



NATIONAL TRANSPORTATION SAFETY BOARD - **Public Hearing**

Conrail Derailment in Paulsboro, NJ with Vinyl Chloride Release

GROUP	7
EXHIBIT	
X	

Agency / Organization

State of New Jersey

Title

State of New Jersey Proposed Findings
Submission 49CFR 845.27

**National Transportation Safety Board
Investigative Hearing
Conrail Train Derailment with Hazardous Materials Release
Paulsboro, New Jersey, November 2012**

**State of New Jersey's Post-Hearing Submission
August 9, 2013**

INTRODUCTORY STATEMENT

Beginning shortly after the derailment, the State of New Jersey's collective actions improved the response to the hazardous conditions created by the incident. In New Jersey, all emergency incidents begin at the local level. In an incident like the Conrail derailment in Paulsboro, the State's main role is to assist the local government and participate in a unified command as appropriate. After the train derailed and a tank car of vinyl chloride was breached in Mantua Creek, the State supported and assisted the Incident Command in assessing the incident, establishing control, moving the incident command post, developing an air monitoring plan, recruiting and providing additional resources, and transitioning to a Unified Command headed by the United States Coast Guard as the federal on-scene coordinator.

Upon arriving at the scene, the New Jersey Department of Environmental Protection (NJDEP) and the New Jersey State Police Office of Emergency Management (OEM) provided assistance to the Incident Commander. Specifically:

- NJDEP and OEM maintained a vital presence throughout the incident, contributing to the control of the scene and the organization of the response;
- NJDEP and OEM encouraged and worked with the Incident Commander and later within the Unified Command to identify and address the hazards posed by the derailment and the release;
- NJDEP and OEM played a significant role in moving the Incident Command Post farther back from the derailment site because of concerns over site safety;
- NJDEP and OEM assisted throughout the response in identifying priorities and objectives, creating action plans, and allocating resources;

- NJDEP and OEM marshaled additional resources for the response. For example, NJDEP contacted the United States Environmental Protection Agency (EPA) to arrange for the EPA to bring its valuable air monitoring expertise and equipment to the area;
- NJDEP helped to develop an air monitoring plan to measure the extent and location of vinyl chloride as a factor in determining whether the evacuation area needed to be expanded; and
- NJDEP and OEM initiated the framework for a Unified Command and worked with its partners within the Unified Command to ensure the public health and safety.

In short, the presence of NJDEP and OEM representatives in Paulsboro helped to address concerns relating to the safety of responders, brought needed expertise and resources to bear, and generally improved the response to the derailment.

New Jersey's post-hearing submission contains proposed key factual findings drawn from the National Transportation Safety Board's record of investigation, including the Board's hearing on July 9 and 10, 2013.

STATE OF NEW JERSEY PROPOSED FACTUAL FINDINGS

I. INITIAL EMERGENCY RESPONSE

A. Response Efforts During the First Day of the Incident

Finding No. 1:

Early in the response, both the Paulsboro Fire Chief, as Incident Commander, and the Deputy Fire Chief, were operating on the basis that there was a release of vinyl chloride.

1. Deputy Fire Chief Stevenson's wife observed gas spewing out of a train car which led him to report it on the first 911 call. T127-21 to T128-11.
2. At 0705 hours, Deputy Fire Chief Stevenson reports that the creek is full of vapors from the derailed cars. Group 3, Exhibit A, p. 19.

3. Deputy Fire Chief Stevenson read a placard from one of the derailed cars, "1086," which he understood from his initial call to the County Dispatch to identify vinyl chloride. Because he understood that cars run in bunches, he believed the breached car was probably carrying vinyl chloride too. T130-15 to -25. See also Group 3, Exhibit BF, p. 5.
4. Deputy Fire Chief Stevenson informed Chief Giampola that a car was leaking its contents and that a placard for one of the derailed cars, but not necessarily the breached car, showed that it contained vinyl chloride. T131-14 to T132-4.
5. At approximately 0730 hours, Gary Fillingame, the Conrail Trainmaster, told Deputy Chief Stevenson that a car was punctured. Group 3, Exhibit A, pp. 22-23.
6. Deputy Fire Chief Stevenson obtained a copy of the Material Safety Data Sheet (MSDS) for vinyl chloride, and this was the primary resource he used the morning of the incident. T131-2 to -9. The MSDS provides for a half mile evacuation. T205-17 to -20.

Finding No. 2:

Conrail failed to comply with statutory notice requirements.

1. New Jersey law requires that a person responsible for a discharge of a hazardous substance, "who knows or reasonably should know of the discharge, shall immediately notify the Department [of Environmental Protection (NJDEP).]" Notification received by NJDEP "within 15 minutes of the time that the person responsible for a discharge knew, or reasonably should have known, of the discharge shall be considered immediate." NJDEP rules at N.J.A.C. 7:1E-5.3, implementing the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11.
2. There is no minimum reportable quantity of hazardous material release. Group 3, Exhibit AF, pp. 1000-59.
3. Conrail, as the discharger of a hazardous substance, did not comply with the New Jersey State Air Pollution Control Act, which provides: "A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment

or which might reasonably result in citizen complaints shall immediately notify the department." N.J.S.A. 26:2C-19(e); see also NJDEP rules at N.J.A.C. 7:1E-5.3, implementing the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11.

