



## Do you perform periodic ARFF vehicle foam distribution system checks using AFFF?

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

- **Meet environmental compliance regulations.** Meet installation wastewater treatment system pretreatment requirements by eliminating the discharge of Aqueous Film Forming Foam (AFFF) into wastewater. Media area is wastewater.
- **Improve workers' safety and health.** No change to current operations.
- **Increase productivity.** Improve fire fighter mission readiness.
- **Save money.** Reduce collection and treatment of AFFF wastewater. Reduce procurement cost of AFFF concentrate.



External NoFoam Unit for ARFF Vehicles

*The external NoFoam Unit is an innovative technology for fire departments to use in performing periodic foam distribution system checks on their Aircraft Rescue and Fire Fighting (ARFF) vehicles. The unit does not alter the function of the vehicle fire fighting capabilities and is universal to any ARFF vehicle model. The unit can be mobile (trailer mounted) or stationary, is battery powered and recharged using a solar panel. Ninety-five percent of the NoFoam Unit hardware is installed exterior to the vehicle on a mobile platform. The hardware consists of a control panel with monitor, flow sensor piping, and surrogate fluid. A retrofit module is installed in the foam distribution system for the ARFF vehicle to allow the connection of the NoFoam Unit. In some vehicles an additional isolation valve installation is required. This technology is available through the Navy Pollution Prevention Equipment Program (PPEP).*

### How can you achieve these improvements?

Use the NoFoam Unit for Aircraft Rescue and Fire Fighting (ARFF) vehicle foam distribution system checks.

### How does this system work?

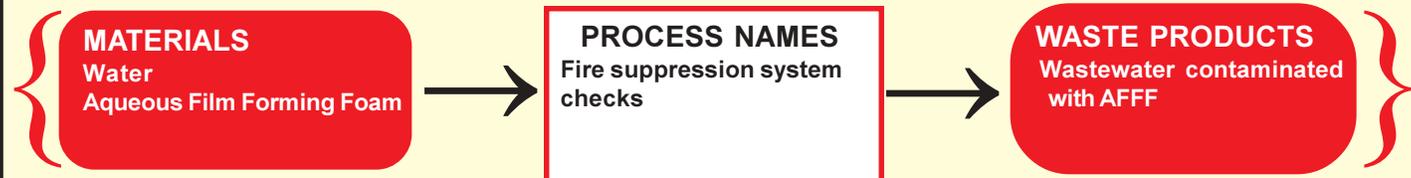
By using a dye-water solution, the NoFoam Unit permits periodic ARFF vehicle foam distribution system checks without AFFF wastewater release.

### How will this system save you money?

Eliminating the AFFF waste generated from the ARFF vehicle periodic foam distribution system checks eliminates the costs of AFFF wastewater collection and disposal. Also, cost is avoided by not having to procure AFFF concentrate to replenish the spent AFFF from ARFF vehicle foam system checks. Capital cost of equipment ranges from \$15K to \$25K, depending on the vehicle model.



## Typical Process Flow Diagram



How can this technology eliminate or reduce pollution?

This technology reduces the amount of AFFF contaminated wastewater generated during routine ARFF vehicle foam distribution checks. Implementation will result in the following pollution reduction:

- Reduce the volume of AFFF contaminated wastewater requiring disposal or treatment.
- Reduce the volume of AFFF contaminated wastewater discharged to POTWs.

Which activities can benefit most from this technology?

This technology may be implemented at activities with ARFF vehicles in their fire fighting arsenal. Activities that would most benefit from this technology include:

- Naval air stations
- Naval stations
- Research laboratories
- Fire and emergency services

How can this technology reduce regulatory compliance concerns?

This technology provides an environmentally compliant method for fire departments to perform ARFF vehicle foam distribution checks. Implementation of this technology will result in the following regulatory compliance benefits:

- Help activities eliminate wastewater discharges prohibited by the Clean Water Act and 40 CFR 110.
- Help activities meet pretreatment standards for wastewater discharges into a POTW (40 CFR 403).
- Help activities meet the waste reduction requirements under RCRA (40 CFR 262).



### 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:

*Naval Facilities Engineering Service Center (NFESC) Project Test Report for External NoFoam Unit, expected to be completed July 2002.*

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