



UNITED STATES COAST GUARD

U.S. Department of Homeland Security

MARINE SAFETY ALERT

Inspections and Compliance Directorate

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Safety Alert 02-23

ENGINE ROOM EXHAUST HAZARDS ON FISHING VESSELS

This Safety Alert addresses the importance of installing noncombustible materials in machinery space boundaries with dry exhaust systems. A recent marine casualty resulting in an engine room fire onboard a commercial fishing vessel identified significant hazards associated with main engine dry exhaust systems coming in direct contact with combustible materials, such as general-purpose resin on a wood Fiberglass Reinforced Plastic (FRP) vessel.



Main Engine Dry Exhaust

Some commercial fishing vessels are required to insulate combustibles from heated surfaces in accordance with 46 Code of Federal Regulations (CFR) 28.380(b) and ABYC P-1 requires fittings in contact with uncooled exhaust carriers to be noncombustible. However, there are currently no specific requirements for commercial fishing vessels to use fire retardant resin or to install noncombustible panels around machinery compartment boundaries.

When constructed of wood or general-purpose resin, a lack of noncombustible materials can lead to the main engine exhaust heating a wood/FRP deck, which can ultimately lead to a fire. In the above-mentioned vessel casualty, the main engine's dry exhaust caused the vessel's wooden deck to ignite and caused \$200,000 in damage.

The Coast Guard **strongly recommends** that commercial fishing vessel owners and operators:

- Ensure that dry exhaust piping passing through combustible bulkheads or partitions are insulated/shielded from combustible materials.
- Install noncombustible panels on existing vessels with general purpose resin.
- For new construction vessels, install noncombustible panels or fire-retardant resin around machinery compartment boundaries constructed of wood/FRP.



Dry exhaust passing through wood/FRP deck

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