4. Conrail did not report the derailment to the National Response Center (NRC) until 0832 hours. The NRC forwarded the notice to the NJDEP Hotline at 0849 hours. Group 5, Exhibit AI.
5. Conrail did not report the incident to the NJDEP Hotline until 0902 hours. Group 5, Exhibit AG.
6. The Gloucester County Communications Center notified the NRC of the train derailment at 0741 hours. Group 5, Exhibit AH and AG. Notice was then sent by the NRC at 0752 hours and received by the NJDEP Hotline at 0756 hours. Group 3, Exhibit AV, p. NJDEP-1297; Group 5, Exhibit AG and AF.

Finding No. 3:

Conrail, as the responsible party, failed to make sufficient efforts to support and assist the Incident Commander at the scene.

1. Conrail failed to maintain a consistent presence at the scene and did not adequately assist the Incident Commander. Neil Ferrone, Conrail's Chief Risk Officer, did not establish a consistent line of communication with the Incident Commander during the initial response period. While Ferrone and Fillingame took the train consist and inspected the back end of the train, no one in a senior Conrail position remained with the Incident Commander. T230-20 to T231-4.
2. Conrail failed to provide the train consist to the Incident Commander in a timely manner. The consist was unavailable for at least 45 minutes while Ferrone and Fillingame inspected the train. T231-9 to -14.
3. Mr. Ferrone advised that the Incident Commander did not ask for the train consist when they first met, so neither he nor Fillingame gave it to him. Group 3, Exhibit BI, p. 15.

Finding No. 4:

The Incident Commander did not follow guidance and information regarding the hazards of vinyl chloride in order to adequately assess and safely secure the scene in response to the release.

1. When a Paulsboro police officer asked Deputy Chief Stevenson whether they should be standing at his residence, he responded: "Not really, but we're here." Group 3, Exhibit A, p. 17.
2. Chief Giampola was aware that the Emergency Response Guide (ERG) recommended an initial evacuation area of at least a half mile. T140-13 to -16; Group 3, Exhibit BM.
3. The Gloucester County Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) team Lieutenant arrived at approximately 0730 hours. He felt personnel were too close to the derailment and said that they needed to move back at least a half mile. Chief Giampola said that the command post was going to be established at that location. The Lieutenant said that when a police officer asked if personnel were too close, he responded that he was not in charge, the fire department has command of the scene but that he was going to be staying back because of the proximity of that location to the incident. Group 3, Exhibit A, pp. 24-25.
4. After completing an assessment of the tank cars near the bridge and before leaving to assess the cars on the north end of the tracks, Ferrone spoke with Chief Giampola. "'I had the clipboard with the consist. I explained to him that these cars, 6 through 12, were derailed, and it looked like car number 9 was breached, and then [I] showed him the car number and told him that it . . . was a vinyl chloride car. . . His response to me was . . . what do we do with that? And I pulled -- in the consist is a hazardous description, almost like a small MSDS sheet. . . I read it to him. . . it says that if it's not involved in a fire, it requires a half mile evacuation. If it's involved in a fire, it's recommended a mile evacuation. To my remembrance, he basically said, I don't think we're going to do that. And I said, well, that's your call; you are the fire chief. You are the incident commander.'" Group 3, Exhibit A, p. 23. See also T174-13 to -24.
5. Mr. Ferrone did not agree with Chief Giampola's decision to not evacuate those within a half mile of the incident. Once Ferrone realized there was a breach, he immediately told the

four or five Conrail employees in the area to evacuate. Although Conrail was the responsible party, Ferrone did not feel that it was necessary to have further discussion with the Chief about evacuation. T216-19 to T217-15.

6. The Paulsboro Refining Company Certified Industrial Hygienist reported to the incident command at the church at approximately 0830 hours. He reported: "I had everybody's attention because it was very quiet. Everybody was looking at me. So . . . they were all aware that the [air monitoring] numbers were over 500 parts per million as read on [his] PID uncorrected for vinyl chloride." He told them that the threshold he knew was the OSHA Permissible Exposure Limit of 1 part per million. He quickly left with his team. Group 3, Exhibit A, pp. 26-28.
7. Chief Robinson said that he was not privy to the decisions being made regarding evacuation, resources and the command process until 45 minutes after his arrival when incident command met in the church. T219-20 to T220-13.
8. Chief Robinson did not specifically have any participation coordinating between fire and police on the evacuation strategy. T177-5 to -9.
9. Chief Giampola left the scope of the evacuation response to the police department. Group 3, Exhibit BE, pp. 14-15.
10. Air monitoring information is one of the things that should be considered in deciding whether or not to evacuate. T294-10 to -24.
11. According to Chief Royall, incident command posts typically will be located in the cold zone, or the area beyond which you would expect to be exposed to whatever material is being released. T320-24 to T321-3.
12. Chief Giampola testified that he relied on his experts, Pat Robinson from Paulsboro Refining Company and Neil Ferrone of Conrail, to assist him in establishing Commerce Street as the perimeter for the hot zone. T141-5 to -17.
13. Chief Robinson does not recall specifically giving Chief Giampola a hot zone recommendation. T176-15 to -21.
14. Chief Giampola stated that air monitoring was also used to establish the hot zone. T141-21 to T142-7. However, Chief Robinson from Paulsboro Refinery was not aware of anyone

conducting air monitoring before his team from the refinery arrived at approximately 0830 hours. T149-11 to -15.

