



NATIONAL TRANSPORTATION SAFETY BOARD - **Public Hearing**

Conrail Derailment in Paulsboro, NJ with Vinyl Chloride Release

<b>GROUP</b>	<b>3</b>
<b>EXHIBIT</b>	
<b>AM</b>	

Agency / Organization

Paulsboro

Title

Paulsboro, NJ First Responder

Hotwash - Jan 2013

**East Jefferson Street Bridge Train Derailment 2012  
Responder Hotwash  
January 18, 2013**

Item	Title/Category	Positive - Opportunity for Improvement - or Both	Observation	Discussion/Comment	Recommendation
1	Initial Notifications	Positive	For this incident, participants commented that the initial notification process was a strength. Appropriate local, state and federal agencies were notified about the derailment.	Agencies utilized their notification procedures to make in-agency and external agency notifications.	<b>First Responder Agencies Should:</b> 1. Periodically check contact numbers for in-agency and external agencies. 2. Periodically conduct in agency and external agency notification drills. 3. Review (and then periodically review) their procedures to ensure that all hazard preparations are considered. Specifically mentioned was contact information for Pipeline Companies may be needed by some agencies.
2	Assessment Reports	Opportunity for Improvement	The initial assessment reports of the amount of product released conflicted.	Early on in the incident there were some opportunities for improvement as there wasn't a clear consensus of the amount of material that was released. A number of factors contributed to the lack of a consensus of the amount released. These factors depended on the reporting entity; the entity receiving the report; the time that the reports were used to make subsequent notifications; the measurement scale used to report the amount released (total volume capacity of the railcar, gallons, tons, etc.).	<b>First Responder Agencies Should:</b> 1. Participate in Railroad sponsored derailment training . 2. Review their HAZMAT release notification forms to ensure that appropriate questions are asked of the reporting entity so that accurate assessments can be made.
3	Railcar Placarding	Both	There were placards on all four "sides" of the railcars. However, there were challenges in seeing them.	As a result of the derailment and the wreckage, there were railcars on top of each other and railcars or portions of railcars that were submerged underwater in Mantua Creek. Also, safe vantage points provided limited views.	<b>Railroad Industry:</b> 1. Consider the placement of additional hazardous material placards on railcars. <b>Paulsboro FD:</b> Explore opportunities with Conrail to determine feasibility of obtaining a list of the products being transported through the city or even the products being transported on each train.
4	"Assistant Safety Officer" Contributions to the Incident Action Plan (IAP)	Opportunity for Improvement	There were numerous Safety Officers (Assistant Safety Officers) for various entities, departments, and agencies.	There were numerous Safety Officers that responded or were assigned by the various entities, departments, and agencies. Each contributed to the specific operation that they were observing. However, they didn't collaborate in overall operational safety meetings. As such, a hotwash participant commented that there was a need for the Safety Officers to meet to facilitate communication between agencies and "contribute" to the IAP.	<b>First Responder Agencies Should:</b> 1. Seek opportunities for formal training for their Safety Officer(s). 2. Seek opportunities to exercise with other agencies and entities. Suggest that Safety Officer protocols and procedures are evaluated during the exercises.

