



June 15, 2011

Mr. Randy Nattis
On-Scene Coordinator
U.S. Environmental Protection Agency (EPA), Region 4
61 Forsyth Street, SW, 11th Floor
Atlanta, GA 30303

**Subject: Final Emergency Response Letter Report
Midville Train Derailment
Midville, Burke County, Georgia
EPA Contract No. EP-W-05-054
TDD No. TTEMI-05-001-0140**

Dear Mr. Nattis:

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting this letter report summarizing response activities that were conducted at the Midville Train Derailment in Midville, Burke County, Georgia from November 21, 2010 through November 23, 2010. This letter report includes five appendices and one attachment. Appendix A provides figures illustrating the site location, site layout, and railcar identification. Appendix B provides tables summarizing air monitoring information. Appendix C provides a photographic log of the response activities. Appendix D provides a copy of the Tetra Tech START logbook notes. Appendix E provides a table of witnesses. Attachment 1 provides a copy of the National Response Center incident reports.

BACKGROUND

At approximately 1707 on November 21, 2010, 38 cars of a Norfolk Southern freight train derailed in Midville, Burke County, Georgia (see Figure 1 in Appendix A) resulting in the release of hazardous material (hazmat) into the surrounding environment. According to incident reports filed with the National Response Center (NRC), hazmat contained in some of the derailed cars included: one car containing methyl ethyl ketone (MEK) (with railcar identification label - SCM 4309); three cars containing sodium hydroxide solution (TILX 160381, GATX 90681, TCIX 6193); and five cars containing liquid chlorine residue (UTLX 900269, OLN 117086, OLN 8077, OLN 114053, OLN 8075). Residue refers to the hazmat remaining in the car after its contents have been unloaded and before the car is refilled or cleaned of hazmat and purged to remove any hazardous vapors. In addition, cars containing sodium carbonate peroxyhydrate (TCM 450166), hexamethylenediamine, anhydrous ammonia, potassium chloride, and sulfur were also identified in the derailment according to the NRC incident reports.

The derailment occurred at milepost S95.5 near the Midville city limits in Burke County, Georgia, between the Jones Street (SR-56) crossing and the North Herndon Road crossing. This section of track is south of and runs parallel to Lee Street (SR-17). There are no houses within 1,000 ft of the derailment location. However, most of the city of Midville, with approximately 457 residents, lies within one mile of the derailment location. The east and west ends of the derailment were accessible from Lee Street (SR-17) through two pathways (see Figure 2 of Appendix A).

EMERGENCY RESPONSE ACTIVITIES

Unified Command

First responders to the derailment included representatives from the Midville Fire Department and Burke County Emergency Management Agency (EMA) as well as Norfolk Southern. As additional agencies and organizations arrived at the scene, a Unified Command was established to manage and coordinate the response efforts. The following list identifies agencies and organizations involved in the response:

- Midville Fire Department (Incident Commander)
- Midville Police Department – security and road closures
- Burke County EMA
- Georgia Environmental Protection Division (GA EPD)
- U.S. Environmental Protection Agency (EPA) Region 4
- Tetra Tech START – EPA contractor
- Norfolk Southern
- Center for Toxicology and Environmental Health (CTEH) – consultant for Norfolk Southern
- R.J.Corman – cleanup contractor for Norfolk Southern
- Hulcher Services Inc. – cleanup contractor for Norfolk Southern
- Hepaco – cleanup contractor for Norfolk Southern
- Eagle/SWS – cleanup contractor for Norfolk Southern
- Federal Railroad Administration – incident investigation

Because of concerns for public safety, local officials evacuated residents from approximately 25 nearby homes after the derailment occurred. The Incident Command Post was located at the Midville Fire Station located on North Railroad Street and an Equipment Staging Area was established along SR-17 near the Faith Baptist Church located to the northeast of the derailment area.

Initial Assessment

On November 21, EPA On-Scene Coordinators (OSC) Randy Nattis and Terry Stilman mobilized to the site to provide technical support to the Incident Commander and monitor cleanup efforts. Norfolk Southern was in the process of mobilizing contractors and equipment to respond to the derailment and began to assess the situation. Initial information indicated that the railcar containing MEK was the only car that was confirmed to be leaking. At approximately 0050 on November 22, Tetra Tech START arrived at the site to support OSCs Nattis and Stilman, and began calibrating air monitoring equipment and installing chlorine and ammonia sensors on the AreaRAE units.

At approximately 0345 on November 22, EPA, Tetra Tech START, and Hepaco representatives made an entry into the eastern end of the derailment area using level B personal protective equipment (PPE) to conduct air monitoring and assess the condition of the MEK and chlorine railcars (see Figure 3 of Appendix A). During the entry, Hepaco personnel identified a 3- to 5-inch cut in the hull of one of the chlorine railcars (OLNX 114053), which was situated adjacent to the MEK rail car and two of the other chlorine railcars (see Figure 3 of Appendix A). Hepaco personnel reported a chlorine vapor concentration of 30 parts per million (ppm) at the cut. Tetra Tech START observed a maximum concentration of volatile organic compounds (VOC) up to 300 ppm (using a MultiRAE) at a distance of approximately 15 feet from the chlorine railcar. Upon exiting the eastern derailment area, personnel noted an organic odor, presumably MEK, and measured VOC concentrations up to 3 ppm.

At approximately 0800 on November 22, EPA and Tetra Tech START met with CTEH representatives to discuss air monitoring activities and coordinate placement of AreaRAE units at fixed monitoring locations along the perimeter of the derailment area to protect public health and safety. AreaRAE units allowed for wireless remote monitoring and continuous data logging on a host controller laptop computer that displayed the status of each unit. Each AreaRAE unit included sensors for chlorine and VOCs as well as other parameters such as ammonia (NH₃), oxygen (O₂), and lower explosive limit (LEL). Based on discussions, AreaRAE units were placed at the following locations (see Figure 2 of Appendix A):

- West of the derailment area on the northern side of the tracks near the intersection of 1st Avenue and Alice Street (Tetra Tech START location).
- Northeast of the derailment area at the equipment staging area near the Faith Baptist Church (Tetra Tech START location).
- Northwest of the derailment area on the north side of Route 17 (CTEH location).
- Immediately east of the derailment area along the tracks (CTEH location).
- South of the derailment area along Field Road (CTEH location).
- West of the derailment area on the southern side of the tracks along Field Road (CTEH location).

