

**WASH PADS - REGULATIONS AND PRACTICAL ISSUES**  
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Equipment washing areas are common on golf courses and part of the daily routine. These wash stations can range from rather simple systems where the machines are rinsed off in a turfed area to those that use complex equipment that treats the water for discharge or recycles the wash water. The simple objective of the washing operation is to remove the clippings from the equipment so it's clean for the next use. Along with the clippings, dirt collected on the decks, reels, wheels, and carriage of the mowers are also removed in the wash process. While these wash stations are not usually targeted for engine cleaning, petroleum products can be dislodged from grease fittings, engines, or hydraulic systems and is considered incidental to the main purpose of removing clippings and dirt.

The important environmental considerations of these stations is to properly handle the organic materials (clippings and dirt) and water generated from this operation. In Michigan there is regulatory backing that prohibits the discharge of the wash water in a manner that would leave the property and potentially degrade other water resources. The guts of the regulatory direction is found in Part 31 of Michigan Act 451 of 1994, a document called - Water Resource Protection. The important component of this law is a broad brush statement which declares:

It shall be unlawful for any persons directly or indirectly to discharge into the waters of the State any substance which is or may become injurious to the public health, safety or welfare; ... or which is or may become injurious to the value or utility or riparian lands; ... or whereby the value of fish and game is or may be destroyed or impaired."

The potential impacts from the washing operation to "waters of the State" are the nutrients in the clippings (primarily phosphorous and nitrogen), any petroleum products that might be dislodged from the equipment, and any pesticide or fertilizer products that might be attached to the leaf surface. Of these potential contaminants, the primary concern is the nutrients associated with the clippings which is approximately the same percentage by weight found in most animal manure. Therefore, identifying clippings as "green manure" is an appropriate mental image. Everyone knows what happens to a pile of grass clippings that gets hot and wet - it can quickly turn anaerobic, turn into a slimy, ugly mess and create a powerful stench. This slurry will release the phosphorous and nitrogen as the clippings break down and be available to move downstream if they are not removed from the water system.

The regulatory authority surrounding this issue is held within the Surface Water Quality Division and the Waste Management Division of the MI Department of Environmental Quality. We are currently working with them to develop criteria for the handling of golf course wash water. There are several clear messages regarding these systems at this time. First, don't use any soaps or degreasers. These products cloud the natural microbial breakdown pathways and tend to dislodge petroleum products from the machines. Second, you may not discharge wash water to surface water that flows off your property and has the potential to degrade water quality. This includes storm water plumbing systems. You may discharge the wash water to a sanitary sewer system with permission from the local sewage treatment center. In most cases, your discharge of "green manure" and incidental petroleum's will not be problematic for the treatment center. Third, you may not discharge the water underground. This is considered a "groundwater discharge" like a septic system and would be regulated through the same system as any home septic system.

With those directives in mind, what are you supposed to do with this slop? The intent of our discussions with the agencies in the coming months is to develop clear direction on a process to collect the organic materials and release the water to the ground surface - either over a stone or turf dispersal area where the water can spread out and infiltrate - essentially an above ground leach field. Several systems have been developed over the this last summer around the state and we will discuss and review these designs during the session.