Concrete and Asphalt Production at Stationary Sites

This activity applies to you if you mix raw materials on-site to produce concrete or asphalt. It also applies to subsequent activities such as pouring concrete structures, and making other concrete and asphalt products. Mishandling during concrete production can introduce suspended solids and metals to stormwater runoff and cause pH increases in receiving waters. Asphalt production can introduce toxic hydrocarbons, other toxic organic compounds, oils and greases, and metals to stormwater runoff. Improper equipment washing may cause concrete and asphalt waste materials and liquids to be washed to storm drainage systems. Mobile concrete pouring and asphalt applications are covered under Activity Sheet A-20. This activity sheet does not cover concrete production at mining or sand and gravel sites covered by a King County sand and gravel permit or a National Pollution Discharge Elimination System (NPDES) sand and gravel permit issued by the Washington State Department of Ecology. However, if the BMPs conditioned in these permits do not adequately protect stormwater, surface, or ground water quality, more stringent BMPs may be required under King County Code 9.12.

MINIMUM REQUIREMENTS

The following BMPs, or equivalent measures, methods, or practices, are required if you are engaged in concrete and asphalt mixing and production:

1 Discharge all process water from production, pouring, and equipment cleaning activities to a sump, process water treatment or recycling system, or sanitary sewer system. Never wash contaminated water to the storm drainage system.

☞ See BMP Info Sheet 2 in Chapter 5 for information on disposal options.

2 Contain the production and pouring area to prevent stormwater runon so pollutants are not washed to stormwater or natural drainage systems.

☞ See BMP Info Sheet 5 in Chapter 5 for information on containment and run-on prevention.

3. Prevent cement dust from settling onto surfaces where it will contaminate stormwater runoff. Sweep up any settled dust. Never hose down cement dust to the storm drainage system.

4. Required Routine Maintenance:

   Sweep the production and pouring area as needed if it is paved. Collect loose chunks of aggregate and raw material particles for recycling or proper disposal. Do not hose down the area to a storm drain.

ADDITIONAL BMPs

The following BMPs are optional unless the above minimum required BMPs do not provide adequate source control:

1. Use an oil control device in the catch basins to treat stormwater runoff. See the King County Surface Water Design Manual and BMP Info Sheets 9 and 10 in Chapter 5 for further information.

2. Pave the mixing, production, and/or pouring area(s) with a slope that drains to a central collection area. For concrete production and pouring activities, a sump drain should not be provided because it would be quickly clogged with hardened concrete. It may be wise to segregate the mixing and pouring area from the curing area because wastewater from curing applications could be collected by a drain. By sloping the pavement to a central location, loose chunks of concrete or asphalt aggregate can be collected more easily and recycled or disposed of properly.

For more information or assistance in implementing these best management practices, contact the King County Department of Natural Resources and Parks Water and Land Resources Division at 206-296-1900.

Reader Note: The above requirements are the minimum required BMPs. If these BMPs fail to prevent discharges to the storm drainage system, you will be asked to take additional measures to correct the continued pollution discharges.