



Navy Environmental Quality Fact Sheet



Do you respond to harbor oil spills or leaks?

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

- **Meet environmental compliance regulations.** Detect and locate oil spills efficiently and consistently, permitting quicker cleanup response.
- **Improve workers' safety and health.** No change to current operations.
- **Increase productivity.** No change to current operations.
- **Save money.** Minimize spill impact and associated cleanup costs through early detection.



Infrared Camera Leak Detector

*The Infrared Camera Leak Detector provides a versatile and accurate method to locate and define petroleum product leaks in a harbor environment. Operations such as oil and fuel transferring and equipment readiness preparation result in an average of over 500 spill events annually at Navy installations. These spill events require the cleanup of nearly 300,000 gallons of petroleum products each year. Use of the infrared camera leak detector can provide for early identification of oil spills or leaks, thereby minimizing the amount of oil products requiring clean-up actions. The detectors are easy-to-use, portable, battery operated, calibrated, thermal imaging systems that come with a variety of features, including the capability for electronic data capture and recording. Because of its infrared capabilities, the equipment can be operated at night or in high-glare sunlight. This technology has been tested at the New Orleans Naval Air Station as a 1995 NELP Initiative. **This equipment is available through the Navy Pollution Prevention Equipment Program (PPEP).***

How can you achieve these improvements?

Use an Infrared Camera Leak Detector.

How does this equipment work?

The detector is a hand-held device that operates similar to a camcorder; the camera records temperature and emissivity data used to identify and define oil spills.

How will this equipment save you money?

The Infrared Camera Leak Detector can identify potential problems before expensive spill clean-up operations are necessary. The cost of detectors can vary from \$13,000 for standard imaging equipment to \$60,000 for high-performance systems with data capture and recording capabilities.

Typical Process Flow Diagram



How can this P2 equipment eliminate or reduce pollution?

This P2 equipment can efficiently detect and locate harbor oil spills, enabling quicker cleanup response efforts. Use will result in the following pollution reductions:

- Reduce the amount of oil products that must be cleaned up following spills.
- Reduce the amount of clean-up products that must be disposed of as oily or hazardous waste.
- Reduce the damaging effects of oil spills to the harbor environment.

Which facilities can benefit most from this equipment?

This technology can be used wherever oil and fuel transferring or equipment readiness operations are conducted. Typical facilities include:

- Naval Stations
- Naval Air Stations
- Naval Shipyards
- Naval Supply Facilities

How can this equipment reduce regulatory compliance concerns?

This equipment can identify and define the extent of petroleum product leaks in harbor environments. Use will result in the following regulatory compliance benefits:

- May help minimize oil discharges prohibited by the Clean Water Act and 40 CFR 110.
- Helps facilities meet the reporting and clean-up requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).
- Helps facilities meet the provisions of their Spill Prevention Control and Countermeasures (SPCC) plans as required by 40 CFR 112.



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://www.lakehurst.navy.mil/p2/index.html>)

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