**National Transportation Safety Board** 



Office of the Chairman

Washington, D.C. 20594

CC: DRP-1 AG DRP-1 DS DRP-3 DPP-1 DHM-1 DHM-6 DCC-1

JUL 8 1994

Ms. Ana Sol Gutiérrez Acting Administrator Research and Special Programs Administration U.S. Department of Transportation Washington, D.C. 20590

Dear Ms. Gutiérrez:

The National Transportation Safety Board has reviewed your letter of May 3, 1994, responding to Safety Recommendations I-81-3, I-83-4, I-87-4 and -5, and I-90-5, -6, and -8 through -11.

Safety Recommendation I-81-3 requested that the Research and Special Programs Administration (RSPA) develop and use a common shipper identifier in all Department of Transportation (DOT) compliance records. The Safety Board notes that RSPA, in coordination with a departmental working group, has designed and developed a shipper-based data system, UNISHIP, that assigns a unique identifier to each shipper, contains a history of the compliance and enforcement actions for each shipper, and by cross-referencing the various DOT modal identification numbers, provides each modal agency with the capability to trace the performance of individual shippers. Because of these positive actions, Safety Recommendation I-81-3 is classified "Closed--Acceptable Action."

Safety Recommendation I-83-4 requested that RSPA develop and publish preshipment inspection criteria for drums used to ship regulated hazardous materials. We recognize that performance standards for drums were implemented by RSPA under docket HM-181. However, we do not agree with RSPA that the need for preshipment inspection criteria for drums was superseded by the performance standards set forth in HM-181.

In the incident that led to this recommendation, a corrosive hazardous material was released from a drum that was loaded and left in storage for several years before it was placed in transportation and failed. The drum that failed and other drums transported with it were weathered, corroded, and dented in various degrees. The recommendation references 49 CFR 173.28(m)(1), which concerns the reuse of certain DOT specification drums. According to 173.28(m)(1), any drum that showed evidence



of deterioration as found in this incident, such as visible pitting, creases, rust, corrosion, reduction of thickness, metal fatigue, or other material defects, or which could not be returned to its original contour and shape, could not be reused for the transportation of hazardous materials.

The Safety Board intended that similar criteria should be established to aid carriers and shippers in assessing the preshipment condition of any drum intended for the transportation of hazardous materials. The performance standards implemented under HM-181 do not address the concerns that led to the recommendation. Consequently, nearly 11 years after the recommendation was issued, there has been no positive action taken to implement the recommendation. Therefore, Safety Recommendation I-83-4 is classified "Closed--Unacceptable Action."

Safety Recommendation I-87-4 requested that RSPA require thermal protection for explosive shipments posing the greatest fragment and overpressure hazards in highway transportation accidents. Although RSPA is analyzing various options to address the thermal protection issue, the Safety Board does not believe that RSPA has taken any substantive action to implement this recommendation in the 7 years since it was issued. Therefore, Safety Recommendation I-87-4 is classified "Closed--Unacceptable Action."

Safety Recommendation I-87-5 requested that RSPA quantify the fragment and overpressure hazards for shipments of explosives, establish safe evacuation distances, and require vehicles transporting such explosives to be appropriately identified. The Safety Board notes that the 1993 edition of the Emergency Response Guidebook (ERG) recommends evacuation distances of 2,500 feet or more for certain shipments of Class A and B explosives and explosives classified under the new classification system as posing a mass explosion hazard, a projection hazard, or combination of fire, blast, or projection hazards. Because the new classification system assigns explosives to one of six divisions that are defined by the type of hazard presented, the Safety Board agrees that placards bearing the division number will provide appropriate identification. Therefore, Safety Recommendation I-87-5 is classified "Closed--Acceptable Action."

