





Midwest Research Institute





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Stormwater Best Management Practices (BMP's)

Concrete & Mortar Application



Safe Environmental Habits and Procedures for:

Construction Inspectors

Developers

Do-It Yourselfers

Home Builders

Masons and Bricklayers

Patio Construction Workers

Sidewalk Construction Crews

Pollution Prevention It's Up to Us

The storm drainage systems of Florida lead to our local water bodies, and eventually to the Gulf of Mexico or the Atlantic Ocean. Storm drains were designed to prevent flooding by carrying excess rainwater away from streets out to Florida waterways. Because the system contains no filters, it now serves the *unintended* function of carrying stormwater runoff, also referred to as *Pointless Personal Pollution*, straight to these waterways.

When it rains, water mixes with pollutants creating *Pointless Personal Pollution*. The pollutants include oil and other automotive fluids, paint and construction debris, yard and pet wastes, pesticides and litter.

Pointless Personal Pollution flows to our waterways through the storm drain system. Each day, polluted runoff enters the water untreated, leaving toxic chemicals and trash in our water.

Pointless Personal Pollution contaminates the waterways, harms aquatic life and increases the risk of inland flooding by clogging gutters and catch basins.

This pamphlet tells you how to prevent *Pointless Personal Pollution* through Best Management Practices (BMPs). Using these BMPs will ensure cleaner waterways.



Environmental Awareness Saves Our Planet!

This is one in a series of pamphlets describing storm drain protection measures. Other pamphlets include:

Painting

Roadwork & Paving

General Construction & Site Supervision

Heavy Equipment

Food Service Industry

Automotive Maintenance & Car Care

Landscaping Gardening & Pest Control

Concrete & Mortar Application Problems

Fresh concrete and mortar activities are frequent sources of pointless personal pollution. Materials and wastes blown or washed into a street, gutter or storm drain have a direct impact on Florida's waterways.

Sediment is the most common pollutant washed from work sites, creating multiple problems once it enters Florida's waterways. Sediment clogs the gills of fish, blocks light transmission and increases water temperature, all of which harm aquatic life, disturbing the food chain upon which both fish and people depend.

Sediment also carries with it other work site pollutants such as cement wash, asphalt, pesticides, cleaning solvents, motor oil, grease and fuel. Thus, poorly maintained vehicles and equipment leaking fuel and oil at the work site also contribute to water pollution.

Solutions

Best Management Practices that include the proper handling, storage and disposal of materials can prevent pollutants from entering waterways through the storm drain system.



Solutions for Concrete & Mortar Application Problems

♦ General Business Practices

Schedule projects for dry weather periods.

Keep materials out of the rain. Store both dry and wet materials under cover, protected from rainfall and runoff. Also, protect dry materials from the wind.

Secure open bags of cement to keep wind blown cement powder away from streets, gutters, storm drains, rainfall and runoff.



Cleaning Up

When cleaning up after driveway or sidewalk construction, wash concrete dust onto dirt areas, not down the driveway or into the street or storm drain.

Wash out concrete mixers and equipment only in designated wash-out areas, where the water flows into containment ponds or onto dirt.

Recycle cement wash water by pumping it back into cement mixers for reuse.

Never dispose of cement washout onto driveways, streets, gutters, storm drains or drainage ditches.

b During Construction



Place erosion controls (i.e. berms or temporary vegetation) down slope to capture runoff carrying mortar or cement before it reaches the storm drain.

Do not order or mix up more fresh concrete or cement than you will use.

Set up and operate small mixers on tarps or heavy drop cloths.

When breaking up paving (cement or asphalt), be sure to pick up all the pieces. Recycle them at a crushing company.

Dispose of small amounts of excess dry concrete, grout and mortar in the trash.

Never buy waste material. Recycle or dispose of it as hazardous waste material.



♦ Handling Materials & Wastes

Practice Source Reduction—minimize waste when ordering materials. Order only the amounts needed to complete the job.

Use recycled and recyclable materials whenever possible.



Recycle broken asphalt, concrete, wood and cleared vegetation. Non-recyclable materials must be taken to an appropriate landfill or disposed of as hazardous waste.

Use a crushing company to recycle cement, asphalt and porcelain rather than taking them to a landfill.

Contacts

To report a spill, learn about waste disposal or report illegal dumping please contact your local public works department. For more information contact your local Water Management District.

| Northwest Florida | 850-539-5999 |
|-------------------|--------------|
| St. Johns River | 386-329-4500 |
| Southwest Florida | 352-796-7211 |
| South Florida | 561-686-8800 |
| Suwannee River | 386-362-1001 |