181 performance standards (other than perhaps the option in the UFC and NMFC systems that includes a four-foot drop test).

As directed by Section 122 of the Act, RSPA must determine whether any of these alternate standards will provide a "level of safety" equal or greater than that provided when packagings meet the HM-181 performance standards. RSPA believes that any specified "level of safety" in the transportation of hazardous materials can only be measured with reference to the performance of the packaging used to transport those hazardous materials. If the packaging fails, safety is compromised. The ultimate purpose of any packaging standards must be, as IFDI puts it, their ability "to predict the safety of [the packaging] in the transportation environment." In other words, how will the packaging perform, and to what extent will it protect its contents during transportation? To make the finding required by Section 122 of the Act, RSPA must determine whether a packaging that meets other standards will perform as well in the normal transportation environment as a packaging that meets the HM-181 performance standards.

The flaw in IFDI's proposed alternate standards is that they contain no means of assuring the same performance that the HM-181 standards measure. IFDI's impact test, a tipover followed by a oneto two-foot drop on the bottom chime, is essentially a lesser form of the 2.6foot drop test in 49 CFR 178.603. IFDI states that its structure, joint integrity and impact tests, in combination, must be compared to DOT's drop test. But RSPA cannot find anything in the first two that compensates for the inability of IFDI's 55-gallon fiber drum to survive a drop of more than 13 inches. RSPA recognizes the historical use of construction specifications, alone or with performance tests, in IFDI's proposed standards and in the former DOT specifications. However, the only purpose of construction standards is to assure satisfactory performance. A fiber drum manufactured to the IFDI standards cannot perform as well, or achieve the same level of safety as, a drum meeting the HM-181 standard of a drop from 2.6 feet or more.

Similarly, since liquids expand in hot weather, a packaging that will not withstand an increase in pressure is simply not as safe as one that will. While IFDI has stated that it would not object if RSPA limited the use of nonspecification fiber drums to liquids with a vapor pressure no greater than 16 psi, RSPA has no basis (from IFDI's submission or otherwise) to find that this limitation is sufficient to avoid those instances when an increase in internal pressure would affect the performance of a drum.

Safety and the ability of a packaging to contain its contents can be increased by certain handling practices that minimize damage to individual packagings. For example, banding or wrapping individual packagings secured to a pallet will reduce the likelihood of one packaging falling over or off another. Restricting the height that packagings are stacked will reduce the distance a single package can fall off another. The familiarity and expertise of a private or contract carrier, that handles only a few hazardous materials, reduces risks associated with a common carrier that transports any freight offered to it. Many exemptions issued by RSPA include operational controls along these lines. Some of these controls are found in Monsanto's proposal for a limited exception to allow the use of nonstandard fiber drums for the shipment of liquid hazardous wastes in packing groups II and III to incineration facilities.

Monsanto's proposal would apply to the situation when the entire package (with its contents) was to be incinerated, and would allow the one-time use of drums similar in design to former DOT specifications 21C and 21P, under conditions similar to those set forth in 49 CFR 173.12(c) (authorizing the reuse of standard packagings for shipments of hazardous waste, by highway only, when the packaging is finally closed at least 24 hours in advance of transportation, inspected for leaks, and loaded by the shipper and unloaded by the consignee-or handled only by private or contract carrier). Monsanto would also limit to 90 days the total time the non-standard fiber drum could contain the liquid hazardous waste.

The only party to comment on Monsanto's proposal, the Association of Waste Hazardous Materials Transporters (AWHMT) raised several questions. AWHMT expressed concerns that the liquid hazardous waste would cause the fiber drums to deteriorate during a 24hour holding period. It also noted that drums are typically double stacked (one on another) during transportation and asked whether double stacking would "compromise the integrity of fiber-drum packagings containing liquids." For AWHMT, the packaging material and pre-trip requirements were not important, but

all packaging should meet the same level of transportation performance \* \* \* based on safety, not the use proposed for the packaging after transportation \* \* \* In short, transporters should not have to assume increased risk for the convenience of a shipper or consignee.

Monsanto's suggestion appears to exclude fiber drums built to IFDI's proposed standard, because the drums Monsanto would use would meet former DOT specifications 21C (which includes a four-foot drop test) or 21P (which mandates the tests applicable to the inside plastic container). 49 CFR 178-224-2(b), 178-225-5(b) (1990 ed.). In this circumstance, and without further comments on Monsanto's proposal in response to the ANPRM, there is insufficient information on which to propose a rule concerning the use of fiber drums for the shipment of liquid hazardous wastes to incineration facilities.

IFDI, any of its member companies or any other person that wants to use nonspecification fiber drums for this or any other purpose may petition RSPA for a rulemaking, in accordance with 49 CFR 106.31, or apply for an exemption and provide the information specified in 49 CFR 107.103.

RSPA assumes that there are an infinite number of possible alternate standards that could be measured against the level of safety provided by the HM-181 performance standards. However, the final determination of whether any standard provides an equal or greater level of safety as the HM-181 standards must rest on whether it produces a packaging that will perform as well in the normal transportation environment as one that meets the HM-181 standards. Because IFDI's proposed standards do not assure this same performance, they will not provide as great a level of safety for the transportation of liquid hazardous materials as the HM-181 standards. In light of that finding, Section 122 does not require RSPA to propose any amendments or additions to the HMR.

V. Congressional Concerns and Other Matters

IFDI points to language in the Congressional Record, and letters from Senators and Representatives to the docket, urging RSPA to consider the fiber drum industry's "excellent shipping record." These letters also question whether the scope of this rulemaking is consistent with Section 122 of the Act.

Sen. Hollings states that RSPA should not consider whether alternate standards should apply to other packagings in this rulemaking. Both he and Sen. Thurmond believe that RSPA's request for estimates of cost differences between present and proposed packagings "goes beyond the statutory mandate." As Sen. Thurmond states,