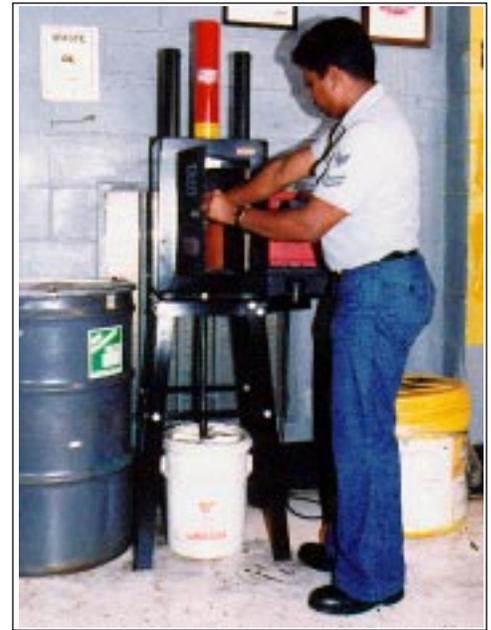




Do you dispose of used oil filters as hazardous waste?

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

- **Meeting environmental compliance regulations** -- Reduce hazardous waste disposal by draining and crushing used oil filters. Oil filters removed of free-flowing oil can be reclassified as non-hazardous waste providing certain criteria are met, per EPA regulation 40 CFR 261.4(b)(13).
- **Improving workers' safety and health** -- No change from current operations.
- **Increasing productivity** -- Reduce time required to handle used oil filters as hazardous waste.
- **Saving money** -- Eliminate cost of hazardous waste disposal; minimize volume of waste to dispose and sell crushed filters for scrap.



Oil Filter Crushing Equipment

*Crushed filters can be sold as scrap metal if the following criteria are met: the filters are not terne lined, have not been mixed with HW and have been gravity hot drained. Hot-draining requires puncturing the dome end of the filter and allowing it to drain before crushing. Gravity draining may include dismantling the filter or any other method that drains free-flowing oil from the filter. Some states, however do not allow landfill disposal of crushed oil filters regardless of how well they have been drained. The EPA recommends a minimum hot-drain time of 12 hours to ensure removal of all free-flowing oil. Successful and cost-saving oil filter crushers have been installed at several Navy installations such as NAVSTA Roosevelt Roads, NAVSTA Everett, and NAF Misawa. **This equipment is available through the Navy Pollution Prevention Equipment Program (PPEP).***

How can you achieve these improvements?

Implement Oil Filter Draining and Crushing Equipment.

How does this equipment work?

Oil filter crushers hydraulically puncture and crush filters to reduce waste volume and collect free-flowing oil in a drum for disposal or recycling.

How will this equipment save you money?

Oil filter crushers eliminate the disposal cost of used oil filters. Cost to implement varies from \$1,500 to \$5,000; units can pay for themselves within a year. For a complete economic analysis refer to Joint Service P2 Opportunity Handbook Data Sheet 6-11.

Typical Process Flow Diagram



How can this technology eliminate or reduce pollution?

This technology can eliminate a hazardous waste stream (used oil filters). Implementation will also result in the following pollution reductions:

- Opportunity for Oil and Scrap Metal Recycling.

Which shops can benefit most from this technology?

This technology can be used in processes that maintain vehicles and engines. Typical shops include:

- Automotive Repair
- Aircraft Engine Maintenance
- Equipment Motor Pools

Take action: How can you implement this technology?

- **Activity Shop & Work Center Personnel.** Contact your Pollution Prevention Program Manager. The P2 Program Manager can provide more information and conduct a more detailed analysis, and may be able to provide this equipment at no cost to a Shop or Work Center.

- **Activity Pollution Prevention Manager.** Request this equipment through the Navy P2 Equipment Program (PPEP). Depending on the application, the Environmental Program Requirements Cookbook may contain project submission information for annual budget requests sent to your claimant.

- **For Additional Technical Information.** More information about this technology can be found on Joint Service P2 Opportunity Handbook Data Sheet 6-11 (Web: <http://www.nfesc.navy.mil/enviro/index.html>) and in the PPEP Book (Web: <http://www.lakehurst.navy.mil/p2/index.htm>).

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 implementing pollution prevention technologies and methods to reduce compliance requirements. This Fact Sheet is one in a series designed to encourage activities to implement pollution prevention technologies and methods. The overall goal of this series is to promote sustained environmental compliance at the lowest life-cycle cost.

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