5	Determination of the Incident Zones: Evacuation, Hot, Warm, Cold	Opportunity for Improvement	Initially, there was some confusion as to where the incident work zones should be located. There were various factors that contributed to this issue.	The initial first responders had a very challenging situation. Weather conditions were conducive to support fog. Additionally, the vinyl chloride vapors were very "fog-like". Therefore, the responders couldn't tell if there was fog or vapors covering the creek. As time progressed, there were more and more responders from differing agencies arriving. A mindset developed where each of the responders "followed" the lead of the other agency responder and assumed that the area was safe because the other agency was "there". It wasn't until later when it was confirmed that there was a "large" vinyl chloride release which caused a hazardous environment did responders "pull back" their incident zones.	<p><b>Railroad Industry Should:</b></p> <ol style="list-style-type: none"> <li>1. Provide training to first responders.</li> <li>2. Consider participating in the Sector Delaware Bay Area Committee meetings. (Area Committee contact is Jerry Conrad <sup>*** P I I ***</sup>) The Area Committee is composed of port stakeholders who have worked together to develop the Sector Delaware Bay Area Contingency Plan (ACP), which is the Area All Hazard Response Plan.)</li> <li>3. Ensure that first responders know that each train carries a "Consist" (mini-MSDS) in the locomotive.</li> <li>4. Ensure that first responders know that the railroad companies maintain a Consist for each train in their Operations Center(s) and all the first responders have to do is call in with some basic train information to get more specific product information on each train.</li> </ol> <p><b>First Responder Agencies Should:</b></p> <ol style="list-style-type: none"> <li>1. Participate in any training provided by the railroad companies and/or Federal Railroad Administration.</li> <li>2. Review the Emergency Response Guidebook to help identify evacuation actions and establish an ICP outside that zone.</li> <li>3. Review their protocols to ensure that their agency responders don't get exposed or enter into work zones without the proper PPE.</li> <li>4. Review their agency's response plans for Hazmat incidents and update with lessons learned from this incident.</li> <li>5. Participate in training and exercises with other agencies. Recommend that "incident control" injects are included in the exercise.</li> <li>6. Establish a Unified Command, work with law enforcement to limit access to the area.</li> </ol>
6	Liaison Staff Mobilization	Both	The liaison mission became an extremely challenging mission. Numerous private and public entities and officials at the local, state and national levels needed information. Identifying these entities, establishing contact procedures, and dealing with an ever expanding group of entities needing information was challenging.	Many private individuals, businesses, and politicians, needed or wanted information. A Coast Guard Officer was assigned as Liaison Officer and worked diligently to identify who he should contact and how. As time progressed there were more and more politicians and entities added to the contact list. Moreover, the politicians wanted tours of the ICP and derailment site and this was a demanding endeavor. It would have been helpful if additional staff familiar with the local and state politicians, and businesses were assigned to the Liaison function.	<p><b>Local, State, and Federal First Responder Agencies Should:</b></p> <ol style="list-style-type: none"> <li>1. Provide staff to support the Liaison function.</li> <li>2. Consider activating the NJ-DEP Liaison Team.</li> <li>3. Update their plans or notification procedures to include information about the EPA's Liaison Team.</li> </ol>
7	Communication with Public and Businesses	Both	Reverse 911 system was utilized to contact residences within Paulsboro.	The Reverse 911 system worked well for the people that were in the areas that officials wanted to get information. However, because of the way that the system pulls phone numbers, there were people that were getting calls to shelter in place that shouldn't have gotten calls. There were also business owners within the area but who lived outside the area who didn't get Reverse 911 calls because their primary residence was outside the area.	<p><b>State and Local Officials Should:</b></p> <ol style="list-style-type: none"> <li>1. Encourage individuals to sign-up for Reverse 911. The initiative must be ongoing as individuals enter and leave the area for numerous reasons.</li> <li>2. Share Reverse 911 lessons learned with other Counties.</li> <li>3. Consider activating the NJ-DEP Liaison Team.</li> </ol>