15. According to Chief Robinson, the high air monitoring readings taken at 0830 hours outside of the church quickly dissipated to some very low readings in about 20 minutes, indicating the incident was a fast moving event. T210-16 to -23.
16. Even though the readings were not high, Chief Robinson nevertheless suggested moving out of the immediate area and that some type of field command post be set up in the church. Group 3, Exhibit BH, pp. 9-12.
17. Other first responders reporting to the scene urged that the Command Post was too close to the derailment. See Group 3, Exhibit BG, p. 18 (Deputy Gloucester County Emergency Management Coordinator (EMC) discussed the issue with his on-scene contact, Pat Dolgos, and advised Dolgos that if he felt uncomfortable with the location he should leave and communicate with the Incident Command via radio); T145-17 to -24 and T148-1 to -15 (Chief Giampola indicated that Dolgos said the Command Post was too close but the Chief thought Dolgos was rude and sent him away); Group 3, Exhibit BF, p. 12 (Deputy Chief Stevenson conversed with a first responder who stated the command post was too close to the scene and should be at least a mile and a half away, not 100 yards or in the middle of it).
18. After the Chief held the briefing at the church, he felt the incident was pretty stable. Group 3, Exhibit BE, p. 19.
19. Sgt. Bryan Everingham of the New Jersey State Police arrived on scene shortly before 0900 hours at St. James Church, which he had been told was the command post. However, when he arrived, no one was there, so he proceeded down Jefferson Street. It did not take long to realize that they were in a hot zone, and when NJDEP arrived, they worked together to bring that to the attention of the Incident Commander. T374-20 to T375-13.
20. Robert Van Fossen of the New Jersey Department of Environmental Protection arrived about 0920 hours. His initial assessment was that there was a vinyl chloride discharge and the Command Post needed to be moved back. A unified command needed to be initiated. T335-10 to T336-4; T374-1 to -3.

21. When Mr. Van Fossen first arrived at the scene, he went to the Deputy Fire Chief's front lawn, which he understood to be the command post, where a lot of people were present. He was there for approximately five minutes, and then dropped back to the church to look for his State Police counterparts and county officials to start discussing the need to push the command post farther back because he had concerns about site safety. The goal was to get people out of there and move them back to a safe distance. T335-10 to T336-4; T336-23 to T337-7; T368-3 to -16; T424-4 to -12.
22. Another Incident Command briefing occurred at the church at approximately 0940 hours. A Paulsboro police officer stated that "[t]here was a lot of debate" regarding where the incident command post should be located. The officer said that Chief Giampola was "pretty persistent" that he wanted it at the church. The New Jersey State Police "questioned it big time - if this was the right place ... a lot of people and I want to say ... once that second smoke came in ... were not happy with that call [The Paulsboro Fire Chief's decision] ... A lot of people said we're out of here, and you saw people leaving ... Gloucester County [CBRNE Member 3] was one that said ... we got to go." Group 3, Exhibit A, p. 30-31.
23. The Incident Command Post did not move to its third location - Borough Hall - until approximately 1130 hours. T345-11 to -17.
24. By approximately 1410 hours, the Incident Command Post was relocated to the Gloucester County Fire Training Academy. Group 3, Exhibit AQ, p. NJDEP-0137.
25. Chief Giampola did not ask for any assistance from Conrail on the morning of the derailment. Group 3, Exhibit BI, pp. 19-20.
26. Chief Giampola did not think there were any resources lacking at the derailment scene. Group 3, Exhibit BE, p. 25.

Finding 5:

The United States Coast Guard did not make its plume modeling available to the Incident Commander in a timely manner.

1. USCG Captain Moore requested plume modeling from NOAA. The Coast Guard had an initial plume model between 1000 and 1100 hours. T342-5 to 343-3; T351-24 to T352-6.
2. The Coast Guard advance team was on scene between 0930 and 1000 hours to interface with the incident command and understand the scope of the incident, the scope of the response, the resources deployed, and the decision-making taking place. T343-10 to -24.
3. The Coast Guard did not share the plume model with the local incident commander until about 1300 to 1500 hours. T372-21 to T373-18.

B. First Responder/Worker Protection

Finding No. 1:

The Incident Commander did not ensure the protection of first responders.

