

NWCG Equipment Technology Committee

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To: Wildland Fire Community

From: Nathan Hesse, Chair, NWCG Equipment Technology Committee (ETC)

Subject: Diesel exhaust fluid (DEF) in fuel containers



Issue: A National Interagency Support Cache (NISC) received fuel containers from an incident that were marked as containing DEF.

Action: Do not store or transport DEF in safety cans that are designed to hold fuel.

DEF users should not put DEF in fuel containers but rather should purchase bulk containers specifically designed and marked as appropriate for containing DEF or purchase pre-packaged single-use containers and dispose of properly after use.

Continue to mark containers with their contents but use the proper container for those contents.

Background: DEF is a specific mixture of urea and water which operators of diesel-engine vehicles must add into the selective catalytic reduction system. This system injects DEF into the exhaust to improve emissions. DEF is known to be corrosive to steel, so manufacturers sell it in polyethylene containers.

Additional Information: Safety cans or fuel containers of any type are designed to carry/transport gasoline (gas), diesel, gas/diesel burn mix, or two stroke gas mix. Utilizing fuel containers to transport anything other than what they are designed for increases the potential for damage to equipment. Fuel containers should always be marked/tagged with their contents for awareness and to limit waste.

Storing DEF in safety cans will corrode the safety can, introduce impurities into the vehicle's selective catalytic reduction system when that DEF is used, and put future users of the safety can at risk of contaminants in their fuel.

The supply of fuel containers in the NISC system is low, and any containers contaminated with DEF are likely to be discarded. This limited supply could become a shortage and negatively impact fire operations if containers continue to be damaged by DEF.

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