

MANAGING CONCRETE WASHOUT – ARE YOU IN COMPLIANCE?

The US Environmental Protection Agency (EPA) and the Minnesota Pollution Control Agency (MPCA) mandate the use of effective Best Management Practices (BMPs) to prevent pollution. Therefore, proper concrete washout procedures should already be included in Storm Water Pollution Prevention Plans. However, because so many sites have had inadequate washout management, the MPCA expects to add specific new requirements in its forthcoming construction storm water permit: *“All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.”*

“Concrete washout” is the residue and contaminants from washing concrete trucks, pumps, mixers, chutes, hand tools, and wheelbarrows. Cementitious products (like grout, mortar, plaster, and stucco) and activities (like saw-cutting, coring, grinding, and grooving) can also result in concrete washout. This type of wastewater is highly alkaline (pH 12), caustic, and corrosive. When it is not properly managed, it can pollute surface water and groundwater by changing its pH, increasing the toxicity of other substances, and reducing water clarity. Each of these changes is detrimental to aquatic life and their habitats. Concrete washout that is dumped on the ground and absorbed into the soil can substantially alter the soil and inhibit future plant growth.

Here are some tips for properly managing concrete washout:

- Train workers so they do not dump concrete washout on the ground or allow it to enter storm drains, open ditches, streets, and waterways. (Download copies of the “Managing Concrete Washout” brochure from www.rochesterstormwater.com for distribution to your employees and subcontractors.)
- When feasible, truck washout should occur at the concrete plant.
- When washout is needed on a construction site, use temporary storage facilities large enough to contain all the liquid and concrete waste generated by washout operations.
- Keep washout areas at least 50 feet from storm drains, open ditches, and water bodies and install signs instructing operators to use the facility.
- One containment option is to use manufactured, watertight, portable washout containers.
- Alternatively, a plastic-lined containment area such as a holding pit, bermed basin, roll-off bin, or portable tank that prevents runoff from entering it can be constructed. The liner should be at least 10 mil thick and leak free.
- Where pavement is absent, construct a stabilized vehicle entrance to the containment area.
- Keep containment areas away from construction traffic to reduce the likelihood of accidental damage and spills.
- Inspect the containment areas daily to insure the sidewalls are intact, leaks are absent, and adequate capacity remains.
- Cover the containment area before rainstorms to prevent overflows.
- Washout facilities must be cleaned, or new facilities constructed and ready for use, once the washout container is 75% full.
- If stored liquids have not evaporated when 75% capacity is reached, contact the Rochester Water Reclamation Plant for disposal assistance (281-6190, ext. 3006).
- Hardened solids can be crushed and hauled away for recycling or disposed in accordance with local construction waste management regulations.
- Place new plastic in the containment facility each time it is cleaned and complete other needed repairs before using the containment facility again.