



Do you wash vehicles, support equipment or aircraft?

Would you like to improve this process in the following areas?

- **Meet environmental compliance regulations.** Meet installation POTW/NOTW pretreatment requirements by eliminating the discharge of pollutants in wash water. Reduce wastewater disposal and the risk of undetected leaks. Media area is wastewater.
- **Improve workers' safety and health.** No change from current operations.
- **Increase productivity.** No change from current operations.
- **Save money.** Conserve water. Reduce hazardous waste disposal costs.



Closed Loop Wash Water Recycling System

*Navy activities pressure wash vehicles, support equipment and aircraft, discharging the used wash water to a sewer or Publicly Owned or Navy Owned Treatment Works (POTW/NOTW). These waste waters typically contain detergents, fuel, oils, metals and other contaminants that may be subject to pretreatment requirements for discharges. A Closed Loop Wash Water Recycling System can augment an activity's Wash Rack System by providing a process that reclaims used wash water. Wash water is collected, pumped through a combination of oil/water separators, coalescers, and filters that recycle the wash water, and stored until needed. A Closed Loop Wash Water Recycling System reduces the need for make-up water, new detergent, and saves costs through zero discharge of wastewater. The Closed Loop Wash Water Recycling System is being used successfully at NAS North Island and other Navy installations. **This equipment is available through the Navy Pollution Prevention Equipment Program (PPEP).***

How can you achieve these improvements?

Use a wash rack with a Closed Loop Wash Water Recycling System.

How does this equipment work?

Instead of using wash water and detergent only once before discharging to the POTW, the Closed Loop Wash Water Recycling System allows you to reclaim and reuse the wash water.

How will this equipment save you money?

This system eliminates the cost of procuring fresh water and detergent and reduces the volume and costs for wastewater disposal. A typical cost to implement is approximately \$29,000 including installation.



Typical Process Flow Diagram



How can this technology eliminate or reduce pollution?

Implementation will result in the following pollution reductions:

- Dramatic volume reduction of wastewater.
- Dramatic reduction in the use of detergents.
- Elimination of waste water discharges to POTWs.

Which shops can benefit most from this technology?

This technology can be used at activities that regularly clean vehicles, support equipment or aircraft. Typical shops include:

- Motor Pools
- Car Washes
- Auto Hobby Shops
- Construction Equipment Cleaning
- Public Works
- Golf Courses
- Aircraft Cleaning

How can this technology reduce regulatory compliance concerns?

This technology recycles wash water that is usually discharged after it is used to clean vehicles, construction equipment and aircraft. Thus, this technology reduces the volume of wastewater and hazardous waste.

Use will result in the following regulatory compliance benefits:

- Help meet installation POTW/NOTW pretreatment requirements by eliminating the discharge of contaminants in wash water.
- Help meet energy efficiency and water conservation requirements of Executive Order 12902.

Achieving Environmental Compliance Through Pollution Prevention

Every day the Navy faces the challenge of operating and maintaining the fleet while complying with environmental regulations. This burden can be reduced by using pollution prevention technologies and methods to reduce compliance requirements. This fact sheet is one in a series designed to encourage activities to use pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

For additional information, contact:

PPEP Equipment Book (<http://141.150.233.37/p2/servlet/DocListServlet?wEID=26>)

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