

## **Standard Procedures for Cleaning Up Domestic Wastewater Spills Outside Buildings**

The following are recommended procedures for cleaning up untreated or inadequately treated sewage spilled to the ground surface. This guidance may also be used for cleanup of spills from mobile sources such as RVs, buses, and septic trucks.

### **1. *In all conditions:***

- A. If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access. Keep children and interested bystanders away from cleanup activities.
- B. Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a sewage spill. (Dispose of gloves and wash rubber boots when leaving spill site).
- C. Lime may be applied to the affected area but should only be used or applied by people experienced in using this material and excess lime must be removed after the sewage has been removed. Please note that hydrated lime is a caustic material and is dangerous to handle and apply.
- D. Do not mix cleaning / disinfecting products or chemicals. Cleaning products can react with one another to produce toxic vapor or liquid substances.

### **2. *In non-freezing conditions, when sewage is a mixture of liquid and solid material, the following steps should be taken:***

- A. If the spilled material can't be recovered using hand tools, a commercial vacuum/pump truck should be called to remove all visible liquid and solid material.
- B. When the area is visibly clean, either a chlorine / water solution (using Clorox or a bleach that has "sanitizes" or "kills germs" on the label) or hydrated lime should be applied to the spill area to disinfect. To make a 5% chlorine solution, add 3/4 cup Clorox bleach to one (1) gallon of water. You can verify the chlorine concentration by using test paper available at food supply warehouses or chemical supply companies.
- C. If the spill occurred in a heavily populated area and odor may be an issue or is within 100 feet of surface water, hydrated lime should be applied to the area in place of chlorine bleach. Enough hydrated lime should be applied to raise the pH to at least 12. By raising the pH to 12 for at least 1 hour, the area will be disinfected. You can test the pH by using pH paper obtained at a chemical supply facility. Because lime is a caustic material, access to the area treated with lime must be restricted during the disinfection period. If using lime, any residual must also be cleaned up. Lime is also highly corrosive to aluminum, so don't use where aluminum is present – use chlorine.
- D. After the spill area has been cleansed (24 hours after the chlorine solution or hydrated lime has been applied) and any residual lime removed, the barriers may be removed and access to the area restored.

### **3. *In freezing or frozen conditions.***

- A. An attempt should be made to clean up the spill before it becomes completely frozen.

- B. If possible, the frozen sewage should be removed down to the natural ground surface (or at least one inch below the spilled sewage if on thicker ice) and the recovered material disposed of properly. This may require that approval be obtained for disposal in a permitted landfill. Because each spill site and situation is different, please contact your local DEC office for recommendations regarding constructing an acceptable containment area. If the material thaws, the liquid must be properly handled and disposed of at a permitted wastewater treatment and disposal facility. Keep in mind that frozen and/or thawed sewage may still contain active, harmful bacteria, cysts and viruses.
- C. When the area is visibly clean, either a chlorine / water solution (using Clorox or an equal bleach) or hydrated lime should be spread across the spill area to disinfect. You can verify the chlorine concentration by using test paper available at food supply warehouses or chemical supply companies.
- D. If the spill occurred in a heavily populated area and odor may be an issue or is within 100 feet of surface water, hydrated lime should be applied to the spill area in place of chlorine bleach. The hydrated lime will raise the pH to 12, which will disinfect the area. By raising the pH to 12 for at least 1 hour, the area will be disinfected. You can test the pH by using pH paper obtained at a chemical supply facility. Because lime is a caustic material, access to the area treated with lime must be restricted during the disinfection period.
- E. When the spill area has been cleansed (24 hours after the chlorine solution or hydrate lime has been spread) and any residual lime removed, the barriers can be removed and access to the area restored.

**Contact Information**

If you are experiencing on-going failed wastewater system issues or have questions about how to cleanup spills of sewage from either wastewater systems or mobile sources, please contact your local Wastewater office through the Vermont Department of Environmental Conservation, Division of Drinking Water & Groundwater Protection at the link

<http://www.anr.state.vt.us/dec/dwgwp/poregionaloffices.htm>

or phone numbers listed below:

Barre	802-476-0190	5 Perry St., Suite 80, Barre, VT 05641-4268
Essex	802-879-5656	111 West Street, Essex Jct, VT 05452
Rutland	802-786-5900	450 Asa Bloomer Bldg., Rutland, VT 05701-5903
Springfield	802-885-8855	100 Mineral St., Suite 303, Springfield, VT 05156-3168
St. Johnsbury	802-751-0130	1229 Portland St., Suite 201, St. Johnsbury, VT 05819-2099