8	"Feeding" The Media Doesn't Necessarily Mean That They Will Broadcast The Message	Opportunity for Improvement	The UC, and the Joint Information Center put a lot of effort into giving the media the correct information about the situation and what the public should do to shelter in place. However, that information wasn't necessarily provided to the public in the continuous methods necessary for the public to "get the message".	The UC cannot rely on media outlets to get the message to the people. Regardless, timely dissemination of information needs to occur.	<p><b>Unified Command Should:</b></p> <ol style="list-style-type: none"> <li>1. Immediately stand up a Community Relations Team.</li> <li>2. Establish an incident web page.</li> <li>3. Produce information packages for those without computer access.</li> <li>4. Consider utilizing social media to immediately convey UC's message.</li> </ol> <p><b>First Responder Agencies Should:</b></p> <ol style="list-style-type: none"> <li>1. Share training and expectations for public evacuations and sheltering in place orders (include industry and community representatives). That is, what do all agencies expect the public to do and what can't they do.</li> <li>2. Continue to review this issue and make improvements to Plans, Policies, Procedures and Protocols as necessary.</li> <li>3. Investigate the use of social media to immediately convey messages to the public and media.</li> </ol>
9	Community Mental Health	Opportunity for Improvement	In a situation where there is a Hazmat release, there will be individuals who have symptoms from being dosed and others who worry themselves sick even though they were not exposed to the chemical release. This "natural stress" causes physical illness symptoms.	Mental health issues can become a real issue for individuals exposed to a chemical release or inconvenienced by the incident. The stress can manifest into actual physical illness where individuals are unsure as to the actual cause (exposure to the chemical or stress). Therefore, mental healthcare needs to be available for the community.	<p><b>Unified Command:</b></p> <ol style="list-style-type: none"> <li>1. Include mental health professionals when mobilizing the IMT.</li> <li>2. Continuously evaluate where the mental health professionals are within the IMT and elevate their position as necessary.</li> </ol> <p><b>Health Agencies:</b></p> <ol style="list-style-type: none"> <li>1. Should continue to evaluate "better methods" to communicate mental health issues to the community (consult with JIC/PIOs, Community Relations Team, and Liaison if activated during the incident).</li> </ol>
10	Water Supply - Firefighting & Vapor Suppression	Positive	The Neptune System (high volume water supply system) was utilized during the event.	New Jersey has three Neptune Systems. The system can deliver 5,000gpm onto an incident. Hoses from a water supply can be laid out one mile, making the system very versatile. During the event the system was used for vapor suppression and available in the event of fire. It was learned that the standing water in the lines will freeze.	<p><b>Local Fire Departments Should:</b></p> <ol style="list-style-type: none"> <li>1. Continue to train with the system.</li> <li>2. Review/update sub-freezing system protocols to prevent freezing water in the lines when the system is in "stand-by mode".</li> </ol>
11	NOAA's "Real Time" Current Meter	Positive	NOAA's tidal current meter was extremely beneficial.	The currents in Mantua Creek are very swift. Divers were needed to complete underwater assessments, rig submerged rail cars and remove debris. They could mostly only operate during slack tidal periods. The current meter was deployed in the hot zone by a contractor because it was a relatively simple and straight forward unit.	<p><b>NOAA Should:</b></p> <ol style="list-style-type: none"> <li>1. Produce "EZ Set-up" instruction sheets that can go with the contractor/unit into a hot zone.</li> </ol> <p><b>NOAA/Situation Unit Leader Should:</b></p> <ol style="list-style-type: none"> <li>1. Produce one "at-a-glance" briefing slide that contains all pertinent information (high tide(s), low tide(s), current conditions, sunrise, sunset, and any other info requested by the UC or Operations Section).</li> </ol>
12	Water Monitoring Plan	Opportunity for Improvement	The Environmental Unit Leader/NOAA Scientific Support Coordinator (SSC) lead an effort to develop a water monitoring plan for this incident.	Chemical releases can have a wide range of impacts to creeks and rivers and the organisms and wildlife that depend on it.	<p><b>NOAA Should:</b></p> <ol style="list-style-type: none"> <li>1. Take this issue to the Sector Delaware Bay Area Committee and lead an environmental discussion to identify the scientific parameter concerns of water quality and environmental subject matter experts.</li> </ol>
13	EPA - TAGA Bus	Positive	The EPA mobilized the Trace Atmospheric Gas Analyzer (TAGA) bus. The bus is a self-contained mobile laboratory that conducts "instant-result monitoring" of air quality at particular locations.	The EPA's TAGA bus was extremely beneficial to the first responders and the UC. Whenever there was a fixed monitoring station "hit", the TAGA Bus went to the location and conducted tests.	<p><b>EPA Should:</b></p> <ol style="list-style-type: none"> <li>1. Work with First Responders of other agencies to showcase the TAGA Bus at training opportunities and the Sector Delaware Bay Area Committee meetings. This may also spur additional inter-agency resource capabilities training.</li> </ol>

