

UMD 618 – Pollution Prevention /Good housekeeping BMP

Title: **Fueling System Spill Protection – Procedure Review**

The fueling system at the Robert W. Bridges Fleet and Grounds Maintenance Facility is fairly new. It is used to fuel university service vehicles and to fill small gas cans.

The system is equipped with a Veeder Root electronic monitoring system that checks the fuel levels in both the diesel and unleaded gasoline tanks. Readings of the tanks are taken daily; a printout of past activities is put into a spreadsheet. There are no underground (out of tank) leak detection sensors. Any leak is detected by comparing fuel levels with fueling activities. The Veeder Root system also monitors water levels in the tank and performs weekly electronic tests for tank tightness. Monitoring logs are kept at the facility.

The fueling procedure used at this facility is a standard one; there is only a very small risk of fuel overflow when manually filling small gas cans. New pumps were installed in February 2004, reducing the possibility of pump malfunctions resulting in a spill.

The area is adequately equipped with spill cleanup material and tools, such as oil absorbing boom and pads; the material is located inside the maintenance garage. In the event of spills, personnel are advised to place booms around storm water entry (man hole) in case of large spills, and around the spilled material in order to contain it first and then clean it. Contaminated material is then collected in proper waste containers, labeled as hazardous waste and shipped for disposal as such according to university hazardous waste rules (<http://www.dehs.umn.edu/hwd/guidebook/>).

Facilities Management is responsible for making sure that spill cleanup material is adequately restocked after each use and signage is visible informing users of spill prevention methods and what to do in case of accidental spills.

The storm water from the fueling area is directed through a Stormceptor oil and sediment separator. Annual monitoring of this device shows only a light sheen of hydrocarbons in the storm water system. Therefore the impact of fueling operations on storm water is very minimal and no drastic procedural changes are necessary.

Recommendations

1. Post the area by the fuel pump with signs describing proper fueling and spill response/prevention procedure.
2. Purchase additional spill retention equipment such as a magnetic or rubber mat to place on storm sewer entry during a spill emergency.
3. Label and place spill retention and cleanup material storage container in a highly visible, easily accessed area.
4. Provide annual training to student grounds crew on ways to prevent spills and minimize overflow when filling small cans.
5. Add fuel spill prevention, spill response, and reporting procedures sections to biannual drivers training meetings.

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