Air monitoring activities, which are discussed in more detail later in this report, continued for the duration of EPA's response activities, and included the use of AreaRAE units at the fixed perimeter locations described above as well as roving locations throughout the site and in the surrounding community. Except for the high concentrations of chlorine and VOCs identified in the vicinity of the damaged chlorine and MEK railcars, no air monitoring results exceeding threshold values were identified during response activities. However, concerns remained high due to the hazardous materials present at the derailment, the extent of damage to the railcars, and the proximity of nearby populations.

Cleanup Efforts

Norfolk Southern's cleanup efforts initially focused on assessing the situation and moving railcars containing nonhazardous materials in order to gain access to those that contained hazardous materials. To provide space for the staging of derailed cars, Norfolk Southern used heavy equipment to clear vegetation from an area along the northern side of the railroad tracks and west of the derailment area (see Figures 2 and 3 of Appendix A).

At 1800 on November 22, an operations briefing was held during which Norfolk Southern reported that their crews had moved several cars from the derailment area, including two of the four intact chlorine railcars from the eastern end, which were moved further to the east and north to clear the track area. The remaining two intact chlorine railcars were also subsequently moved to the same location. During the briefing, it was agreed that the leaking MEK railcar would remain in place until the following day due to limited visibility. Based on estimates from CTEH, MEK that leaked from the railcar had impacted soil in a radius of approximately 50 feet surrounding the railcar on the northern side of the tracks as well as a similar sized area on the southern side of the tracks.

After patching the cut in the damaged chlorine railcar (OLNX 114053), Norfolk Southern uprighted the car and staged it along the northern side of the tracks to facilitate depressurization of the remaining residue. A sodium hydroxide solution was used to depressurize the contents of the car by converting the residual chlorine into a bleach solution, an operation referred to as sparging. Initial readings of the damaged railcar indicated a pressure of approximately 150 pounds per square inch (psi) inside the railcar. The objective of the sparging operation was to reduce the pressure gradually to below 20 psi, and then use air pumped into the railcar to clear out the remaining chlorine vapors. Sparging operations were

estimated to require approximately 12 to 24 hours. Table 3 of Appendix B provides a summary of the pressure readings obtained during the sparging operation.

At approximately 2200 on November 22, OSC Nattis directed Tetra Tech START to the eastern end of the derailment area, where a fire had ignited. Personnel observed flames approximately 20 feet tall in the vicinity of the MEK railcar as well as the damaged chlorine railcar (OLNX 114053) that was actively being depressurized. The fire also burned in a small wooded area around the MEK railcar, where MEK had previously leaked into soil on the northern side of the tracks. Air monitoring results obtained during the incident did not indicate any significantly elevated concentrations at the fixed perimeter locations. Subsequent roving air monitoring conducted at 0141 on November 23 while the fire still smoldered indicated chlorine concentrations up to 0.2 ppm and VOC concentrations up to 2 ppm at a distance of approximately 20 yards from the fire.

According to Norfolk Southern and its contractors, the fire ignited while attempts were being made to move the MEK railcar and a steel cable used in the operation pulled slack around the railcar and produced sparks that ignited the fire. A subsequent operations briefing was held to discuss the incident and corrective actions to be taken to prevent future incidents. It was determined that Norfolk Southern's contractor was responsible for the unscheduled move despite earlier agreements to postpone the move until daylight. Corrective actions following the incident included an agreement that all planning and operational decisions would be brought to the attention of Unified Command for approval prior to implementation.

At approximately 0630 on November 23, an operations briefing was held during which Norfolk Southern reported that crews had moved the potassium chloride (salt) railcars and gained access to the sodium hydroxide railcars. Based on the weight of the sodium hydroxide railcars, Norfolk Southern determined that only minimal amounts of the material had apparently leaked. OSC Nattis measured the pH of some small pools of black liquid in the area at approximately 12 to 13. Norfolk Southern subsequently constructed soil berms along the northern side of the railroad tracks to provide a temporary containment and staging area for the sodium hydroxide railcars. By approximately 1020 on November 23, Norfolk Southern had completed moving and staging the three sodium hydroxide railcars.

At approximately 1100 on November 23, Norfolk Southern had cleared all railcars from the track and continued to place ballast and install pre-constructed track panels on the right-of-way to get the line running again.

At approximately 1300, an operations briefing was held during which Norfolk Southern reported:

- The MEK railcar, which was empty, had been staged on plastic for future transportation; small fires in the area where the fire occurred were still burning, but were being monitored by CTEH and site personnel.
- Chlorine sparging operations had reduced the pressure inside the damaged railcar (OLNX 114053) to approximately 19 psi. The four remaining intact chlorine railcars would be loaded onto a flatbed car for transport within 10 to 14 days.
- The three sodium hydroxide railcars were secured inside the bermed area along the northern side of the tracks and arrangements were in progress to transfer their contents for transportation to Olin Corporation (Augusta, Georgia). Contaminated soil in the vicinity of the sodium hydroxide railcars was being excavated to native material and placed into rolloff containers for future disposal.
- Although the evacuation of local residents was to be lifted, CTEH would continue to conduct air monitoring at the site during response activities.

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During the 1300 briefing, a representative from the Federal Railroad Association (FRA) announced that they were conducting an investigation of the derailment. The FRA representative requested any pieces of the rail from the switch area be set aside for their investigation as well as cameras that were reportedly located on each of the chlorine railcars, but had not yet been located. Based on the progress of operations and the stabilization of hazardous materials, OSC Nattis coordinated with the Midville Fire Department, and EPA and Tetra Tech START subsequently demobilized from the site at approximately 1500 on November 23.