14	Town Hall Meetings	Opportunity for Improvement	Town Hall meetings were used as "another" method by the UC to distribute information to the community. There were many citizens who attended that were concerned for their health, frustrated because they were evacuated (or not evacuated) from their residences, and angry because they were inconvenienced by the methodical operations.	The Town Hall meetings didn't really show the residents how many agencies responded to the incident and were looking out for their best interests. The Town Hall meetings are larger than "one" agency. Additionally, the "rotation" method of the Town Hall meeting wasn't as successful as hoped because residents may not have been given the "same" information as they rotated from location (table) to location (table).	<p><b>First Responder Agencies Should:</b></p> <ol style="list-style-type: none"> <li>1. Identify additional expertise to support the JIC.</li> <li>2. Provide or send their PIOs to formal training.</li> <li>3. PIOs should seek additional training opportunities with other than their own agency.</li> <li>4. When participating in exercises, PIO dissemination of information needs to be designed into the exercise to test procedures.</li> </ol> <p><b>Unified Command:</b></p> <ol style="list-style-type: none"> <li>1. More than "one" agency leader needs to address the Town Hall Meeting audience. More First Responder Agency subject matter experts need to address the audience.</li> </ol>
15	Red Cross Support	Positive	Red Cross did a fantastic job in every aspect.	The Red Cross provided a lot of support with everything from feeding responders to helping with resident evacuations.	<p><b>Red Cross Should:</b></p> <ol style="list-style-type: none"> <li>1. Engage with local First Responders and showcase their capabilities.</li> <li>2. Engage with local First Responders to help those agencies review and update their all-hazard plans.</li> </ol> <p><b>First Responder Agencies Should:</b></p> <p>Include the Red Cross in their training opportunities and exercises.</p>
16	Incident Management System	Both	The Incident Command System (ICS) worked, but there were real challenges.	The division of labor within the ICS allowed responders to "focus" on their jobs and the system allowed for a "flexible" response. However, it was noted by several participants that, at times, it seemed that people were working to satisfy the "process" instead of the process working to manage the response.	<p><b>ICS Best Practice Recommendations:</b></p> <ol style="list-style-type: none"> <li>1. Operational Period Safety Briefs were beneficial.</li> <li>2. Place a "Current Operations Representative" in the Situation Unit to track the status of field operations and help maintain the situation status information.</li> <li>3. When developing the Incident Action Plans, trust the experts to do their jobs. Be careful to avoid unreasonable precautions. Learn what the experts do on a regular/routine day and allow them to use those precautions in response operations.</li> <li>4. Unified Command should remain flexible and revisit decisions throughout the response and modify them as necessary. All decisions should be on the table. For example, as operational or political demands change, there may be a need to change the make-up of the UC or the restrictions/demands on operations. For example again, the Operations Section was responsible to develop plans for operations that were 48 hours out. Then in 24 hours when conditions changed, they were required to modify the plans. Then as the operations got closer, there was the need for additional revisions to the tactical plans. All these plans and revisions and modifications took time from "current" operations.</li> <li>5. NJ is a Home Rule State. Therefore, local municipalities have a lot of authority and legal responsibilities and all members of the UC need to be aware of that.</li> </ol> <p><b>Coast Guard - Sector Delaware Bay Area Committee Should:</b></p> <ol style="list-style-type: none"> <li>1. Review the Area Contingency Plan and ensure that the Plan affirms that the response organization needs to remain flexible and can "modify" the UC as necessary (accept additional agencies into the UC and eventually remove agencies as necessary).</li> </ol>
17	Political Liaisons	Opportunity for Improvement	There are many different political levels within the state of NJ. They were not all familiar with the National Incident Management System - Incident Command System (NIMS-ICS). Additionally, the response organization struggled to provide all of them with the information needed by the Politicians.	The different political positions include: Local - Mayor; County - Freeholders; State - Assemblymen; Federal - Congressional and Senate Representatives, and the State Governor. All these levels of political leaders need information to provide to their constituents so that they can help the response organization manage the response.	<p><b>Unified Command:</b></p> <ol style="list-style-type: none"> <li>1. Consider activating the NJ-DEP Liaison Team .</li> <li>2. The Liaison Team should train, drill, and exercise providing political leaders with the various amounts of information that they may need in an incident.</li> </ol>
18	Safety	Both	No Responders got hurt. However, Safety in this incident was "bigger" than site safety. All safety issues should have been under the Safety Officer. Responders should be reminded to use Risk Management models,	There were a lot of operations and actions that were worked to resolve this train derailment issue. Not all of the safety issues were routed through the Safety Officer.	<p><b>First Responder Agencies Should:</b></p> <ol style="list-style-type: none"> <li>1. Remind employees that everyone should be keen to safety issues and can stop unsafe operations.</li> <li>2. Individuals who may be assigned as Safety Officers or Assistants should seek formal training opportunities.</li> </ol>

