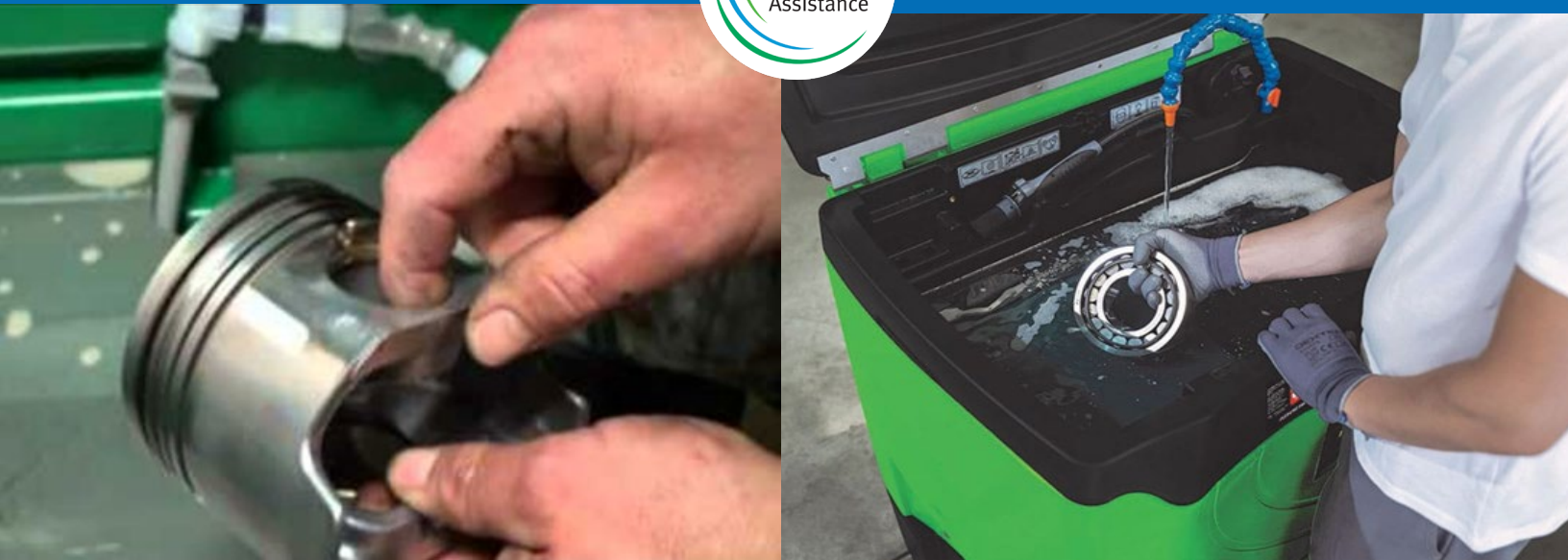


# BIOREMEDIATING PARTS WASHERS



## Thurston County Business Pollution Prevention Program

☎ 360-867-2664

📞 TDD: 360-867-2603

Small changes  
make a  
**BIG**  
difference!

## WHAT'S NEW ABOUT BIOREMEDIATION AND PARTS WASHERS?

A new generation of aqueous parts washer have come on the market, and they have some significant advantages:

- 💧 Cleans like a solvent but eliminates fire and health hazards
- 💧 Doesn't require oil skimming
- 💧 Doesn't produce contaminated water to manage
- 💧 Easy to use and can be portable
- 💧 No need for maintenance/service agreements
- 💧 Less fluid loss from evaporation

## WHAT IS BIOREMEDIATION?

Bioremediation is the process of using living organisms to break down hazardous chemicals into non-toxic chemicals. Bioremediation microbes have been successfully used for large oil spills and to clean contaminated soil.

In a parts washer, the bioremediation process begins when the cleaning agent in the fluid breaks the bond between the contaminants and the part being washed. The contaminants then go through a filter, or mat, where particles are captured. When the cleaning solution flows through the mat, a combination of microbes and nutrients are released into the fluid. The fluid cleans the parts, and the microbes clean the fluid. This process releases water, which dissipates in the fluid and ultimately evaporates. The carbon that is released from this process is then used as a nutrient for the microbes. The fluid is thereby cleaned and ready for continued use.

## MAINTAINING YOUR BIOREMEDIATION SYSTEM

With proper management, bioremediation cleaning solutions can last longer than other solutions. Extending the life of a bioremediation solution will save you money by reducing your chemical footprint and waste disposal costs. Doing the following will help maximize the life of your bioremediation solutions:

- ◆ Maintain and change out microbial filter pads as described by the manufacturer. The used mat with the captured particulates can be disposed of as solid waste, if tested and determined to be non-hazardous.
- ◆ Refill the solution when loss has occurred through evaporation or use. The cleaning solution will only need to be topped off, reducing the need for complete solution change outs.
- ◆ Maintain the unit at the recommended temperature to ensure optimal environment for microbial reproduction and digestion. Check with the manufacturer of your system for proper temperature range and keep your unit(s) plugged in and turned on.

## MANAGING BIOREMEDIATION CLEANING WASTES

Since bioremediation waste is typically non-toxic, waste management is often easier and less expensive than traditional aqueous systems. How you manage your spent bioremediation waste depends on the type of cleaning solution used, type of equipment, and the type of wastewater treatment system at your facility (i.e., onsite septic, oil/water separator, municipal sewer system). *It is illegal to dispose of any parts washer solution into drywells, onsite septic systems, storm drains, or onto the ground.* For additional information on best management of your spent bioremediation washer waste contact the Thurston County Business Pollution Prevention Program.

For questions on small business hazardous waste, contact the Thurston County Business Pollution Prevention Program at (360) 867-2664, during regular business hours or TDD (360) 867-2603 or email: [PHSSPollutionPrevention@co.thurston.wa.us](mailto:PHSSPollutionPrevention@co.thurston.wa.us).

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