

UTAH STATE DIVISION OF HEALTH

WATER CONSERVATION BY REUSE OF HOUSEHOLD WATER

Under current drought conditions in Utah, some municipalities and water districts will impose severe restrictions on water use. As a consequence, the homeowner may look to unorthodox methods for obtaining an adequate supply of water. The reuse of household water might appear a reasonable compromise under the circumstances, but except in the temporary emergency situation, its use must be discouraged. Recycled household water is much lower in quality than that normally used for irrigation and the risks associated with reuse outweigh any advantage, except in times of extreme emergency.

Modern standards and regulations regarding water supply, plumbing and waste disposal have been designed to prevent health hazards in the community. Proper regard for these regulations insures our protection. The following suggestions for reuse of household water depart somewhat from common interpretations of existing standards and are here presented with the understanding that they may be applied on a temporary basis only if local health authorities approve. They can be authorized only under emergency conditions, and no other modifications of normal water use or of plumbing facilities can be authorized under any circumstances.

SUGGESTED EMERGENCY PROCEDURES

Subject to approval of local health authorities, the following procedures are acceptable in an emergency situation:

1. **REUSE OF KITCHEN SINK WATER**

Some of the water used at the kitchen sink, particularly water used to wash vegetables, may be suitable for watering shrubs and other ornamentals. The grease and various soaps and detergents in dishwater make that source less desirable for outside irrigation.

Kitchen sink water can be dipped from the sink into a bucket and carried outside for appropriate use. If preferred, the water can be siphoned through a length of garden hose, either into the bucket or directly to the outside. Siphoning obviously cannot be accomplished from basement facilities.

It is possible to remove the P-trap under the sink so that a bucket can be placed directly under the tail piece (sink drain pipe). This is an acceptable alternative to dipping water from the sink, but it is cautioned that inexperienced, "handyman" plumbers can easily damage the trap and the thin-walled connecting pipes. There is also the consideration that overflow from the bucket will create more problems than the process is worth. If trap removal is attempted, however, it is important to plug the end of the pipe which connects to the building plumbing system to prevent sewer gas from entering the kitchen.

2. **REUSE OF WASH BASIN AND BATH WATER**

Water from the bath, shower or wash basin can be reused in much the same way as kitchen sink water. It can be dipped or siphoned, but traps should not be removed from bathtubs or showers. Shower water can be collected by placing flat, rubber stopper pads over the shower drain.

3. **REUSE OF CLOTHES-WASHING WATER**

Water discharged from the automatic clothes washer can be collected by removing the discharge hose from the drain pipe for release into a stationary tub or other suitable container next to the washer. An occasional quart of water poured down the drain pipe for release into a stationary tub or other suitable container next to the washer. An occasional quart of water poured down the drain pipe will keep the trap seal intact and prevent sewer gas from entering the house. Obviously, water used to launder heavily soiled clothing or diapers must not be reused.

4. **TOILET FLUSHING**

Water from the kitchen sink, bathtub or basin can be used to flush toilets. Keep a bucket of water near the toilet and flush by pouring the contents quickly into the toilet bowl, without operating the flushing handle. Four gallons will suffice for the average toilet. When the flushing action is complete, fill the bowl slowly with additional household water to the usual level.

CAUTION: Pouring used water into the toilet tank is prohibited, as it may be siphoned back into the culinary water supply.

PROHIBITED ACTIONS

Several recommendations for water reuse, unfortunately widely circulated, are not permissible under any circumstances. Some of these misconceptions are corrected as follows:

1. Never use effluent from septic tanks or other home sewage treatment devices for any kind of irrigation. Use of this material on the ground surface is a health hazard and is prohibited by law. If the seepage field receiving effluent from the septic tank or other treatment unit fills and overflows, correction must be made immediately to that all effluent remains completely underground.
2. Never pour water into the toilet tank. Emergency flushing water must be poured directly into the bowl.
3. Do not use sink, clothes washer or bath water on vegetables or low-growing fruits. Apply around shrubs and other ornamentals sparingly to avoid pooling. Puddles will produce disagreeable odors and attract insects. Do not allow any household water to run beyond the property line.
4. Never modify household plumbing to facilitate reuse of water. Though P-trap removal at the kitchen sink is an acceptable exception, most people would be well advised to leave the P-trap alone as well.

EFFECTS OF USED WATER ON PLANTS

Though all the evidence is not in, it appears that chlorine, boron, sodium, and other substances in detergents, bleaches and softeners may damage plants and soil with continued use. When no other water is available, some damage may be preferable to no irrigation at all, but the homeowner is urged to seek the advice of an agricultural expert before reusing household water on growing plants.

SUMMARY

Certain water reuse practices are appropriate during severe drought conditions if water users understand the risks. Water from sinks, bathtubs, showers and clothes washers can often be put to limited use in irrigation when no other water is available, but such use must be approved by local authorities. Agricultural experts should be consulted to determine potential damage to soil and plants.

Once the emergency situation has passed, water reuse should be abandoned. These practices should never be confused with water conservation practices applied under normal conditions.

Expressly forbidden under all circumstances are:

- (1) use of effluent from septic tank or other home waste treatment devices,
- (2) modification of plumbing systems to permit easy reuse of water, and
- (3) reuse of household water in the toilet tank instead of the toilet bowl.