1. Deputy Fire Chief Stevenson obtained a copy of the Material Safety Data Sheet (MSDS) for vinyl chloride, and this was the primary resource he used the morning of the incident. T131-2 to -9. The MSDS provides for a half mile evacuation. T205-17 to -20.
2. When the responders came in, Deputy Fire Chief Stevenson did not advise them regarding safety precautions. T129-14 to -21.
3. Although Chief Giampola expressed concern for the safety of residents by ordering evacuations or ordering them to shelter in place, T139-3 to T140-11, it is unclear how the Chief identified the hot zone to first responders. T141-9 to -20.
4. "Members of the [Gloucester] County CBRNE team told NTSB investigators that they were not given a safety briefing when they arrived at the [Incident Command Post] and that there was no delineation of the hot zone. They stated that no one in the area was wearing PPE, specifically respiratory protection." Group 3, Exhibit A, p. 32.

5. Chief Giampola stated that air monitoring was used to establish the hot zone perimeter. However, the record is unclear as to what readings he used, when they were used, or how they affected the establishment of the hot zone. T141-21 to T142-7.
6. Deputy Chief Stevenson stated that nobody donned a full HAZMAT suit to assess the train cars because, for a little while, they were not sure what chemical they were dealing with, and the cars could have shifted. T150-10 to T151-15. This is in contrast to the Paulsboro Emergency Operations Plan, which requires that if it is possible that emergency responders may be exposed to a hazardous substance, the Incident Commander will ensure that self-contained breathing apparatuses (SCBA) are worn. Group 3, Exhibit T; T307-15 to T308-16; T309-2 to -4.
7. Chief Robinson asked one of his HAZMAT people, his industrial hygienist, to be the point source to try to collect data from "all the people" with monitoring meters. Group 3, Exhibit BH, p. 14. The data was not communicated to first responders.

Finding No. 2:

The Incident Commander failed to require first responders to wear personal protective equipment.

1. People who were not wearing personal protective equipment (PPE) were allowed in the hot zone. T142-8 to -10.
2. Paulsboro does have SCBA available for each riding position in the fire vehicle, along with the driver, T309-9 to -12, and yet when the equipment was on scene, no one used it. T142-11 to -24.
3. Chief Giampola did not require any responder to wear PPE at the scene because his Deputy Chief was "standing on two legs and he's having a conversation with me, so protective -- breathing apparatus didn't even come into my mind Once we found out that there was a release it was almost like the horse is already out of the barn ... you can't close the gate now, it don't help I didn't smell anything or taste anything ... no eye watering. My throat wasn't getting scratchy. I didn't show any signs that I needed to put respiratory equipment on." Group 3, Exhibit BE, pp. 17-18; T186-4 to T187-8.

4. Chief Giampola's failure to require first responders to wear PPE was based in part on the fact that Deputy Chief Stevenson appeared not to be affected by the exposure and "was still on two feet standing up so I trusted the decisions that he was making at the time and I had no reason to second guess his decisions at the time." T144-1 to -4. Deputy Chief Stevenson, on the other hand, testified that he did not make any decisions regarding safety precautions, leaving that to Chief Giampola. T129-14 to -21; T130-9 to -14.
5. According to Chief Giampola, "[s]ometimes you end up taking a little chance on your own, that don't want to take with your residents." T144-5 to -6.
6. Chief Giampola did not act on initial high air monitoring readings. Group 3, Exhibit A, p. 24-25. When Chief Giampola started receiving lower air monitoring readings, he determined that using SCBA was not warranted. Group 3, Exhibit BE, p. 18.
7. Chief Robinson does not recall having a conversation with anyone at the scene about PPE. Rather, the emphasis was on moving back once the "fog" started to lift. Group 3, Exhibit BH, p. 38.
8. The respiratory protection plan in the fire annex to the Paulsboro EOP provides that first responders are to wear SCBA whenever they are going to a hazardous or toxic environment, and they are to wear that SCBA until told otherwise by the incident commander. The day of the incident, neither incident commander addressed the issue. When Chief Roemmich and the other firefighters arrived on location, the firefighters were told to remain in the vehicle while Chief Roemmich got out to see what course of action to take. At that point, he felt they were safe, so they did not put on SCBA; when the numbers were elevated later in the day, they did. All firefighters and command personnel are fully aware of the respiratory protection plan. The EOP's respiratory protection plan is the same plan that was first put out by the Division of Fire Safety and PEOSH (DOH). T307-15 to T308-16; T309-2 to -4.

C. Paulsboro Responder Training and Qualifications

Finding No. 1:

The Incident Commander, Deputy Fire Chief, and other Paulsboro firefighters all had awareness and operational level training at the time of the response to the derailment, and the Incident Commander had the necessary training to adequately assess and control the scene.

