

TACDA ACADEMY – CIVIL DEFENSE BASICS

10. SANITATION

10.01 Introduction:

Proper management of toilet facilities and garbage during times of emergency may have a greater affect on your health than any other single element of sanitation. Bacterial infections such as typhoid and dysentery can be just as devastating as the earthquake or flood that caused the emergency.

10.02 Disposal of Rubbish:

In order to reduce bulk, cans should be flattened and bottles should be broken. Trash and rubbish may be burned in open yard areas or left at dumps established by local authorities. Dry trash and rubbish should be kept in separate containers from garbage.

10.03 Disposal of Garbage:

Garbage may sour, decompose, breed bacteria, or attract insects and small animals; rubbish (trash) will not. Garbage, or any mixed refuse containing garbage, must be carefully stored if odor and insect nuisances are to be prevented.

Store garbage in 20 or 30 gallon cans with tight-fitting lids until it can be properly disposed of.

If collection by authorities is not possible, garbage should be buried in a hole deep enough to cover it with at least 18 inches of dirt.

During times of NBC crises, it may not be practical to dispose of garbage immediately. If liquids are strained away, garbage may be stored for a longer period of time without the development of unpleasant odors. Wet garbage should be drained, wrapped in newspaper and placed in covered cans lined with heavy mill plastic bags.

Do not store garbage or human waste in airtight bags, as decomposing garbage produces gas that could cause the bag to rupture.

10.04 Disposal of Grease:

Grease should be handled separately from other garbage.

Prepare a grease trap in the following manner:

- Place burlap, straw, grass or similar filtering materials in a large box or barrel.
- Strain grease and dishwater containing food particles through the filtering material.
- Change the trap frequently.
- Prepare a pit with wood ashes, sand and gravel for outside use.
- Periodically clean the trap and burn or bury the accumulated grease.

An excellent chapter dealing with sanitation can be found in Crisis Preparedness Handbook, by Jack Spigarelli (available in the TACDA Store – <http://www.tacda.org>).



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10.05 Chemical Toilets:

Camping toilets are fairly inexpensive and offer a good temporary solution for emergency use. Flush toilets require a great deal of water and water is usually at a premium during disasters. Store disintegrating toilet paper for portable flush toilets.

A temporary toilet can be made from a watertight container with a snug-fitting lid or cover (5 gallon plastic buckets work great). Line it with a garbage can liner or leaf bag. Mix one cup of liquid chlorine bleach to one half gallon of water (one to ten ratio - do not use dry or powdered bleach as it is caustic), or mix laundry detergent or other disinfectant with one half gallon of water and pour the mixture into the temporary toilet. Every time it is used sprinkle on a little more pine sol, chlorine, bleach, baking soda, alcohol, laundry detergent, ammonia, insecticide or other disinfectant to keep down odors and germs. Replace the lid tightly after each use.

When the container is one third to one half full, tie the garbage bag liner shut and empty it into a larger, covered container (such as a 10 gallon trash can). Each person requires approximately 5 gallons of waste storage space per week. In the event of most natural disasters, waste storage can be removed from the shelter area by the 2nd day and buried.

Never deposit human waste or garbage on the open ground. If you have no other alternative for disposal it is safe to bury waste in trenches deep enough that the waste is covered with 24-30 inches of dirt.

10.06 Latrines:

Latrines should be placed at least 50 feet downhill from any water source and well away from your living and food preparation areas.

A temporary latrine can be prepared by digging a hole one foot wide, two feet deep and two to four feet long. Place a toilet seat over the hole with privacy blankets or makeshift wooden sides surrounding the area.

To construct an outhouse for use up to two months, an average sized family will require a hole two feet wide, six feet deep and seven to eight feet long. Construct an insect-proof toilet box to cover the hole. Sprinkle lime on the waste before filling in the hole. Insect repellent, deodorizer, toilet paper and lime should be a part of every family's emergency supplies.

Where possible, install a septic tank with proper leach fields to backup the regular sewer system. Septic tanks can service a family for many years.

