



Why BMPs are needed for concrete slurry management

The concrete slurry created by diamond grinding, polishing, or saw cutting is a regulated substance and must be contained and disposed of properly. The slurry is made up of ground concrete sediment and cooling water; either the liquid or the sediment can be caustic or corrosive when their pH is over 12.5. Working on concrete that has soaked up hazardous spills (ie. oils, solvents, fertilizers, etc.) can release those hazardous substances into the slurry.

If the slurry were allowed run into storm drain, dried solids could clog storm sewer pipes and increase localized flooding. Slurry that is released into water delivers the sediment and all hazardous substances into rivers and lakes as a cloud. The cloudy water slows plant growth, clogs the gills of aquatic animals, and the high pH creates a toxic environment. Once the sediment settles to the bottom it reduces the depth of our waterways and continues to release hazardous materials into our water.

Best management practices

Management and Disposal Plan

Before you start work, be sure you understand state and local laws that may apply to slurry disposal. Assess the work site for any additional spills or pollutants. Determine the best way to collect the slurry. Have a plan to contain any leaks or spills in the work area. Test the slurry for pH and any pollutants before disposing of the material according to federal, state, or local regulations.

Disposal Methods

In some cases, the slurry can be spread on the ground. This is true when all of the following conditions are met:

- The slurry contains no hazardous materials
- The slurry has a pH less than 12.5 and greater than 6
- The owner of the disposal area allows the slurry to be spread on their property
- The disposal area is relatively flat (slope less than 3:1)
- The area has healthy, uniform, established vegetation
- There are no waterways or environmentally sensitive areas nearby
- There are no bridges or storm sewer inlets nearby
- It is unlikely that the slurry sediment would enter any form of waterway

When working near a waterway or storm inlet, slurry can be collected, separated to liquid and solids, and disposed of. Most collection systems use a vacuum to collect the grinding slurry. After collection, the solids are allowed settle to the bottom of a water-tight container. The clear water can be reused for more grinding, allowed to evaporate, or (if nonhazardous) be disposed of on the ground. The solids can be dried out and reused in your work or disposed of at a landfill in a suitable container.