1. Chief Giampola obtained ICS level I-400 training in 2011, and first obtained Incident Command System training as early as 1992. Group 3, Exhibit P.
2. Deputy Chief Stevenson obtained ICS level I-300 training in 2006. Group 3, Exhibit O.
3. All firefighters in the Borough of Paulsboro are awareness and operational level trained. T245-2 to -6.
4. The Paulsboro Fire Department has two drills per month, including one with its mutual aid companies (East Greenwich Township, Greenwich Township Gibbstown or Thorofare Fire Departments). It also performs drills once a year with local industries (Paulsboro Refining Company, Nustar and Exxon Mobil). T309-13 to T310-3.
5. Paulsboro Refinery invites Paulsboro to an annual hands-on mutual aid drill. Group 3, Exhibit BH, pp. 53-54.
6. Gloucester County CBRNE provides training every other month on HAZMAT tech, including Level A Competency, Level B Competency, and SCBA Competency. They also provide trainings from other experts and vendors on various equipment and topics. Group 3, Exhibit BG, pp. 25-26.
7. As part of its 5-year strategic plan for fiscal years 2009 through 2013, PEOSH has attempted to reduce injuries and illnesses within the local fire protection industry by conducting targeted inspections of different municipalities that it either knows have issues, or by conducting random samples. The Program conducts a lot of outreach and education, focusing primarily on respiratory protection, HAZCOM and medical surveillance. T362-8 to 362-19.
8. Chief Giampola said that his HAZMAT knowledge is very limited and so he calls the experts. T148-20 to -23. Yet he took and completed a hazardous materials chemistry class in January

1991, a 32-hour course from the University of Nevada entitled "Mobil Company Special" in August 1991 and again in 1993, a hazardous materials refresher in March 2011, and a hazardous materials Level II operations competency refresher in April 2012. Group 3, Exhibit P. See also Group 3, Exhibit A, p. 42.

9. Paulsboro usually conducts exercises regarding its hazardous materials response based on the Hazardous Materials Section of its Emergency Operations Plan (Group 3, Exhibit T) once a year in conjunction with its hazardous operations refresher, and conducts those exercises with its neighbors. T168-25 to T169-14.
10. The Paulsboro Refinery provides various training opportunities to Paulsboro emergency responders, including mutual aid drills, co-sponsorships at Texas A&M University for flammable liquid firefighting, trips to AAR Pueblo Tank Car Safety Course and several other specialty courses such as trench collapse, structure collapse, etc. The Borough of Paulsboro is also going to go out to Texas A&M again with the Refinery. T178-4 to 17; T192-6 to -15.
11. Conrail offers training to first responders, including classroom training that talks about Railroad 101, safety, and general awareness. It also offers tank car hands-on training through the TRANSCAER operations, which brings in Dow, DuPont or the CSX training cars, and does tabletop emergency response drills for the communities. In addition, it provides Operation Lifesaver, trespasser and grade crossing safety awareness. This training is available to Paulsboro as well. T179-21 to T180-8; T182-17 to T183-3.
12. Chief Giampola acknowledged that they recently had training with Conrail "that was probably the best training I've ever had anywhere. And we learned from this experience with the train and now [Conrail]'s going to give us the opportunity, as well as other local responders, to go out to, I think it's Pueblo with the train. So we are going to learn more on what we can do, better ourselves in that training." T191-22 to T192-5.
13. The Paulsboro Fire Department held a three-hour HAZMAT Awareness & Operations drill at its fire station on April 10, 2012. Group 3, Exhibit BD, p. DOH525.
14. Despite the fact that between 25,000 and 30,000 cars each year go through Paulsboro carrying hazardous materials, in the last

30 years, Paulsboro had never participated in a training involving a train derailment. Chief Giampola admits that this incident was a wake-up call, and that they "really didn't prepare for that incident." T181-19 to T182-15.

D. Roles of the Hazardous Materials Teams During the Response

Finding No. 1:

The Gloucester County Chemical, Biological, Radiological, Nuclear, and Explosive team had the capability to assist during the incident.

1. The Gloucester County CBRNE Team had members that were trained at the tank car specialist level, but Chief Giampola was not aware of that. T151-17 to -20.
2. In the Gloucester County Deputy Emergency Management Coordinator's (EMC) view, the Paulsboro Fire Chief does not have an understanding of Gloucester County CBRNE's response capabilities or where Gloucester County CBRNE fits into the whole ICS function. Instead, the Chief relies on Paulsboro Refinery to provide HAZMAT expertise. Group 3, Exhibit BG, pp. 19-21.
3. Two of the Gloucester County CBRNE team's air monitors were not working because the batteries were depleted, but backup batteries were in the case and could have been used. T311-10 to -20. Gloucester County CBRNE had been deployed three weeks prior in response to the hurricane and it may be that when the truck returned, it was not plugged in properly so the batteries were dead in the meter itself. However, there are spare battery packs in the same case with the meters, but for some reason the spare packs were not used. Group 3, Exhibit BG, p. 6. There is also a third back up measure, a converter kit that uses six C batteries. Group 3, Exhibit BG, p. 13. Two of the SCBA units had faulty LEDs that could not display the amount of air left, but the units themselves worked and there are other means of gauging how much air is left. T311-21 to T312-5.
4. Maintenance and calibration of all equipment issued under homeland security grants is the responsibility of the grantee. Group 3, Exhibit AU, p. NJDEP-1264.

5. Gloucester County CBRNE has the capability to conduct plume modeling, but Chief Giampola did not request modeling by the County during the incident. T277-1 to -13.

II. HAZARDOUS MATERIALS INCIDENT MANAGEMENT

A. Incident Command Operations to Organize, Control, and Manage the Incident

Finding No. 1:

The Incident Commander had all the resources necessary to respond to the incident.