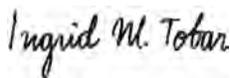
Air Monitoring

During response activities, Tetra Tech START conducted air monitoring at roving locations throughout the derailment area as well as fixed locations along the perimeter of the site to ensure public health and safety. Based on the hazardous materials that were initially reported to be involved in the derailment according to the NRC incident reports, air monitoring concerns focused on chlorine, VOCs (MEK), and ammonia. A combination of one MultiRAE and four AreaRAE units were used by Tetra Tech START to measure these parameters as well as percent oxygen and lower explosive limits. The Acute Exposure Guideline Levels (AEGL), specifically AEGL-1 for chlorine, ammonia, and VOCs were used as threshold values for comparison of air monitoring results. In addition, threshold values for LEL and O₂ were obtained from the Occupational Safety and Health Administration (OSHA) Standards, 29 CFR 1910.146(b), that define a hazardous atmosphere. Table 2 of Appendix B summarizes the AEGL and OSHA values.

Maximum readings obtained at roving locations were detected during the level B entry made from the eastern end of the derailment area to assess the condition of the damaged chlorine railcar (OLNX 114053). During this entry, chlorine concentrations up to 30 ppm were measured by Hepaco representatives at the cut observed in the side of the railcar and VOC concentrations up to 300 ppm were measured by Tetra Tech START in the vicinity of the railcar, presumably attributable to the MEK that was spilled nearby. Table 1 of Appendix A provides a summary of air monitoring results obtained at roving locations. No other air monitoring results obtained by Tetra Tech START at roving locations or fixed perimeter locations indicated concentrations exceeding the AEGLs or OSHA standards.

If you have any questions about the enclosed report, please call me at (678) 775-3119 or Andrew Johnson at (678) 775-3100.

Sincerely,



Ingrid Tobar
START III Team Member



Andrew F. Johnson
START III Program Manager

Enclosures (5 Appendices, 1 Attachment)

cc: Katrina Jones, EPA Project Officer
Angel Reed, START III Document Control Coordinator

APPENDIX A
FIGURES
(Three Pages)



Legend

-  Train Derailment Site Location
 -  State Highway
 -  Major Road
- N
W —+— E
S
- 0 1,000 2,000
Feet

Note: The Environmental Protection Agency does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any injury or loss resulting from the reliance upon the information shown.

Map Source:
USGS 7.5 Minute Topographic Quadrangle Map:
Midville, GA 1981.
HSIP Gold Dataset, 2007.



United States
Environmental
Protection Agency



MIDVILLE TRAIN DERAILMENT
MIDVILLE,
BURKE COUNTY,
GEORGIA
TDD: TTEMI-05-001-0140

**FIGURE 1
SITE LOCATION**





Legend

- Incident Command Post
- Equipment Staging Area
- EPA Fixed Air Monitoring Location
- Norfolk Southern Fixed Air Monitoring Location
- State Highway
- Major Road
- Street
- Site Access Pathway
- Railroad
- Perennial Stream
- Approximate Train Derailment Area
- Radius Ring

N
W E S

0 250 500
Feet

Note: The Environmental Protection Agency does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any injury or loss resulting from the reliance upon the information shown.

Map Source:
i Imagery Prime World 2D, 2010
HSIP Gold Data, 2007



United States Environmental Protection Agency

MIDVILLE TRAIN DERAILMENT
MIDVILLE,
BURKE COUNTY,
GEORGIA
TDD: TTEMI-05-001-0140

**FIGURE 2
SITE LAYOUT**

TETRA TECH



Legend

- Site Access Pathway
- Railroad
- Approximate Train Derailment Area

Identified Cars by Contents

- Chlorine (Cl₂)**
OLNX 8075, OLNX 8077, OLNX 114053, OLNX 117086, UTLX 900269
- Methyl ethyl ketone (MEK)**
SCMX 4309
- Sodium hydroxide solution (NaOH)**
GATX 90681, TCIX 6193, TILX 160381
- Sodium carbonate peroxyhydrate**
TCMX 450166
- Unidentified**
GATX 9954

Location ID (Air Monitoring Results in Table 1)

- (A) East derailment area entry point
- (B) Damaged chlorine residue car OLNX 114053
- (C) Staging area for chlorine residue cars east of the derailment
- (D) Center of railroad track between first derailed car and east entry point
- (E) Pathway from equipment staging area to railroad tracks
- (F) Center of railroad track between first derailed car and west entry point
- (G) MEK release and burn area

Railcar Reporting Marks

- GATX General American Marks Company
- OLNX Olin Corporation
- SCMX Shell Oil Company
- TCIX Trinity Chemical Leasing
- TCMX Transportation Company of America
- TILX Trinity Industries Leasing
- UTLX Union Tank Car Company

Note: The Environmental Protection Agency does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any injury or loss resulting from the reliance upon the information shown.
Map Source: Imagery Prime World 2D, 2010
Aerial Photographs by OSC Randy Nattis, 2010

MIDVILLE TRAIN DERAILMENT
MIDVILLE,
BURKE COUNTY,
GEORGIA
TDD: TTEMI-05-001-0140

**FIGURE 3
DERAILED CAR
IDENTIFICATION DIAGRAM**

APPENDIX B

TABLES

(Three Pages)

