Hazardous Materials Automated Cargo Communication for Efficient and Safe Shipments (HM-ACCESS): Moving Ahead for Progress in the 21st Century (MAP-21)

Defining the HM ACCESS Pilot Tests

Purpose: This update is intended to provide information for stakeholders regarding the HM-ACCESS initiative. Under HM-ACCESS, the Pipeline and Hazardous Material Safety Administration's (PHMSA's) Office of Hazardous Materials Safety (OHMS) has held discussions with modal administrations, law enforcement personnel, emergency response providers, and industry representatives regarding the use of paperless HM communications systems. Paperless hazard communication is defined as "the use of advanced communication methods, such as wireless communications devices, to convey hazard information between all parties in the transportation chain."[1]

Background[2]: PHMSA has held discussions with fire services personnel; law enforcement personnel; emergency response providers; air, highway, rail, and water modes; HM employees; and government agencies to determine the feasibility of allowing the use of paperless HM (e-HM) communication systems for HM shipments for the purposes of:

- Improving the availability and accuracy of hazard and response information for shipments and packages,
- Improving the speed by which information is available to emergency responders when accidents occur,
- Improving the security of imported containers through better knowledge of shipments and reduced potential for diversion, and
- Allowing U.S. companies to compete more effectively in the global economy by using the best tools available.

The results of these discussions indicate that the implementation of e-HM communication systems has already begun and will be generational, as industry determines that investing in technology is economically beneficial for their businesses. Spurred by competitive demands, just-in-time delivery requirements, and the globalization of supply chains, the transportation and logistics industries have embraced modern communication technologies; yet, HM transport remains primarily a paper-based system. In general, paper-based communication is slow, limits the information available, and has the potential for error. Inefficiencies and errors in HM handling increase risk throughout the transport chain due to increased storage time, mishandling, and ineffective or inaccurate hazard communication, especially when communication is most critical; i.e., in the immediate aftermath of a transportation incident.

In accordance with MAP-21, at least one pilot e-HM project must be held in a rural area. Project requirements state that PHMSA: (1) cannot waive the current statutory shipping paper requirements; and (2) must consult with organizations representing fire and other emergency responders, law enforcement, and regulated entities.

In addition to the authority granted under MAP-21 to conduct pilot tests, PHMSA is looking to harness its Permits and Approvals procedures to consider regulatory changes that both: (1) maintain an equivalent level of safety to the current written communication and (2) allow the use of today's technologies. Specifically, PHMSA is currently evaluating two special permit applications that request different methods, i.e., telephone and tablet, for providing paperless

[1] The pilot program is provided for under Public Law 112–141 § 33005.

[2] Additional background regarding HM-ACCESS is available on PHMSA's HM-ACCESS website at http://hazmat.dot.gov/HM-ACCESS/index.html.

hazard communication. Potential participants should not be dissuaded from their involvement in

the pilot tests based on other technologies, as the determination of best in breed has not been made; however, PHMSA is not looking to conduct tests for vendors. Moreover, a number of shippers and carriers have already invested in e-communication systems for economic reasons, and have stated that they are ready to begin using e-HM shipping papers, subject only to regulatory authorization. Other stakeholders may not have made these investments, or are considering doing so. The objective of this update is consequently to be transparent to all interested parties.

Description of Pilot Tests: The goal of the HM-ACCESS pilot tests is to demonstrate the potential for e-HM communication systems to provide an equivalent or better level of safety to the current HM shipping paper requirement, thereby facilitating commercial efficiency while maintaining and possibly enhancing safety. Any pilot conducted under the authority granted by MAP-21 would study the safety and security impacts, and the associated benefits and costs of using e-HM communication systems for HM shipments, without disrupting the normal flow of commerce. Specifically, the pilot tests, expected to begin in July 2013 and projected to conclude in October 2013, would focus on the use of e-HM communication systems:

- While shipping HM from point of origin to final destination using truck, rail, maritime, and air transport, and
- During inspections and emergency response simulations.

PHMSA hopes to conduct pilot test(s) in three, potentially four, regions of the U.S.: the Northeast, Southeast, Northwest, and Southwest, with at least one pilot test conducted in a rural area within one or more of the regions. Further, hardcopy shipping documents would still be required to accompany each shipment during the pilot tests, in accordance with the Hazardous Materials Regulations (HMR; 49 CFR Parts 100-185).

PHMSA anticipates potential participants in any pilot program will:

- Send an email expressing interest to PHMSA at HMACCESS@dot.gov by May 1, 2013, understanding that participation is completely voluntary, and that: (1) volunteering does not guarantee your organization will be selected for participation by PHMSA; and (2) PHMSA will not provide monetary compensation for participants, and participants will receive no direct benefit from participating in the pilot tests,
- Possess e-HM communication system(s) capable of managing and communicating the HM shipping paper information at their own expense,
- Possess their own equipment and personnel and/or contractor resources necessary to transport HM shipments,
- Be willing to allow, and participate in, inspections and emergency response simulations during the pilot tests,
- Be willing to provide feedback on experiences regarding e-HM communication during the pilot tests, including providing actual e-HM communications data from the pilot tests,
- Be willing to provide information on the basic function and capabilities of their e-HM communication system(s),
- Be willing to provide information on administrative, business, training, equipment, and operational-related costs and benefits associated with implementing e-HM communication system(s),
- Transport HM within the targeted test regions of the U.S., and
- Be in good standing with all levels of government and demonstrate compliance with ALL applicable regulations governing the safe and secure transportation of HM.

Pilot test results will be evaluated and compiled into a final report to the Committee on Commerce, Science, and Transportation of the Senate, and to the Committee on Transportation and Infrastructure of the House of Representatives by October 2014.

Contact Information: To obtain more information on this initiative, please contact Mr. James Simmons by email at james.simmons@dot.gov or by telephone at 202-366-5535.