1. Chief Giampola did not think there were any resources lacking on scene. Group 3, Exhibit BE, p. 25.
2. The Refinery has a written mutual aid policy with Paulsboro. Group 3, Exhibit BH, p. 8.
3. The Paulsboro Refinery HAZMAT team has trained technicians to do immediate air monitoring to establish the hot, warm and cold zones. Group 3, Exhibit BH, p. 8.
4. Paulsboro Refinery had meters on the water and a number of other locations and relayed the information to Chief Giampola. Group 3, Exhibit BF, p. 13.
5. Paulsboro relies on mutual aid agreements and memoranda of understanding with neighboring communities to provide the resources it needs for an evacuation during a transportation disaster or HAZMAT release. T164-25 to T165-10.
6. In New Jersey, county, State and federal resources support local government in responding to local emergencies. Group 3, Exhibit AE, pp. 1000-50.
7. The resources that Paulsboro could seek from Gloucester County included the Gloucester County CBRNE team, a team recognized by the New Jersey State Police. It has various metering equipment as well as Levels A through D personal protective equipment for different levels of CBRNE response. The team also has computer-aided resources for evacuations and modeling. T256-6 to T257-1; T276-24 to T277-7. The team has members with expertise at the technician and specialist levels in the areas of railcar, tank car, weapons of mass

destruction, and meth labs. The team also has two bomb technicians. T310-20 to -25.

8. Pat Dolgos from the Gloucester County CBRNE team was giving Chief Giampola air monitoring readings concerning the levels of vinyl chloride. Group 3, Exhibit BE, pp. 16-17.
9. A county HAZMAT team is going to assist, advise, and offer equipment to the municipality, but not take over as incident commander. T257-13 to -19.
10. Later in the day of the incident, Paulsboro worked hand in hand with the County Office of Emergency Management (OEM) to effectuate the second evacuation. The County assisted Paulsboro with the evacuation. T247-13 to -17.
11. In New Jersey, the State's main role in any HAZMAT incident is to assist local government, help the Incident Commander move into a unified command as appropriate, and bring in resources in a unified fashion. T334-3 to -9; Group 3, Exhibit AF, pp. 1000-59.
12. Grant funding is available through the NJSP to qualified applicants for emergency planning at the local level. T366-1 to -19.
13. The NJDOH, through its emergency response side, tries to ensure that locals are aware of the funding opportunities that are available to help them put together detailed preparedness plans. T319-15 to T320-2.
14. As outlined in its emergency operations plan, Paulsboro should have sought resources from the Gloucester County Office of Emergency Management to evacuate large numbers of people. The County has buses, and can reach out to neighboring municipalities and the State Department of Transportation to provide additional buses. T246-15 to -25; T247-13 to -15; T248-13 to T249-10.

III. STATE AND FEDERAL EMERGENCY RESPONSE ACTIONS

A. The Paulsboro Emergency Operations Plan

Finding No. 1:

The Paulsboro Emergency Operations Plan was sufficient to address the incident, but the Incident Commander failed to follow the provisions of the Plan.

1. Chief Roemmich testified that the Paulsboro Emergency Operations Plan (EOP) (Group 3, Exhibit T) has numerous annexes that cover a broad range of emergency response areas, including fire rescue, evacuation, alert warning, resource management, public works, public information, and HAZMAT. Each annex has a director who is responsible to revise and keep current their annex. T243-6 to -15.
2. The Paulsboro EOP, Annex H, sets forth the plan for responding to a hazardous materials incident. Group 3, Exhibit T.
3. Chief Giampola is the director for Annex H, hazardous materials response. T244-11 to -14.
4. The primary agency for hazardous materials response is the municipal fire department. Group 3, Exhibit T.
5. The Paulsboro EOP designates the fire chief as the incident commander in any hazardous materials incident. Group 3, Exhibit T.
6. Paulsboro usually conducts exercises regarding its hazardous materials response based on the Hazardous Materials Section of its Emergency Operations Plan (Group 3, Exhibit T) once a year in conjunction with its hazardous operations refresher, and conducts those exercises with its neighbors. T168-25 to T169-14.
7. The Paulsboro Police, Fire and EMS Chiefs are responsible for coordinating hazardous materials training. Group 3, Exhibit T. This is also a Public Employees Occupational Safety and Health Act requirement.
8. The Gloucester County Department of Health, Environmental Health is designated in the EOP as an additional response agency for any hazardous materials incident. Group 3, Exhibit T.

