

Working With Concrete

Three Pollutants Associated with Construction Activities

1. Sediment is a common component of stormwater, and can be a pollutant. Sediment can be detrimental to aquatic life (primary producers, benthic invertebrates, and fish) by interfering with photosynthesis, respiration, growth, reproduction, and oxygen exchange in water bodies. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.

2. Gross Pollutants (trash, debris, and floatables) may include heavy metals, pesticides and bacteria in stormwater. Typically resulting from an urban environment, industrial sites and construction sites, trash and floatables may create as aesthetic "eye sore" in waterways. Gross pollutants also include plant debris (such as leaves and lawn-clippings from landscape maintenance), animal excrement, street litter, and other organic matter. Such substances may harbor bacteria, viruses, vectors, and depress the dissolved oxygen levels in streams, lakes, and estuaries sometimes causing fish kills.

3. Oil and grease includes a wide array of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Sources of oil and grease include leakage, spills, cleaning and sloughing associated with vehicle and equipment engines and suspensions, leaking and breaks in hydraulic systems, restaurants and waste oil disposal.

Prevent Stormwater Pollution

In compliance with federal EPA and state IDEM requirements, municipal lities in Johnson County areworking hard to let everyone know what they can do to help. The problem is simple: anything that goes down the storm drain ends up in our local waterways, including the Young's Creek drainage basin. It is our goal to eliminate all potentially harmful discharges to the storm drains to protect our environment and natural wildlife for future generations.

Protecting Tomorrow Starts Today

Stormwater Management for Working With Concrete

- All action should ensure that sand, concrete, grout and silt do not enter the storm drain.
- Do not mix more fresh concrete or cement than you need for each project.
- If rain is predicted, cover concrete-mixing equipment with tarps or a simple structure to avoid rain contact.
- Cover and protect bags of cement and plaster after they have been opened. Be sure to keep wind-blown cement powder away from gutters, storm drains, rainfall, and runoff.
- Wash down exposed aggregate concrete and equipment only when wash water can flow onto a dirt area, or be collected, pumped, and disposed of properly to a process water treatment system. Make sure runoff does not reach gutters or storm drains.
- Properly contain and collect any discarded concrete slurry.
- Never wash excess material from bricklaying or patio or driveway construction into a street or storm drain. Empty mixing container onto a dirt area, or allow material to dry and put in trash.
- Dispose of small amounts of excess dry concrete, grout, and mortar in the trash. Call your local refuse hauler for weight and size limits.
- Collect and reuse excess abrasive gravel and sand. Recycle broken concrete and asphalt.
- Never hose down driveways, sidewalks, or streets. Dry sweep or shovel and collect for proper disposal instead.