Navy Environmental Quality Fact Sheet

Do you use absorbent materials to clean up fluid spills?

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

- ***Meet environmental compliance regulations*** - Reduce disposal of used absorbent materials. Media areas are hazardous waste and oil spill programs.
- ***Improve workers' safety and health*** - Reduce exposure to fluids from manual wringing of absorbents.
- ***Increase productivity*** - No change from current operations.
- ***Save money*** -- Reduce the procurement and disposal costs of absorbents.

Compact Absorbent Pad Wringer

The Absorbent Pad Wringer (as written in EQI Fact Sheet 2-6) is a heavy-duty, manually operated, wringing system for removing fluids from absorbent pads. The pads can then be reused after fluid removal. The next generation of absorbent pad wringers, called Compact Absorbent Pad Wringers, are suitable for use on Navy ships. The Compact Absorbent Pad Wringers have been re-designed for use aboard Navy surface vessels. The process may soon be approved for submarines. The Compact Absorbent Pad Wringers have all of the same advantages of the absorbent pad wringers used on shore facilities. In addition, the compact units are more easily transported, can be used in more confined spaces, and can easily handle smaller spills. Compact Absorbent Pad Wringers are being used successfully on a LHA class vessel.

How can you achieve these improvements?

Use Reusable Synthetic Absorbent Materials and a Compact Absorbent Pad Wringer.

How does this equipment work?

A Compact Absorbent Pad Wringer is used to remove fluids from absorbent pads, thereby enabling the pads to be reused and the fluid to be recycled.

How will this equipment save you money?

Procurement of new absorbent will be reduced. Disposal costs of used absorbent will be reduced. The cost to implement is approximately $750 and the equipment typically pays for itself in less than a year

Typical Process Flow Diagram

MATERIALS
Fluids
Shop towels and rags
Absorbent materials

→

PROCESS NAMES
Spill Control
Spill Recovery

→

WASTE PRODUCTS
Used spill rags
Absorbent materials
Waste fluid

How can this technology eliminate or reduce pollution?

The Compact Absorbent Pad Wringer can remove up to 90% of the liquids from absorbents. The oil can then be recycled in many cases. Implementation of this P2 technology will result in the following pollution reductions:

- Dramatic reduction in used oil disposal.
- Reduction of disposal of used towels/absorbent material as solid and/or hazardous waste.

Which locations can benefit most from this technology?

All facilities and surface vessels that use absorbent pads.

How can this technology reduce regulatory compliance concerns?

Use of the Compact Absorbent Pad Wringer reduces the amount of hazardous waste being disposed. Implementation will result in the following regulatory compliance benefits:

- Reduction in hazardous waste helps facility meet the waste minimization requirement under RCRA, 40 CFR 262.41 (a) (6).
- Helps facilities comply with the waste reduction and recycling requirements of Executive Order 13101.

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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