit privy and seasonal high groundwater table

If you cannot meet these setback requirements, contact the local DEC office at the bottom of this Fact Sheet. You may be required to provide to DEC site-specific information that documents your properties particular circumstance, or you may not be eligible to install a pit privy at your property.

### 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 and vermin (voles, shrews, etc.) 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 will 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.
- If the privy is used yearly, but closed seasonally, apply lime to the pit prior to the seasonal closure. Additionally, secure the pit against rain, snow and vermin. 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.
- A pit privy must be closed down when it fills to within two feet of the ground surface. See Step Five for instructions on abandoning a pit privy.

**STEP FIVE: Abandon the pit privy properly when solids are within two feet of the ground level or when use of the pit privy is permanently discontinued**

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

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

For more information or if you have questions regarding State of Alaska Wastewater Regulations 18 AAC 72, contact:

Anchorage & Southwest Alaska	Fairbanks & Interior Alaska	Kenai Peninsula	Southeast Alaska	Matanuska-Susitna Valley & Valdez
555 Cordova St Anchorage, AK 99501 (907) 269-7519	610 University Avenue Fairbanks, AK 99709 (907) 451-2109	43335 Kalifornsky Beach Road, Suite 11 Soldotna, AK 99669 (907) 262-3402	410 Willoughby Avenue, Ste 303 Juneau, AK 99801 (907) 465-5167	1700 E. Bogard Rd, Bldg B, Ste 103 Wasilla, AK 99654 (907) 376-1851

If you have questions or concerns regarding these guidelines, please contact Gene McCabe, Program Manager, Wastewater Engineering Support and Plan Review, at 907-269-7692 or [gene.mccabe@alaska.gov](mailto:gene.mccabe@alaska.gov).