**TABLE 1
ROVING AIR MONITORING RESULTS**

Time	Instrument	Operator	Air Monitoring Results			Location ID*	Remarks
			Cl ₂ (ppm)	NH ₃ (ppm)	VOC (ppm)		
11/22/2010							
00:50	Unknown	Hepaco	NR	NR	50.0	--	Unknown location
01:25	MultiRAE	START	NR	NR	0.0	--	McKinney Pond Road
03:45	Unknown	Hepaco	30.0	NR	NR	ⓑ	Cut on damaged chlorine railcar (OLNX 114053)
03:45	MultiRAE	START	NR	NR	3.0 - 5.0	Ⓐ	Railroad tracks at eastern access pathway
03:45	MultiRAE	START	NR	NR	20.0 - 300	ⓒ	15 feet southeast of damaged chlorine railcar (OLNX 114053)
03:45	MultiRAE	START	NR	NR	1.0 - 3.0	Ⓔ	Eastern access pathway
05:00	AreaRAE	START	0.0	0.0	3.0	Ⓕ	Western end of derailment area
06:00	AreaRAE	START/CTEH	0.0	0.0	2.4 - 3.8	Ⓔ	Eastern access pathway
06:00	AreaRAE	START	0.0	0.0	0.4 - 2.3	Ⓓ	Eastern end of derailment area
06:55	AreaRAE	START	0.0	0.0	2.9	Ⓓ	Eastern end of derailment area
06:58	AreaRAE	START	0.1	0.0	14.5	Ⓓ	Eastern end of derailment area (MEK odor increased)
07:02	AreaRAE	START	0.1	0.0	20.2	--	Measurements recorded at the equipment staging area.
07:05	AreaRAE	START	0.0	0.0	0.6	Ⓕ	Western end of derailment area
12:45	AreaRAE	START	0.0	0.0	1.0 - 2.0	--	Equipment staging area (near Faith Baptist Church)
12:45	AreaRAE	START	0.0	0.0	0.0	Ⓔ	Eastern access pathway
17:00	Unknown	CTEH	NR	NR	20.0	Ⓓ	Eastern end of derailment area
20:46	AreaRAE	START	0.0	0.0	0.5	ⓒ	40 yards south of the chlorine railcars
21:23	AreaRAE	START	0.0	0.0	6.3	Ⓕ	Western end of derailment area
23:12	AreaRAE	START	0.0	0.0	1.2	ⓒ	Eastern end of derailment area
11/23/2010							
01:41	AreaRAE	START	0.2	0	2	ⓒ	20 yards east of MEK fire area
04:30	AreaRAE	START	NR	NR	10	Ⓕ	Potassium chloride railcars being moved at western end
07:30	AreaRAE	START	0	0	1.2	Ⓓ	Eastern end of derailment area
08:00	AreaRAE	START	0	0	1.8	Ⓕ	Sodium hydroxide railcars being moved at western end
09:30	AreaRAE	START	0	0	3.1	Ⓓ	Eastern end of derailment area
09:30	Unknown	CTEH	NR	NR	80	ⓒ	Small fires from MEK-saturated soil
10:30	Unknown	CTEH	0.1	NR	NR	ⓑ	Cut on damaged chlorine railcar (OLNX 114053)
12:40	AreaRAE	START	0	0	0	--	Drive through of community to west of derailment area

Notes:

- * See Figure 3 for air monitoring location
- Ⓐ Entry point to eastern access pathway
- ⓑ Damaged chlorine residue car (OLNX 114053)
- ⓒ Staging area for chlorine residue cars (east of the derailment area)
- Ⓓ Center of railroad track between first derailed car and eastern access pathway
- Ⓔ Pathway from equipment staging area to railroad tracks.
- Ⓕ Center of railroad track between first derailed and western access pathway
- Ⓖ MEK release and burn area

- Bold** Indicates the result exceeds a threshold level
- Cl₂ Chlorine
- CTEH Center for Toxicology and Environmental Health, L.L.C.
- ft Feet
- NH₃ Ammonia
- NR No reading
- OLNX Olin Corporation
- ppm Parts per million
- START Superfund Technical Assessment and Response Team
- VOC Volatile organic compound

**TABLE 2
SENSOR THRESHOLD EXPOSURE LIMITS**

Sensor	AEGL-1* (ppm)	OSHA
Cl ₂	0.5	NA
LEL	NA	10.0%
NH ₃	30.0	NA
O ₂	NA	19.5 - 23.5 %
VOC**	200.0	NA

Notes

- * AEGL threshold exposure limits applicable to 8-hour emergency exposure periods
- ** AEGL threshold value for MEK is included as a conservative VOC exposure limit
- % Percent
- AEGL Acute Exposure Guideline Level
- AEGL-1 Airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.
- Cl₂ Chlorine
- LEL Lower explosive limit
- MEK Methyl ethyl ketone
- NH₃ Ammonia
- NA Not applicable
- OSHA Occupational Safety and Health Administration
- O₂ Oxygen
- ppm Parts per million
- VOC Volatile organic compounds

**TABLE 3
PRESSURE READINGS DURING SPARGING OPERATIONS
DAMAGED CHLORINE RESIDUE CAR (OLNX 114053)**

Date	Time	Operator	Pressure (psi)
11/22/2010	06:15	Eagle-SWS	150
11/23/2010	09:30	Eagle-SWS	50
	10:30	Eagle-SWS	34
	13:00	Eagle-SWS	19

Notes

OLNX Olin Corporation
psi Pounds per square inch

APPENDIX C
PHOTOGRAPHIC LOG
(22 Pages)



OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Aerial

Date: November 22, 2010

Photographer: OSC Randy Nattis, EPA

Witness: Unknown

Subject: Aerial view of train derailment site photographed from helicopter. Five chlorine cars and one methyl ethyl ketone (MEK) car are visible at the east end of the derailment site, seen at the bottom of the pile up.



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Aerial

Date: November 22, 2010

Photographer: OSC Randy Nattis, EPA

Witness: Unknown

Subject: Close up aerial view of train derailment. Three chlorine cars (white with black strip) and one MEK car (black) are visible at the right end of the pile up. Three sodium hydroxide solution cars (white with black strip) are visible at the center of the photograph. Potassium chloride salt cars (rust color) are visible at the left end of the pile up.



**OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY**

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Aerial

Date: November 22, 2010

Photographer: OSC Randy Nattis, EPA

Witness: Unknown

Subject: Close up aerial view of train derailment. Several potassium chloride salt cars (rust color) are visible at the center of the derailment site. A white tank car containing sodium carbonate peroxyhydrate is visible at the top left end of the pile up.



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Aerial

Date: November 22, 2010

Photographer: OSC Randy Nattis, EPA

Witness: Unknown

Subject: Car staging area developed at the west end of the derailment site to the north of the railroad tracks.



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: West

Date: November 22, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Wrecking crew clearing wooded area to gain access to the derailment.



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: East

Date: November 22, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Brian Croft, Tetra Tech

Subject: Car SHPX 204377 located in the east end of the derailment site was repositioned for removal off railroad tracks.



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: West

Date: November 22, 2010

Photographer: Paul Prys, Tetra Tech

Witness: OSC Terry Stilman

Subject: Air monitoring team assessing damage on chlorine residue railcar OLNX 114053. Residue refers to the hazmat remaining in the car after its contents have been unloaded and before the car is refilled or cleaned of hazmat and purged to remove any hazardous vapors.



**OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY**

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Northwest

Date: November 22, 2010

Photographer: Ingrid Tobar, Tetra Tech

Witness: Didi Fung, Tetra Tech

Subject: Four of five chlorine residue cars located at the east end of the derailment site were segregated away from the railroad tracks. These tank cars were found not to be leaking as a result of the derailment.



**OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY**

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Aerial

Date: November 22, 2010

Photographer: Ingrid Tobar, Tetra Tech

Witness: Didi Fung, Tetra Tech

Subject: Tetra Tech performs battery replacement and fresh air calibration on AreaRAE Unit #1 located on the western perimeter of the site; specifically located near corner of 1st Avenue and Alice Street, across from 191 1st Avenue. Air monitoring activities continued through the night along with train wrecking operations.



OFFICIAL PHOTOGRAPH NO. 10
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140 **Location:** Midville Train Derailment
Orientation: West **Date:** November 22, 2010
Photographer: Ingrid Tobar, Tetra Tech **Witness:** Didi Fung, Tetra Tech
Subject: Accidental ignition of spilled MEK around cars occurred at the east side of the
derailment site.



**OFFICIAL PHOTOGRAPH NO. 11
U.S. ENVIRONMENTAL PROTECTION AGENCY**

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: West

Date: November 22, 2010

Photographer: Ingrid Tobar, Tetra Tech

Witness: Didi Fung, Tetra Tech

Subject: Flames produced by accidental ignition of spilled MEK around cars at the east side of the derailment site. Notice to the right a chlorine residue car staged for sparging operation.



OFFICIAL PHOTOGRAPH NO. 12
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140 **Location:** Midville Train Derailment
Orientation: Northwest **Date:** November 23, 2010
Photographer: Ingrid Tobar, Tetra Tech **Witness:** Didi Fung, Tetra Tech
Subject: Eagle-SWS crews begin sparging the impacted chlorine residue car with sodium hydroxide solution at the east side of the derailment site.



OFFICIAL PHOTOGRAPH NO. 13
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: West

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Breached potassium chloride salt cars with contents scattered on the ground.



OFFICIAL PHOTOGRAPH NO. 14
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: South

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Crews begin segregating three sodium hydroxide solution tank cars (white with black strip). White potassium chloride salt is visible scattered on the ground.



OFFICIAL PHOTOGRAPH NO. 15
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Aerial

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: OSC Randy Nattis, EPA

Subject: Sludge-like material identified as sodium hydroxide solution with white potassium chloride salt scattered on the ground.



**OFFICIAL PHOTOGRAPH NO. 16
U.S. ENVIRONMENTAL PROTECTION AGENCY**

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: West

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Wrecking crew evaluating the damage to the sodium hydroxide solution tank car.



OFFICIAL PHOTOGRAPH NO. 17
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Southwest

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Wrecking crew segregating sodium hydroxide solution tank car into a bermed containment area.



OFFICIAL PHOTOGRAPH NO. 18
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: South

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Wrecking crew removing box cars away from the sodium hydroxide solution tank car on the left.



OFFICIAL PHOTOGRAPH NO. 19
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Northeast

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Eagle-SWS crews finalize sparging the impacted chlorine residue car.



OFFICIAL PHOTOGRAPH NO. 20
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: Southeast

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Unknown

Subject: Flames from accidental ignition continue burning fueled by residual MEK that saturated the soil.



OFFICIAL PHOTOGRAPH NO. 21
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: East

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Norfolk Southern

Subject: Railroad crews rebuilding railroad track from east end of the derailment.



OFFICIAL PHOTOGRAPH NO. 22
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TTEMI-05-001-0140

Location: Midville Train Derailment

Orientation: West

Date: November 23, 2010

Photographer: Paul Prys, Tetra Tech

Witness: Brian Croft, Tetra Tech

Subject: Tetra Tech conducts air monitoring on west side of derailment while railroad crews rebuild railroad track.

