

## UMD 302 – Illicit Discharge Detection and Elimination BMP

### Title: **Illicit Connection Detection – Examples of Illicit Discharges**

"Federal regulations define an illicit discharge as '...any discharge to a MS4 that is not composed entirely of storm water...' with some exceptions. ... Illicit discharges are considered 'illicit' because MS4s are not designed to accept, process, or discharge such non-storm water wastes. ... Illicit discharges enter the system through either direct connections (i.e. wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (i.e. infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain)."

<http://www.epa.gov/npdes/pubs/fact2-5.pdf>

#### **EPA Storm Water Phase II Final Rule Fact Sheet Series**

2.5 – Illicit Discharge Detection  
and Elimination

<http://www.epa.gov/npdes/pubs/fact2-5.pdf>

### **Examples of Illicit Discharges**

#### **Improperly connected / maintained sanitary sewers**

Improper connections of indoor floor drains to the storm system are difficult to discover, since these drains rarely have any flow, until an unexplainable exterior contaminant is linked to an interior spill. In the old days, equipment room sump pits and loading dock floor drains were sometimes connected to the storm sewer. Cracked or broken sanitary lines can leach effluent into the groundwater, later to be picked up in nearby drain tile, or leached directly into nearby cracked or broken storm sewer lines.

#### **Dewatering**



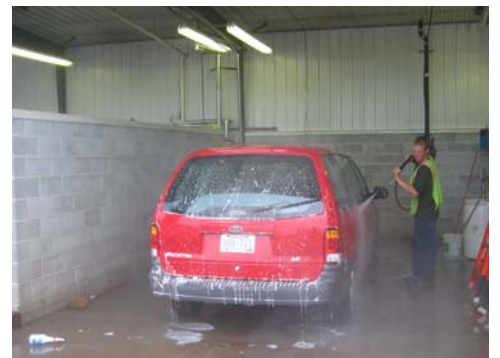
Dewatering construction sites, draining swimming pools, or draining ponds into the storm water system is considered an illicit discharge. Construction water requires pre-treatment and/or an MPCA permit prior to discharge into the storm water system. Swimming pools must be dechlorinated prior to non-sanitary discharge (See UMD 621). The MPCA reserves the right to require a separate discharge permit prior to draining a storm water containment or recreational pond.



#### **Equipment washing**



Vehicles or equipment wash water should not be allowed to enter the storm water system. If there is no danger to the ground water, washing (spraying the under side of lawn mowers, rinsing horticultural equipment, etc.) can be done in grassy areas. Washing of vehicles and equipment that could release oils, greases, or other contaminants shall be washed in a location that drains to sanitary sewer. Construction tools and equipment should not be washed or rinsed in a manner that allows paints, fines or other materials to contaminate ground or surface waters.



## Improper vehicle / machinery maintenance (drippings)



The small drips coming from your oil pan or radiator may not seem like much when you see that dime size puddle on your garage floor, but imagine multiplying that by more than 5000 cars day after day, year after year. With the expanse of parking lots and the sheer volume of cars coming and going from UMD, those small individual drips can add up to a substantial problem. Every rain washes a little more of that material into one of our creek beds.



## Improper disposal



Often people do not think about what happens when they don't put their trash into a garbage can or pick up after their pet. Others who pour liquids onto the ground or into catch basins may think that storm water is treated like sanitary sewer before it discharges into Lake Superior. Still others think that pet waste, cigarette butts, and paper are biodegradable and won't hurt the environment.



Litter plugs up storm sewers, destroys the visual beauty of our area, and harms aquatic and wildlife. It washes and blows into our creeks and ponds from several sources, the most common on campus are:

- Litter dropped by pedestrians, spectators, or blown from cars
- Overflowing or unclosed trash cans and dumpsters
- Construction site debris blowing off site

Oils, paints, and other liquids dumped or washed into the catch basins on campus end up directly in the streams and in Lake Superior.

When pet waste is not picked up and not properly disposed of, it can cause high levels of bacteria (pathogens) in our streams and lakes.

For more information on oils and pet wastes see the Duluth stream website for "Preserve Water Quality by Understanding Stream Impacts" at <http://duluthstreams.org/understanding/impact.html>

For additional information on illicit discharges in the Duluth area see [http://duluthstreams.org/stormwater/illicit\\_discharge.html](http://duluthstreams.org/stormwater/illicit_discharge.html).