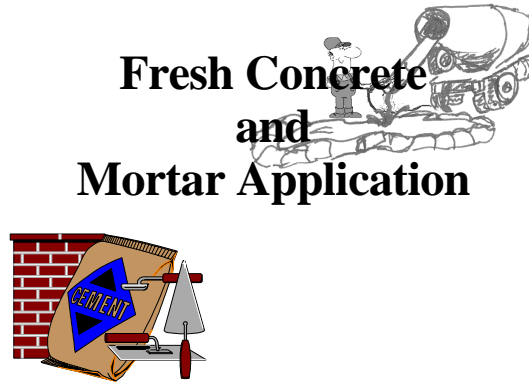


Fresh Concrete and Mortar Application



Best Management Practices for the Construction Industry

Storm Drain Pollution Prevention: It's Up to Us

In Alameda County, storm drains flow directly to local creeks and San Francisco Bay, with no treatment. Storm water pollution is a serious problem for wildlife dependent on our waterways and for the people who live near streams or baylands. Common sources of this pollution are oil, fuel, and fluids from vehicles and heavy equipment; construction debris and dirt; landscaping runoff containing pesticides or weed killers; and materials that people pour or spill into a street or storm drain.

The County and its 14 cities have joined together with Alameda County Flood Control and Water Conservation District to educate local residents and businesses and fight storm drain pollution. We hope you will join us, by using the practices described in this pamphlet.

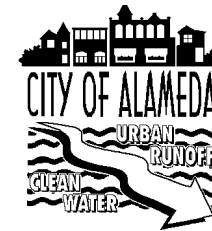
Who should use this brochure?

- Masons and bricklayers
- Sidewalk construction crews
- Patio construction workers
- Construction inspectors
- General contractors
- Home builders
- Developers

Urban Runoff Control Program

The County and its cities all have Ordinances for "Storm Water Management and Discharge Control." In order to comply with state and federal law, these Ordinances prohibit most non-storm water discharges to the storm drain. This includes discharges from concrete and saw-cutting operations clean-up. The Ordinance also requires anyone engaged in an activity that might pollute storm water to take all practicable measures to reduce pollutants.

For information on the urban runoff pollution control program in your area, contact:



City of Alameda
Urban Runoff


Clean Water
Program

748-4623

The State Water Resources Control Board (SWRCB) has issued a General NPDES Permit for storm water discharges associated with construction activity. Your construction project may need to be covered under the General Permit. To obtain coverage, you must file a Notice of Intent (NOI). For more information call the State Water Board's Construction Activity Storm Water Hotline at (916) 657-1146.

The Alameda Countywide Clean Water Program gratefully acknowledges Santa Clara Valley Nonpoint Source Pollution Control Program for this brochure's concept and design.



 Alameda Countywide
Clean Water Program
A Consortium of Local Agencies

Storm Drain Pollution from Concrete and Mortar Application

Improper disposal of fresh concrete and mortar to storm drains or creeks causes serious problems and is punishable by law. These materials end up in streams, lakes, or the Bay and are toxic to fish, invertebrates and the aquatic environment.

What Can You Do?

Best Management Practices

- Both at your yard and the construction site, always store both dry and wet materials under cover, protected from rainfall and runoff. Protect dry materials from wind.
- Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from gutters, storm drains, rainfall, and runoff.
- Train employees to be aware of the impacts of improper disposal of concrete/mortar wastes and washwaters.

During Construction

- Don't mix up more fresh concrete, mortar or plaster than you will use in a day.
- Set up and operate small mixers on tarps or heavy plastic drop cloths.
- Designate an area on-site for dumping excess concrete, do not allow random dumping around the site.
- Never dispose of washout into the street,

storm drains, drainage ditches, or streams.

- Direct washout to a containment pond, pit, or bermed area large enough for liquid and solid waste. Pump back into mixer for reuse whenever possible. Allow water to evaporate or infiltrate into soil. Let concrete harden so it can be broken up and disposed of in trash.
- During saw cutting operations, slurry **must not** be discharged to storm drain system. Vacuum up slurry and pump it to a holding tank for disposal, or pump it to a containment pond/dirt area where water can filter or evaporate, allowing the concrete to set.

- When washing concrete to remove fine particles or expose the aggregate, avoid discharging to the storm drain by directing the water to a bermed or dirt area.



- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return aggregate sweepings to base stockpile, or dispose in the trash.
- When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.



- Cover stockpiles (mortar, sand, etc.) and

other materials with plastic tarps to protect from rain. Secure open bags to protect from wind. Use berms around the stockpile to prevent run-on.

- Store all materials away from creeks and storm drains.

Concrete Waste Management

- When breaking up paving, be sure to pick up all the pieces and dispose of properly. Sweep the area to remove small debris which may blow into the storm drains.
- Recycle large chunks of broken or hardened concrete at a landfill.
- Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- Never bury waste material.



Small Weekend Jobs

- Remove all excess concrete from the chute by using a squeegee or similar tool.
- Place all excess concrete in a form, or in small piles where it may be removed once it has hardened.
- Use a minimum amount of water to wash down chute.
- Direct wash water to dirt area to allow water to infiltrate. Remove concrete after it hardens.
- If no dirt or suitable unpaved area is available, block or berm gutter or nearby

storm drain inlet using sandbags. Allow washwater to collect in bermed area and evaporate.

- Remove the concrete sediment around the sandbags before it hardens completely.



This brochure is one of a series of pamphlets describing storm drain protection measures for specific types of construction industry activities. Other pamphlets include:

General Construction and Site Supervision
Painting and Application of Solvents and Adhesives
Roadwork and Paving
Heavy Equipment Operation