9. The CSX Railroad is a specific identified hazardous materials threat in the Paulsboro EOP, Annex H. Group 3, Exhibit T.
10. The Incident Command System must be used to direct the response phase to a hazardous materials emergency. Group 3, Exhibit T.
11. Where a HAZMAT response is beyond the scope of the local fire department, the Paulsboro EOP directs that the Gloucester County Health Department or the NJDEP are to be called in and designated as the agency in charge. Group 3, Exhibit T.
12. If it is possible that emergency responders may be exposed to a hazardous substance, the Incident Commander will ensure that self-contained breathing apparatuses (SCBA) are worn. Group 3, Exhibit T; T307-15 to T308-5; T309-2 to -4.
13. The Incident Commander will ensure that personal protective equipment will be worn by trained, qualified emergency responders in accordance with OSHA. Group 3, Exhibit T.
14. The respiratory protection plan in the fire annex to the Paulsboro EOP provides that first responders are to wear SCBA whenever they are going to a hazardous or toxic environment, and they are to wear that SCBA until told otherwise by the incident commander. The day of the incident, neither incident commander addressed the issue. When Chief Roemmich and the other firefighters arrived on location, the firefighters were told to remain in the vehicle while he got out to see what course of action to take. At that point, he felt they were safe, so they did not put on SCBA; when the numbers were elevated later in the day, they did. All firefighters and command personnel are fully aware of this plan. The respiratory protection plan in the EOP is the plan that was first put out by the Division of Fire Safety and PEOSHA (DOH). T307-15 to T308-16; T309-2 to -4.
15. For incidents requiring site control measures, the Incident Commander is responsible for limiting and controlling the number of responders entering the "hot zone." Group 3, Exhibit T.
16. The Incident Commander and the Gloucester County Department of Health, Environmental Health are responsible for coordinating safety monitoring and decontamination. Group 3, Exhibit T.

17. The Paulsboro Police Department is responsible for maintaining safety zones, providing site security and traffic control. Group 3, Exhibit T.
18. The Incident Commander, along with the Gloucester County Department of Health, Environmental Health, is responsible for providing and maintaining exposure records for responders. Group 3, Exhibit T.
19. Individual departments are responsible for the maintenance and calibration of response equipment according to manufacturer and NFPA recommended practices. Group 3, Exhibit T.
20. Under the hazardous materials annex, the fire chief is designated the liaison to responding HAZMAT teams. T244-15 to -23.
21. The hazardous materials annex calls for the firefighters to have awareness and operational level training. T244-23 to T245-1.
22. The EOP provides that the Gloucester County Office of Emergency Management would provide Paulsboro with the resources necessary to evacuate handicapped and additional individuals. T246-15 to -25.
23. All Paulsboro firefighters and command personnel are fully aware of the respiratory protection plan requirements. The Paulsboro respiratory protection plan is part of the fire annex; it is a standard operating guideline by the Paulsboro Fire Department. T308-6 to -16.

Finding No. 2:

The failure to submit an updated Emergency Operations Plan did not affect Paulsboro's response to the incident.

1. At the time of the incident, the Paulsboro EOP was expired. Jack DeAngelo, the Gloucester County Deputy Emergency Management Coordinator, who read and reviewed the draft plan since then stated that nothing substantive had changed as far as the HAZMAT or fire Annexes, except for the name of the fire chief. Group 3, Exhibit BG, p. 28.
2. Prior to the Paulsboro train derailment, the last Paulsboro EOP approved by the New Jersey State Police, Emergency

Management Section, was approved on July 25, 2006. Group 3, Exhibit AL, p. NJSP41.

3. By letter dated July 27, 2006, the New Jersey State Police advised the Paulsboro Office of Emergency Management that its EOP should be reviewed annually and must be submitted for recertification by July 31, 2010. Group 3, Exhibit AL, p. NJSP41.
4. By Memo dated April 19, 2010, the Gloucester County Emergency Management Coordinator advised the Paulsboro Emergency Management Coordinator (EMC) that Paulsboro's EOP was due for recertification by the State, and requested that a complete copy of the Plan be submitted to the County OEM for review by July 31, 2010. Group 3, Exhibit Q.
5. Paulsboro's EMC sent paperwork for the recertification of the Paulsboro EOP in 2010 to the Mayor and council advising that the plan was due for recertification, but nothing occurred. T381-2 to T383-21.
6. The Gloucester County EMC and/or Deputy EMC reviews every local EOP, signs off on the plans, and sends them to the State Police Emergency Management Section for certification. Group 3, Exhibit BG, p. 28.

B. State/Local Actions and Public Information

Finding No. 1:

The statements made by the New Jersey Department of Environmental Protection's Public Information Officer were based on information provided by the Incident Commander.

1. The Paulsboro EOP provides that the Emergency Management (EM) Public Information Officer (PIO) is responsible for directing the Emergency Management Public Information emergency response. "The EM PIO will coordinate distribution of press releases and emergency information during emergencies, schedule news conferences with broadcasting and television media, control unfounded rumors to maintain public calm and to keep channels of communications clear for official instructions and information, and along with the EMC and EM Executive Group, assure that accurate emergency information is passed on the public." Group 3, Exhibit T, Annex E, Emergency Public Information.

2. It is very challenging to get the early reports to the media correct. T418-17 to T419-5.
3. Chief Robinson noted that while they were still trying to get a handle on things at the early meeting in the church, the incident command was trying to get information out to the people. Some monitoring numbers were being discussed, but Robinson was not confident the numbers were accurate and cautioned not to report any numbers. Group 3, Exhibit BH, p. 16.
4. NJDEP's Director of Emergency Response, Robert Van Fossen, had no knowledge of the briefing that took place at or about 1045 hours on the first day of the incident. It was his understanding that the NJDEP Public Information Officer received information from incident command, and relayed that information as he understood it. T344-3 to T345-5; T345-25 to T346-7.

