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City of Livermore  
Water Resource Division  
101 W. Jack London Blvd.

# Outdoor Storage of Liquid Materials

*In response to recent Federal and State water quality regulations and requirements, municipalities in Alameda County have joined to form the Alameda Countywide Clean Water Program (ACCWP).*

**The ACCWP** consists of the Cities of Alameda, Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Newark, Oakland, Piedmont, Pleasanton, San Leandro, Union City, Alameda County, the Alameda County Flood Control and Water Conservation District, and Zone 7 of the District.

**The Goal of the ACCWP** is to control discharges of pollutants to municipal storm drain systems (and local creeks and the San Francisco Bay). The ACCWP encourages using Best Management Practices to effectively eliminate illegal discharges and connections.

**The Storm Drain System** was built to collect and transport rain to prevent flooding in urban areas. Anything that flows or is discharged into the storm drain system goes directly into local creeks or San Francisco Bay without any treatment.

**The Sanitary Sewer System** collects and transports sanitary wastes from interior building plumbing systems to the wastewater treatment plant where the wastewater is treated.

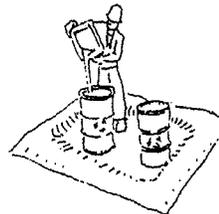
**Best Management Practices (BMPs)** are methods and practices such as good housekeeping, spill prevention, or treatment measures to prevent or minimize pollutant discharges to municipal storm drain systems.

**Illegal Discharges or Illicit Connections** discharge non-storm water to municipal storm drain systems and contribute to water pollution.

**Urban Runoff** is rain and any other water that passes through and out of developed areas (streets, parking lots, roof tops, etc.) into the storm drain system and eventually to creeks and other waters.

**K**eeping pollutants out of our storm drain system protects our local creeks, reservoirs, and the San Francisco Bay. Materials swept, blown, or washed into the storm drains end up in these open waters where they degrade water quality and harm aquatic life. In general, wastewater discharged to the storm drains is illegal.

In addition to reviewing their own practices, municipalities participating in the Alameda Countywide Clean Water Program (ACCWP) have instituted a business education campaign and inspection program. Inspectors work with contractors and businesses to identify and control potential discharge of pollutants to the storm drain system. *Property and business owners are responsible for their contractors' practices.*



Liquids spilled, poured, or dumped outdoors flow to the storm drain system. The storm drain system includes gutters, grated inlets, underground pipes, as well as channels, creeks, and the Bay.

Liquid materials are a particular concern because liquids which dissolve in water or float on the water surface are generally *toxic* to aquatic life.

All businesses can apply common sense practices to minimize or eliminate their contribution to stormwater pollution. Some such practices related to outdoor storage of liquid materials are identified on the reverse side of this page.

If you need additional information concerning stormwater pollution and its prevention contact Water Resources at **(925) 960-8100**.

# Best Management Practices

Follow these BMPs to control pollutant discharges. The objectives are: 1) to keep pollutants from contacting rain, and 2) to keep pollutants from being dumped or poured into the storm drains. The goal is "only rain in the storm drain."

## Indoor Storage

One way to keep rainwater from contacting liquid material is to move storage indoors. This also prevents any spills from accidentally flowing into the storm drains. Be sure to check with your local building, zoning, and fire department concerning indoor storage requirements. Also, hazardous materials must be stored in accordance with federal, state, and local requirements. Check with your local hazardous materials authority.

If you must store your liquid materials outdoors, applying best management practices, or *BMPs*, to your daily activities will significantly reduce your contribution to stormwater pollution. *BMPs* related to outdoor liquid storage are described below.

## Outdoor Storage

- Regularly *inspect* liquid containers for cracks, corrosion, or leaky seams.
- *Keep containers out* of pooled or standing water.
- Apply *caution and control* when transferring liquids to minimize the potential for a spill.
- Have *clean-up materials* easily accessible. Regularly train employees on spill clean-up procedures. Designate a spill clean-up coordinator.
- *Organize and arrange* containers so that they are accessible for inspection and/or clean up.
- *Keep a log* of when you apply *BMPs*. For example, write the name of the operator, the date and time the *BMP* was applied, and a description of the *BMP* in a spiral notebook. This helps you confirm to the inspector that you are minimizing the contaminants rain picks up on your site.
- If possible, practice *source reduction*. Reduce the amount of materials stored on site at any one time.

- *Stencil* storm drain inlets with "No Dumping, Drains to Bay" message.



- *Store containers* so that if a leak or spill occurs, materials do not enter the storm drain system. One option is to place the containers in secondary containment. Secondary containment includes oversized drums, secondary containment pallets, drum containers, etc. Any rain captured in secondary containment must be disposed of properly.
- If the captured rainwater has not contacted the contents of the containers, the *uncontaminated* rain water can be discharged to the storm drains.
- If there is a possibility that the rainwater is contaminated, the rainwater cannot be discharged to the storm drain. Contact your local storm water representative for more information and guidance on disposal alternatives specific for your site.