

COUNTY OF VENTURA	2012 EMPLOYEE HEALTH & SAFETY MANUAL	GENERAL
Originating Agency: GSA	Last Issued Revised	Policy No. 1C
Policy: GSA	8/6/2012	SEWAGE BACKFLOW CLEAN UP PROCEDURES
Forms: N/A		

BACKGROUND

This procedure outlines the requirements for cleanup of a sewage backflow/spill. Water contaminated with sewage may contain a number of bacteria and viruses, which can affect health. The major health concern is related to organisms that affect the gastrointestinal tract causing vomiting and diarrhea (gastroenteritis), and those that affect the liver (Hepatitis A, yellow jaundice). You can contract these illnesses by putting contaminated hands or articles into your mouth. These bacteria and viruses are *not* transmitted through the air. Skin irritation or infection can also occur from contact with contaminated water if open cuts, skin rashes or sores are present.

Every sewage backup is unique and will require different responses but there are some universal principles that can be applied to all situations.

MAJOR OVERFLOWS

Immediate Notification

Contact Facilities Operation dispatch at 654-3878

Notify Environmental Health at 654-2813 or 320-6244 if the spill:

- Is in a food service or food preparation area
- Enters or flows into storm drains

Storm Drains

Properly trained maintenance personnel should attempt to prevent the spill from entering storm drains

MINOR OVERFLOWS

When a toilet overflows or drain backs up and the overflow volume is less than several gallons, decontamination procedure will include water extraction, cleaning, and use of a disinfectant.

Sewage Disposal

Cleanup personnel are to use the sanitary sewer system (toilet, sewer manhole, or floor drains) to dispose of sewage. Sewage is NOT to be disposed of in storm drains, gutters, ditches,

surface waters or any other location where it could enter surface waters, cause groundwater contamination, or result in human exposure.

Cleanup Personnel

Personnel who perform sewage spill cleanup must be properly trained in accordance with this procedure and the County of Ventura Infectious Disease Control/Bloodborne Pathogen Plan. Employees shall employ good personal hygiene practices.

Uninvolved Individuals

Cleanup personnel shall ensure individuals not involved in the cleanup and disinfection of the sewage spill remain out of the area until the contamination has been removed and the area disinfected.

Security shall be contacted and guard posted if necessary to prevent uninvolved individuals from contacting contaminated material and potentially tracking contaminants to other parts of the building.

PERSONAL PROTECTION

Proper hand washing must be considered the most important aspect of personal protection. Cleanup personnel should wash their hands thoroughly after cleanup when removing gloves.

Personal Protective Equipment (PPE):

1. Gloves: mandatory for all clean up, utility style recommended (at no time should cuts or open sores be left exposed)
2. Rubber boots
3. Face shield/goggles: when splashing of contaminated water may occur
4. Work clothes

DISINFECTANT

Freshly prepare one of the following sanitizers and generously apply. Sanitizer may be applied with spray bottle, pump up pressure sprayer, cloth, sponge or mop. Allow surface to remain wet for 5 minutes (15 minutes when using bleach) then allow to air dry or wipe dry. Heavy soiled surfaces should be pre-cleaned.

- Ramsey Frequency 256 Disinfectant Cleaner 0.5 oz (1 Tablespoon) of product per gallon of water.
- Envirox *H₂Orange₂ Concentrate 117* - 10 ounces (1¼ cup) of product concentrate per gallon of water
- Household Bleach - 10% solution (1 to 10 dilution)
- Other registered EPA disinfectant prepared to manufacturer's specifications

Safe handling of disinfectants:

1. Wear PPE, gloves and goggles when working with cleaning products.

2. Read the label carefully before using a disinfectant.
3. Use disinfectant in well-ventilated areas and be aware of the handling precautions and first aid procedures.

Warning! Mixing bleach with other cleaning chemicals may result in the generation of heat and/or toxic gasses.

GENERAL SAFETY

1. Take care - wet surfaces can be very slippery.
2. Be aware of the potential for electrical shock.
 - a. Don't enter a flooded room if there is any chance that an electrical device or outlet has come in contact with the water, it might be carrying electrical current.
 - b. Operate electrical equipment only when plugged into a ground fault circuit interrupter or ground fault equipped outlet.
 - c. Rubber boots and gloves offer only very limited protection from electrical shock.
 - d. Do not use electrical extension cords where there is a possibility of standing water.
 - e. Do not turn on any appliances that have become wet until they have been thoroughly dried and checked for proper operation.
3. Do not eat, drink or smoke during cleanup.

CLEAN UP PROCEDURES

Use the following steps in all cleanup procedures:

1. Assure that the personal protection and general safety steps previously described have been taken.
2. Remove all water and gross contamination as soon as possible using various methods; dry all surfaces as much as possible. The wettest areas can be pumped, squeegeed or mopped to a floor drain. A wet/dry vacuum can be used to remove remaining water.
3. If the water is really deep and an electric sump pump or gasoline-powered pump may be an option. If a gas-powered pump is used, set it outside and run the intake hose in through door to avoid fumes.
4. All water incursion incidents that involve sewage, regardless of the extent will require cleaning of contaminated surfaces with an initial disinfectant contact time of at least 5 minutes. When using bleach, increase contact time to 15 minutes.
5. Thoroughly wash and disinfect walls several inches up from the level reached by water and over the entire floor.
6. Once surfaces are clean and sanitary, fans can be used to increase circulation and dry area.
7. Remove PPE with caution, making sure gloves are removed last.
8. Wash hands thoroughly with soap and warm water for 10 seconds after removing gloves.
9. Report a puncture wound or other injury occurring while performing cleanup, to your supervisor as soon as possible.

References:

Suggested Guidelines for Remediation of Damage from Sewage Backflow into Buildings, U.S.EPA/Research Triangle Park Institute/IICRC