Finding No. 2:

New Jersey supported and assisted the Incident Command in assessing the incident, establishing control, moving the incident command post, developing an air monitoring plan, recruiting and providing additional resources, and transitioning to a unified command.

1. Sgt. Everingham arrived on scene shortly before 0900 hours at St. James Church, which he had been told was the command post. However, when he arrived, no one was there, so he proceeded down Jefferson Street. It did not take long to realize that they were in a hot zone, and when NJDEP arrived, they worked together to bring that to the attention of the Incident Commander. T374-20 to T375-13. They "were trying to bring stability and control to [the] scene and get people out of harm's way and do what was right for the responders as well as for the community." T394-16 to -18.
2. Mr. Van Fossen's initial assessment following his arrival about 0920 hours was that there was a vinyl chloride discharge and the Command Post needed to be moved back. A unified command needed to be initiated. T335-10 to T336-4; T374-1 to -3.
3. When Mr. Van Fossen first arrived at the scene, he went to the Deputy Fire Chief's front lawn, which he understood to be the command post, where a lot of people were present. He was there for approximately five minutes, and then dropped back to

the church to look for his State Police counterparts and county officials to start discussing the need to push the command post farther back because he had concerns about site safety. The goal was to get people out of there and move them back to a safe distance. T335-10 to T336-4; T336-23 to T337-7; T368-3 to -16.

4. When Mr. Van Fossen got to the municipal building, one of his goals was to develop and implement an air monitoring plan so they could understand whether the evacuation area needed to be expanded and whether the shelter-in-place order was appropriate. It was necessary to have an air monitoring plan in place "so we could understand that and make educated decisions based on science." T370-14 to -25.
5. NJDEP's air monitoring plan included the use of assets from the county, from NJDEP, and the USEPA, which had a bus equipped with a Trace Atmospheric Gas (TAGA) system on board. Based on the reports that came back to unified command that afternoon from that air monitoring, the decision was made by unified command to expand the evacuation plan. T371-3 to -13.
6. Mr. Van Fossen was responsible for requesting EPA's presence and assistance. T374-6 to -8.
7. The air monitoring plan was in effect around 1400 or 1500 hours using County, State, and Federal resources. T371-1 to -8.
8. One of NJDEP's first responders on the scene used a photoionization detector (PID) to do minimal air monitoring in his immediate vicinity. "His job was not to do air monitoring. The little bit he did was to make sure he was in a safe environment." T369-14 to -23; T404-16 to T405-2.
9. Once Conrail presented its initial assessment to the group at the initial briefing, the recommendation was made to move the command post back, get people out of harm's way and start setting up an emergency operations center. T375-14 to T376-2. Once at the Borough Hall, the group was able to start to identify the roles and responsibilities of the responding agencies, identify priorities going forward, and communicate information back to their respective agencies. NJDEP and the State Police also provided support to the Incident Commander regarding the issuance of an emergency proclamation. T376-3 to -15.

10. At approximately 1300 hours, Chief Giampola and representatives from the NJDEP, NJSP-OEM, Paulsboro Refining Company HAZMAT, Conrail, and Paulsboro Police discussed the establishment of unified command. This included a discussion of who should be the federal on-scene coordinator, USCG or EPA. Captain Moore of the USCG "arrived and assumed the role of the federal on-scene coordinator. Shortly thereafter, a Unified Command was formed between the USCG, Conrail, NJSP-OEM, NJDEP, and the Paulsboro Fire Department. Group 3, Exhibit A, p. 34.
11. After the incident occurred, the NJDOH developed a health survey, with the help of the CDC, which went out to the community and the local first responders, to inquire into possible health effects as a result of the chemical release. NJDOH's survey also included medical records checks at the surrounding hospitals. The survey does not include Conrail or Coast Guard personnel. The results of the survey are being compiled. T357-3 to T358-10.

C. State Participation in Unified Command in a Local Jurisdiction

Finding No. 1:

In New Jersey, the State's main role in any HAZMAT incident is to assist local government and the incident commander, who is responsible for the response, as well as to take part in a unified command as appropriate.

1. All emergency incidents in New Jersey begin at the local level. T331-3 to -4. When an incident exceeds the capability of the locality, the county office of emergency management coordinates requests for additional support. If the county's capability is exceeded, then they reach out for State resources. In this instance, local, county and state partners responded and worked together. T334-15 to T335-1.
2. The NJDOH is not a formal part of incident command, but it provides assistance when other State agencies or local health departments reach out to it. T260-6 to -15.
3. The role of the NJDEP Bureau of Emergency Response is to provide assets or resources, including federal resources, as needed to help coordinate and assist an incident commander. In hazardous materials spills, if no responsible party is viable or responsive enough, the State is able to finance the response. T331-23 to T333-11.

4. In an incident such as Paulsboro, the State's role is not to take over the command but to help the incident commander move into a unified command and bring in resources in a coordinated fashion. T334-3 to -9.