

stopped the SCANDIA's engines and meant a long time for the crew to re-introduce fresh air into the engine room and then make the necessary repairs to restart the engines. During this time without propulsion or steering, the grounding would still have occurred.

- Towing vessels on the inland rivers must rely on their engines and steering systems to navigate in narrow channels and near locks and dams, in strong currents. If a failure of propulsion or steering occurs, there is little time to prevent a vessel from going aground or striking another vessel or a fixed structure. A requirement of fixed systems, along with engine shutdown, instead of enhanced manual equipment, would increase overall risk to safety.

The public also challenged our views that manual fire-fighting posed an unacceptable risk to the crew, and that equipment for it was ineffective for controlling engine-room fires. The TSAC performed an independent analysis of our data on casualties, which showed, as we noted, that over 80 percent of the reported fires on inland vessels had been extinguished by the crewmembers with only 7 reported injuries. Further investigation revealed that most of the 7 injuries were due to broken lines' spraying fuel or to other conditions in the engine room and were not attributable to fire-fighting efforts. Further supporting this argument, many comments agreed that the typical practice on inland towing vessels, in response to a fire, is to attempt first-aid fire-fighting using portable extinguishers or fire hoses. If this fails to contain the fire, the crew can readily and safely abandon ship to the tow or the riverbank. Accordingly, the comments argue that we should require only portable extinguishers or fire hoses because the situation on inland vessels is not the same as that on vessels operating in open water, where wind and sea can make conditions perilous.

While we agree that it may be possible to abandon ship to the tow or the riverbank in some cases, one cannot assume that one can safely make it to the riverbank (or the tow) in all emergency circumstances. However, after considering all of the comments along with the fire-related casualty statistics available for towing vessels, we have decided to adopt the fire-fighting philosophy of our original proposal, by accepting manual fire-fighting equipment as an alternative to fixed fire-suppression systems on towing vessels operating exclusively on inland waters. However, we will still require the installation of fixed fire-suppression systems in the engine rooms of towing vessels whose

construction is contracted for on or after August 27, 2003 and that will operate in ocean or coastal waters.

#### **How Does This Rule Differ From the NPRM of 1997?**

The NPRM of 1997 proposed different kinds of manual fire-fighting equipment, varying with the overall lengths of the towing vessels. Larger vessels would have had to carry equipment meeting a higher standard. Vessels of less than 24 m (79 feet) in length would have had to carry limited-capacity portable fire pumps with fire hoses 16 mm ( $\frac{5}{8}$  inch) in diameter and B-III semi-portable fire extinguishers. Larger vessels, of 24 m (79 feet) in length or longer, again, would have had to carry fixed fire pumps with capacity of 300 liters per minute (lpm or 80 gpm) and fire mains with fire hoses 40 mm (1½ inch) in diameter, and B-V semi-portable fire extinguishers.

This interim rule does not require different types or amounts of fire-suppression equipment, varying with the lengths of the vessels. Instead, it requires a minimum fire-suppression capability, which follows from the requirements in the NPRM for all non-exempt vessels greater than 24 m (79 feet). The fire pump may be either fixed or portable, but a minimum capacity of 300 lpm (80 gpm) must be available in either case. Also, the smallest fire hose in any case must be at least 40 mm (1½ inch) in diameter. For a portable pump, the way of checking discharge pressure is by using a pressure gage at the pump outlet. Vessels that use portable pumps will not have fire-main piping connected to them, so the rule does not require the use of a pitot tube at the nozzle to check for excessive friction loss in the system. The rule does require, for any non-exempt vessel, a B-V semi-portable fire extinguisher to further ensure adequate fire-fighting capability.

With respect to voyage planning, the most significant difference between the proposal in the SNPRM and the requirements in this interim rule is the applicability. In the SNPRM, we proposed voyage planning for all towing vessels. While we maintain that all these vessels should do voyage planning, we will now require it only for those operating in unprotected waters, beyond the baseline of the territorial sea.

Because pivotal dates indicated in the SNPRM have passed, we no longer refer to towing vessels as "new" or "existing." Where it does remain necessary for us to distinguish by age, so that we do not add to the requirements for vessels beyond those

proposed in the SNPRM, we have simply stated the date (cutoff or appropriate) that determines applicability of a particular requirement. Of course, the elimination of the distinction between "new" and "existing" also entailed the elimination of the need for treating them in separate sections of the rules; to do so now would create a number of duplicate sections in the rules. Consequently, we have removed sections that would have been duplicate.

#### **Discussion of Comments and Changes**

The docket received a total of 67 letters containing 223 comments on the SNPRM. Of the comments, 144 dealt with fire suppression while 56 dealt with voyage planning. We also received comments in the form of remarks at the public meetings held in Washington, DC (on February 8, 2001), and in Huntington, West Virginia (on August 15, 2001). The spoken comments at the public meetings are consistent with, and, in many cases, duplicates of, the written comments to the docket. Those at Huntington criticized the proposed rulemaking. More importantly, however, they offered reasonable alternatives, many of which we have incorporated within this interim rule. The audiotapes of the two meetings are available for listening at Coast Guard Headquarters (G-LRA) in Washington, DC. The following paragraphs contain summaries of the comments (and explanations of any changes made by this rule to the SNPRM) under the category-headings that follow:

#### **Requirement for a Fixed Fire-Extinguishing System**

A few comments did support our proposal to require fixed fire-extinguishing systems for the protection of towing vessels' engine rooms. Yet most opposed it. These offered a variety of reasons against it. The following paragraphs summarize the reasons and provide the Coast Guard's view on each issue. We also note the extent to which we accepted each comment in the preparation of this interim rule.

Many comments expressed concern over the potential hazards to personnel if carbon dioxide were used as the extinguishing agent. They noted that the concentration of carbon dioxide needed to extinguish fires is above the level safe for personnel. The Coast Guard does not agree that the use of carbon dioxide, in this application, poses an unacceptable risk. Approved carbon-dioxide systems must be fitted with pre-discharge alarms and devices that delay the discharge until personnel have been alerted to vacate the space. This interim rule has