Safety Recommendation I-90-5 asked RSPA to require manufacturers of DOT specification containers to retest randomly selected containers from each lot of containers that had not been properly tested or had failed to meet regulatory requirements, and then to notify the owners of containers in the lots that failed the retests to remove the DOT specification markings from the containers. Safety Recommendation I-90-6 urged that RSPA modify its compliance program to ensure that containers are removed from the transportation of hazardous materials when those containers fail to meet DOT specification requirements. The Safety Board notes that RSPA, in responding to these two recommendations, is developing written procedures pertaining to DOT specification containers that were not properly tested or failed required tests, and guidelines concerning the recall of cylinders deemed to pose a serious safety hazard. We believe that these are positive actions, and request that copies of these procedures and guidelines be provided when they are completed.

However, the Safety Board is concerned with RSPA's position that it is not necessary to require the testing of randomly selected containers from lots that were improperly tested or failed the required tests as recommended by Safety Recommendation I-90-5, and that it is not necessary to recall and remove containers that fail to meet specification requirements, as recommended by Safety Recommendation I-90-6. Without RSPA's strict enforcement of testing and other specification requirements, the integrity of any DOT specification container is questionable because there is no assurance that the container meets the minimum requirements for strength and integrity. RSPA has the responsibility to ensure that cylinders and other containers marked as DOT specification containers meet all minimum safety requirements, including those for testing and inspection, before they are used for the transportation of hazardous materials. The Safety Board again encourages RSPA to prohibit the transportation of hazardous materials in containers that fail to meet the DOT specifications, including those containers that have not been properly and successfully tested in accordance with DOT requirements. Pending RSPA's response, Safety Recommendations I-90-5 and -6 are classified "Open--Unacceptable Response."

Safety Recommendations I-90-8, -9, and -10 requested that RSPA take regulatory action to address various safety issues. Safety Recommendation I-90-8 requested that RSPA require hazardous materials cargo to be secured with adequate cargo restraint systems to prevent ejection of cargo from vehicles during transportation. We note that RSPA will address this recommendation in a "notice of petition for rulemaking" that RSPA intends to publish by the end of 1994. The purpose of this notice would be to collect and analyze relevant data on the use of cargo restraint systems. Safety Recommendation I-90-9 asked RSPA to require independent inspections of new and reconditioned low-pressure cylinders that are consistent with the current independent inspection requirements for high-pressure cylinders. RSPA previously advised the Safety Board on September 24, 1990, that it would develop an advance notice of proposed rulemaking (ANPRM) to gather information about this safety issue. Your May 3, 1994, letter indicated that the ANPRM will be published this year. Safety Recommendation I-90-10 asked RSPA to amend inspection and testing requirements for pressure cylinders to make the requirements clear and consistent. The Safety Board notes that RSPA now intends to publish an ANPRM instead of a notice of proposed rulemaking (NPRM) as originally planned because of the lack of available cost information. We also note that although RSPA has begun drafting the ANPRM, RSPA did not indicate when the ANPRM will be published.

The Safety Board is concerned that after 4 years, RSPA has yet to begin or is still gathering information needed to initiate regulatory action on the safety issues addressed by Safety Recommendations I-90-8, -9, and -10. The Board does not believe that RSPA has made any substantive progress toward the implementation of these three recommendations, and we urge RSPA to expedite its efforts to complete the needed regulatory action. Also regarding Safety Recommendation I-90-10, RSPA indicated that the ANPRM will focus on high pressure cylinders, which may not include specification 4BW cylinders (those involved in the accident that led to this recommendation). Because of the lack of substantive progress, Safety Recommendations I-90-8, -9, and -10 are classified "Open--Unacceptable Response."

Safety Recommendation I-90-11 asked RSPA to develop and implement requirements for improving the visibility and effectiveness of hazardous materials placards by considering the orientation of vehicles after accidents. The Safety Board notes that RSPA published an ANPRM in June 1992 under docket HM-206 that addresses the location, attachment, and type of placard, and that RSPA also plans to publish the NPRM in 1994. Because of this on-going progress, Safety Recommendation I-90-11 is classified "Open--Acceptable Response."

Sincerely,

Jim Hall Acting Chairman

cc: Dr. Donald R. Trilling Director Office of Transportation Regulatory Affairs