APPENDIX D
LOGBOOK NOTES
(18 Sheets)

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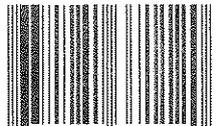
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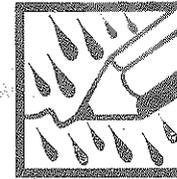


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TTEMI - 05-001-0140

Midville Train Derailment

Logbook 1



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PAGE REFERENCE DATE

Midville Train Derailment
on Norfolk Southern Rail Line
Milepost 595.5
Midville, Burke County, Georgia

TDD No. TTEM1-05-001-0140

Tetra Tech EM1
1955 Evergreen Blvd
Bldg 200, Ste 300
Duluth, GA 30096

Contact:

Brian Croft, TetraTech: 206-300-0301
Paul Prys, TetraTech: 404-844-7136
DD Fung, TetraTech: 678-773-5660
Ingrid Tobar, TetraTech: 678-702-3978
Randy Nattis, USEPA: 404-229-9499
Stephen Ball, USEPA: 404-229-9513

2

Curt
Pays

11-21-10

1900 receive call from RY duty officer

train derailment near Milledgeville, GA

- NS - 90-car train

MEK - leaking

NaOH - leaking

Cl₂ - empty/residual

have methylol diamine

in hydropneumatic comments

- remote/rural location - swampy

- coordinated w/ Tt RSO, Resp/ASC coordinator

- head to office for loadout

192045 sic

2045 head to GZ to pick up EPA equipment

2130 begin move to Milledgeville, GA location

Scale: 1 square = _____

BSC 11-21-10

Curt
Pays

3

11-22-10

0050 arrive @ Railroad St. (Milledgeville, GA)

- meet w/ OSC Stinson

- he does not want us to set up Area RAEs

with new sensors (i.e. Cl₂) yet - wants

to use MEK as indicator because that is

the only known leaking material verified so

far - will calibrate MultiRAE using

standard VOC sensor & proceed to

Mekimney Pad Road area, which is

closer to derailment (OSC Stinson is trying

to help Fire Chief in assessment of

current evacuation radius, which is 1/4 mile

- CTEH & RJ Corman crews expected onsite

soon (contractors for Norfolk Southern) - also,

Hepe Co is also present - Hepe Co reportedly

made entry earlier - VOC readings up to 50 ppm

0125 START Curt/Pays drive to Mekimney Pad

Road to conduct air monitoring w/ MultiRAE

- all readings along stretch of Mekimney Pad

Road were below grade:

O₂ = 21.0 H₂S = 0

LEL = 0

CO = 0

VOCs = 0

BSC 11-21-10

Scale: 1 square = _____

11-22-10

0345 START PRYS RETURNED WITH EPA Nattis AND Stillman. From conducting entry into crash area with NEPALCO. Prior to entry, all personnel donned Level B. START PRYS, EPA Stillman AND 2 NEPALCO PERSONNEL ENTERED crash site to evaluate damage to chlorine car. NEPALCO ASSESSED DAMAGE AND DISCOVERED AN ~ 3-5 inch cut in the wall of the car. NEPALCO MEASURED UP TO 30 ppm OF CHLORINE NEXT TO CUT. START PRYS MEASURED 3-5 ppm AT ENTRY POINT, ~ 20-158 ppm AT DISTANCE OF 15 FEET FROM DAMAGED CAR WITH A SPIKE OF 300 ppm. FOR VOCs. EPA Stillman HAD DIFFICULTY ACTIVATING DRAGERS PUMP FOR CHLORINE READINGS. STAGING THERE WAS AN ODDOR OF VOCs (POSSIBLY MEK) AT THE STAGING AREA NEAR THE CRASH SITE, BUT MULTI-RAE VOC READINGS RANGED FROM 1-3 ppm. EVALUATION CREW WAS IN CRASH SITE AREA FOR ~ 20-25 MINUTES. UPON RETURN, EPA, NEPALCO AND OTHER RESPONSE CREWS

Scale: 1 square=

BSC 11-22-10

11-22-10

0345 DISCUSSED THE FINDINGS OF THE ENTRY. START PROCEEDED WITH CALIBRATION OF AREA RAES.

0500 OSC Nattis & START CRAFT CONDUCT AIR MONITORING WALK OF RR TRACK - met CTEH/AS

0530 RETURN TO CP

0705 OSC Nattis BACK TO RR TRACK TO meet w/ CTEH again for air monitoring

note: max rdgs. during 1st walk @ 0500 were: VOCs = 3.0 ppm
Cl₂ = 0
NH₃ = 0

2nd entry - readings: (@ 0705)
Cl₂ = 0
NH₃ = 0
VOCs = 0.6 ppm

0800 RETURN TO CP AREA

0835 meet w/ OSC Stillman, Nattis & CTEH Justin Rhodes to discuss Area RAE placement - START to place 2 on Rte 17 (1 west of decalant & 1 east of decalant)

SEE START LOGBOOK # 2 (Paul Prys) FOR SUBSEQUENT NOTES REGARDING AREA RAE AIR MONITORING AT RTE. 17/CHURCH LOCATION

BSC 11-22-10

Scale: 1 square=

11-22-10

Craft
Prys

1350 Still conducting Area RDE monitoring along
Rte 17

- START Fung & Tobor are nearing site for replacement of Craft & Prys

1630 With EPA (Steven Ball) & GA Emergency Response Team (EMT) about to enter zone on east side end of tracks. Talked to No-filke Southern worked and he stated that they plan to handle the CL tank car with the remain daylight. OSC Stillman was not final due to the change in plans. Original plan was no handling of CL car until after 6pm meeting and sign off from fire chief.

1700 Justin w/ CTEH saw spikes at 200ppm on PID. Now only seeing 20ppm VOL. RT Lorman crew currently moving CL cars that are intact.

1800 Attended night briefing by CTEH H&S Chip Day.

West side: 6 sites cars cleared.
East side: 2 CL cars cleared.

4000 gal of Sodium Hydroxide transferred for sparging

Scale: 1 square=

11/22/10

during the day MEK ^{air} levels stayed low.
Night ops continue ~~working~~ ^{cleaning} cars
0630 briefing in am, 1300 mtg @ 1800 mtg each day.

Mike w/ CTEH talked about MEK.

MEK 50' diameter on south side impacted. North side also impacted. 50 to 75' radius Potassium Chloride has gotten into same water and will need to be scraped up before rain event. however.

@ 1300, the return of the residents will be discussed

- Enhanced level PPE during car #4 CL is being moved. (Level B) was required by the fire chief, ~~off of MEK~~

11/41 after large flare up at East end of rail ops, @ ~ 1040 pm, mtg at the fire department to discuss the accidental ignition and correction actions.