19	Re-population	Positive	The process to re-populate the community went well	The process of returning the evacuated residents to their homes, went well. Residents assembled at a community center, and were offered police escorts to their homes and air monitoring of their residences.	<b>First Responder Agencies Should:</b> 1. Capture the "Re-population Plan" and include it as an example in any agency Response Plans. The Re-Population Plan should become SOP.
20	Plume Modeling	Opportunity for Improvement	Plume modeling comes out of a National Agency now. As a result, NOAA doesn't "own" the process.	There are more "steps" for NOAA to go through in order to provide plume models.	<b>NOAA Should:</b> 1. Work with the National agency to refine the plume modeling process in order to provide even more timely models.
21	Logistics	Both	There was a great need for logistical support.	As the incident progressed and became more complicated, there was the need for greater and greater logistical support.	<b>First Responder Agencies Should:</b> 1. Seek opportunities for formal training for their logistical staff members. 2. Seek opportunities to exercise their logistical staffs with other agencies and entities.
22	System Recovery Unit	Opportunity for Improvement	Per the Coast Guard's Incident Management Handbook, the CG recommends establishing a Marine Transportation System Recovery Unit (MTSRU) in Planning. A similar Landside system should be established by a UC	This incident closed down the only north/south rail line servicing southern NJ for over two weeks. This resulted in a number of industries being severely affected. A system recovery unit would have been helpful to track the status of industries and help prioritize commodity needs and brief the criticality of the situation to the UC.	<b>Unified Command Should:</b> 1. Consider establishing a unit similar to the MTSRU in future incidents.
23	Responding Agency Relationships	Both	Many of the individuals who responded to the incident already had working relationships. However, there were many individuals from the various agencies that never worked with each other.	An incident such as a multi-week, multi-agency incident brings out a lot of responders from many different jurisdictional levels (local municipality, County, State, Federal). Many individuals had good working relationships with each other, but then again on this incident, there were many who met each other for the first time. This was also a very unique incident with many complex issues. It took time for some of the responders to develop rapport and understanding of the roles and responsibilities of the "other guys".	<b>Coast Guard - New Jersey - Sector Delaware Bay Area Committee Should:</b> 1. Review the Area Contingency Plan and ensure that the plan indicates that the NJSP and NJDEP may represent NJ in the UC. <b>First Responder Agencies Should:</b> 1. Participate in training, drills, and exercises with each other. <b>Coast Guard - New Jersey Should:</b> 1. Reschedule the cancelled "meet and greet" between the USCG Sector Delaware Bay, Captain Of The Port and her senior staff and the senior staffs of the NJDEP and NJSP.