

MDOT'S Storm Water Management Program – Pollution Prevention and Good Housekeeping on Construction Sites

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MDOT is committed to environmental stewardship and has programs and specifications that require MDOT Staff and contractors to keep pollution from entering Michigan's waterways. In previous articles, MDOT discussed their Soil Erosion and Sedimentation Control and Illicit Discharge Elimination Programs; both targeting pollution prevention on construction sites. These programs are critical to protecting Michigan's water resources, but there is yet another fundamental program that complements the other two, the Pollution Prevention and Good Housekeeping Program.

Pollution Prevention Requirements

The Pollution Prevention and Good Housekeeping Program is applied at maintenance facilities and on construction sites. Each MDOT maintenance facility has a Pollution Incident Prevention Plan which addresses procedures specific to that facility, while construction sites are overseen by MDOT Standard Specifications for Construction (MDOT Standards). While many of the general practices and pollution prevention goals are the same between facilities and construction sites, there are some practices that are more likely to occur on construction sites that need additional precautions, such as cleaning bridges over waterways. This article will focus on MDOT's requirements for pollution prevention and good housekeeping on construction sites.

Materials, Storage, Maintenance

Every day, contractors on construction sites encounter polluting and hazardous materials. It is the contractor's job to make sure all proper procedures are followed and to immediately clean-up and report any spills or releases. The information below describes polluting and hazardous materials and provides some key techniques for proper storage, handling, and management of construction materials.

Note: The tips contained in this article do not take the place of federal, state and local laws and regulations, but are intended to give a broad overview of some MDOT specifications related to pollution prevention and good housekeeping on construction sites. The MDOT Standards should always be referred to for complete details.



Sanitary Waste (MDOT Standards, subsection 107.05) – Temporary sanitary facilities may be used on construction sites. The facility shall be maintained properly and sanitary waste shall be collected and disposed of by a licensed sanitary waste management contractor.

Temporary facilities should be located away from storm drains, watercourses, areas of high traffic, and areas prone to flooding. Wastewater from sanitary facilities should not have access to drainage systems, receiving waters, or the MDOT right-of-way, and should be connected to the sanitary sewer system where applicable and feasible.

Hot Mix Asphalt Plants, Concrete Plants, and Crushing Plants (MDOT Standards, subsection 107.15.A.2) - All hot mix asphalt plants, concrete plants, and crushing plants shall meet the requirements of the Michigan Department of Environmental Quality (MDEQ) and obtain applicable MDEQ permits for portable plants.

Concrete Truck Washout (MDOT Standards, subsection 107.15.B) – Facilities and construction work areas where concrete is used as a construction material, demolition occurs, or concrete trucks and equipment are washed on-site should minimize any waste from entering nearby storm drains and watercourses.



Vehicle and equipment washing should only be conducted when they remain on-site during the construction project. Wash areas should have berms in designated washout pits; located away from storm drains and watercourses. The washout pit should be cleaned once 75% of the capacity is reached.

Polluting/Hazardous Materials (MDOT Standards, subsection 107.15.C) – Many ordinary construction materials are classified as hazardous or polluting waste when leaked or spilled. These materials include oil, gasoline, lubricants, solvents, paint, asphalt products, fertilizer, and concrete curing compounds.

Hazardous and polluting materials should have secondary containment with restricted access to prevent vandalism. Clean-up materials should be nearby including spill kits, brooms, dust pans, mops, rags, goggles, and plastic and metal trash containers. Storage containers should be watertight to prevent discharges to nearby watercourses and storm drains.

Fueling should take place in clearly identified and designated “Fueling Areas.” The station should be downstream of any storm drainage structure and watercourse, on level grade, and constructed with an impermeable surface. Barriers such as berms, sand bags or dikes should be present to prevent storm water contact.

Dumpsters and Solid Waste (MDOT Standards, section 209) – Remove and dispose of all debris, including fences, fallen timber, logs, guardrail sections and posts, rocks, boulders, and all other rubbish. All job sites should remain orderly and free of trash, minimizing the quantity of waste generated. Dumpsters or trash cans should be covered and located away from storm drains and watercourses. Dumpsters should be emptied weekly, or more frequently as necessary, and waste should be disposed of properly. Dumpster washout on-site is not acceptable.

Diamond Grinding Concrete Residue (MDOT Standards, subsection 603.03.C) - The Project Engineer’s approval on the spreading/disposal method must be obtained before beginning grinding. The residue must not enter an enclosed drainage system, or be spread within 5 feet

from the edge of the curb, within 100 feet of a natural stream or lake, or within 5 feet of a water-filled ditch. If surface runoff occurs, the residue must be collected and hauled to a suitable location on the project.

Diamond Grinding Slurry from Ride Quality Hot Mix Asphalt (HMA) (MDOT Special Provision) - Diamond grinding slurry from ride quality HMA is a liquid industrial waste and must be transported by a licensed liquid industrial waste hauler to a Type II municipal landfill or licensed liquid industrial waste disposal facility.

Cleaning Bridges Over Waterways (MDOT Standards, subsection 715.03.B.2) - In addition to the general containment requirements for cleaning bridges, cleaning bridges over waterways requires a barge or temporary work platform be located under the enclosure to collect spent material and prevent it from entering the waterway. A floating boom must also be stretched across the waterway 200 feet downstream and down wind of the bridge to collect materials.

All of these procedures, maintenance practices, and techniques are required to minimize the discharge of pollutants to our precious waterways. As always, when it comes to pollution, an ounce of prevention is worth a pound of cure! For more pollution prevention information, visit us on-line at www.michigan.gov/stormwatermgt.