Chip Day apologized for the mixup and the move of the MEK tank car.

NF Southern promised to improve communication and The contractor was determined to be responsible for the move of the MEK car.

Scale: 1 square=

0141

1/23/10

~~1341~~ 20 yards to fire pit
32.81716

O₂ 82.22232

Cl₂ = 4ppm LEL 0% faint smell
VOL = 2ppm O₂ = 20.9% of chlorine in
NH₃ = 0ppm the air.

Engle SWS prep'ing for sparging ops.
Welders working from the west side only.

(419) 348-4127 John Seifert
Engle SWS
NR Southern John Lerna

0230

~~1430~~ Replaced batt. in Unit #2 chlorine &
O₂ sensor seemed to be drifting. Unit #3
was used to check and was not reading
same values.

Bump test

Cal gas	Bump Ready	Post Cal Ready
Cl ₂ 10ppm	9.8ppm ✓	—
NH ₃ 50ppm	44ppm ⊕	50ppm ✓
LEL 55%	41% ⊕	49% ✓
O ₂ 20.9%	19.9% ✓	20.9% ✓

VOC 100ppm Calgas 100ppm ✓
Scale: 1 square =
lot # 718575 (Agas)
lot # LTF180-MD-CM (ISO)

NH₃ cal gas bottle Batch Dφφ2φ1φ exps 2/10/2011
0320 Cal complete for unit #2.

0320 Begin batt. replacement & cal of unit #1

Cal Gas	Bump Ready	Post Cal Ready
Cl ₂ 10ppm	9.4ppm	—
NH ₃ 50ppm	50ppm ✓	—
LEL 55%	33% ⊕	50%
O ₂ 20.9%	22.1% ⊕	20.9%
VOC 100ppm	92.1ppm ✓	100ppm

(resumed @ 0600)

0430 Brought down to west end of
rain to observe removal of salt cars
(potassium chloride) around the liquid
sodium hydroxide. Highest VOC readings = 10ppm
on the area near unit #3

0557 Completed trip to west side train wrecking
ops with salt cars & sodium hydroxide.
Resume cal of unit #1

cell Sparging update 15
5lb every 15 min Temp 126°F steady
20lb/hr

Scale: 1 square =

11-23-10

0630 brichy @ FD
 Cl₂ cars have been moved ~~to east~~
 MEK car also been moved (completely empty)
 Barron working east
 Hatcher working west
 ↳ 3 NAOH cars move slightly - Hatcher
 thinks they did not lose much based
 on heavy weight when moving
 bleaching ops = level C
 ↳ still some residual between shell & hull of car

0730 tour ^{past} ~~west~~ side of derailment w/ Steve Fung &
 Tobin - Cl₂ sparging ops continue on
 Cl₂ car that was patched & moved off
 of tracks (max VOCs = 1.2 / Cl₂ = 0 / NH₃ = 0) @
 all locations

0800 @ west side of derailment - Hatcher
 is moving NAOH cars
 - max VOCs = 1.8 ppm
 Cl₂ = 0
 NH₃ = 0

0855 back @ west side staging area - bump check
 Area Rec Unit 4: bump rdg post'ed

Cl ₂	6.3	10.0	⊕
NH ₃	41	1050	
VOCs	102	-	
LEL	43	50	
O ₂	20.9	-	

Scale: 1 square=

BSC 11-23-10

11-23-10

* note: inadvertently left radio + cassette
 for Area Rec Unit 4 on white bump
 checking / calibrating - disregard readings

0930 air monitoring at ^{east} west side of derailment
 - max VOCs = 3.1 ppm Area Rec unit 4
 Cl₂ = 0 / NH₃ = 0
 spoke w/ CTEH David Caution near MEK
 fire/burn area - still small flames in
 area - said that they worked perimeter
 of fire area & it matches well w/ their
 previous delineation of the MEK - got
 max VOC readings up to 50 ppm @ smoldering
 areas (CTEH readings)
 - also spoke w/ Eagle/SUS rep regarding
 chlorine sparging ops - pressure is down
 to 50 psi - when they reach 20 psi they
 will begin using air pumping into rail car
 to aid in clearing out remainder

1030 meet @ Cl₂ sparging ops w/ CTEH Chip Day
 - wants to install temporary fence around sparging
 ops & keep continuous air monitoring to allow
 NS reps to continue building track to west
 - highest reading @ railcar sparging is 0.1 ppm Cl₂
 and 0 ppm in area around railcar

BSC 11-23-10

Scale: 1 square=

11-23-10

called
- OSC Nattis & he visited area - approved
of plan

- rail car pressure is down to 34 psi.

1110 last of railcars has been cleared from
right-of-way

1155 OSC Nattis directs START to begin
packing up equipment - wants one round of
air monitoring in Middleville neighborhoods before
1300 meeting

1240 drive through air monitoring of Middleville
neighborhoods to east of derailment

using Area RAE 4

VOCs = 0 (max)

Cl₂ = 0

NH₃ = 0

O₂ = 20.8

LEL = 0

1300 meeting

CTEH / NS or CHe Day

- digging contaminated soil to remove
- using rolloffs / along area

- bringing in ballast

- MEK car - stepped on plastic (hole in Bond to
be patched later)
↳ small pieces still present in conduit area

Scale: 1 square =

11-23-10

- reduced exclusion zone around Cl₂ rail car

- ↳ down to 19 psi

↳ shell ^{side} temperature = 59°

shell bottom temp = 55°

- 260 grams/liter in NaOH tanks } any remaining
liquid has gone
to gas
: uniform temp
= more than enough to finish bleaching

CTEH - D. Caution

- planning to lift evacuation order

NS Environmental

- working to transfer NaOH railcar contents

- going to transport to Olm (Augusta)

- working to clear way for right-of-way
maintenance workers

- Cl₂ cars will be loaded out onto flatbed
rail cars - likely 10-14 days (in tact cars)

NS Rail Ops

- ~ 40 track panels to be installed

- ~ 20 so far

- 6 panels in remediation vicinity

NaOH cars have been oriented so no tanks
are engaged

Note Jeff from FRA also @ meeting

- requested rail pieces from switch area &
concerns from Cl₂ cars (have 1, 2 missing)

Scale: 1 square =

11/23/10

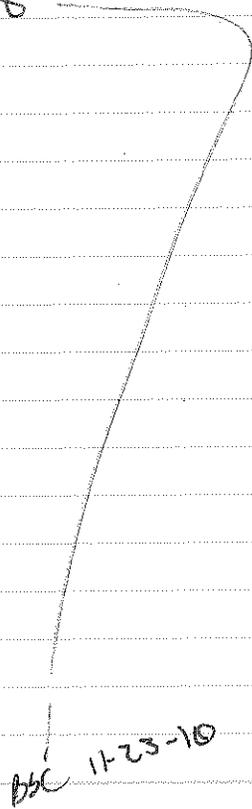
1345 return to west staging area
- photoboc walk through of demob area

1515 demob
- to hotel to check out & get personal items

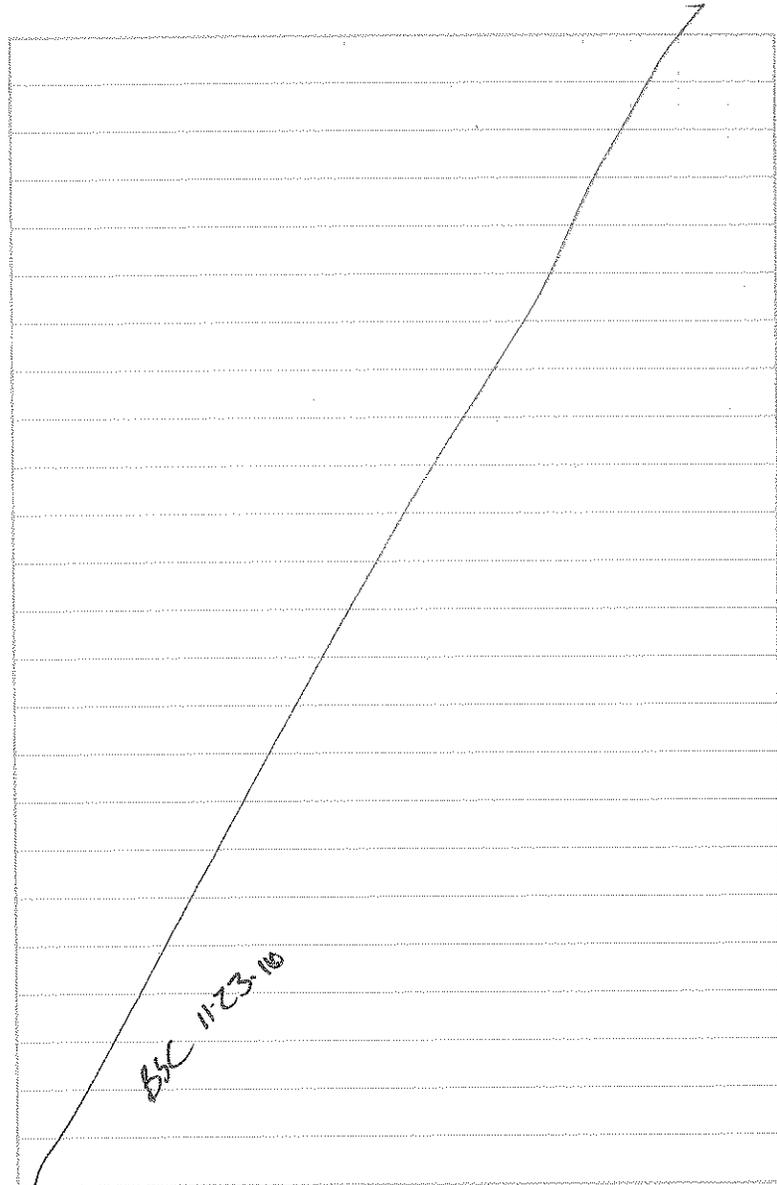
1600 begin demob

1915 back @ Duluth office - unloc/charge
air monitoring equipment

EOD



Scale: 1 square=



Scale: 1 square=

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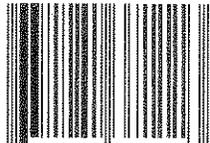
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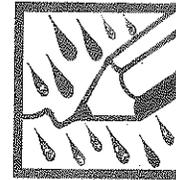
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TTEMI-05-001-0140
MIDVILLE TRAIN
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TDD No. TTEM1-05-001-0140

Tetra Tech EMI
1955 Evergreen Blvd
Bldg 200, Ste 300
Duluth, GA 30096

Contact:

Brian Croft, TetraTech: 206-300-0300
Paul Prys, TetraTech: 404-849-7136
DD Fung, TetraTech: 678-773-5660
Ingrid Tobar, TetraTech: 678-702-3478
Randy Nattis, USEPA: 404-229-9499
Stephen Ball, USEPA: 404-229-9513

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11/22/10

CROFT, PAYS

0455 DEPARTED MAIN STAGING AREA FOR
~~MAIN~~ SR17 Church Staging Area.
 START PAYS AND GARDNER MICHELLE
 CORTES DROVE TOGETHER.

0505 ARRIVED AT SR17 Church Staging
 AREA. START ~~PAYS~~ NEARBY church
 WAS Faith Baptist Church. START PAYS
 SPOKE TO CTEN J.T. Wilson concerning
 Cl₂ and NH₃ monitoring during work
 activities. START PAYS WAS TASKED BY
 EPA TO DOCUMENT WORK ACTIVITIES
 AND TO CONDUCT SPOT CHECK AIR
 MONITORING WITH CTEN DURING WORK
 ACTIVITIES.

0600 START PAYS, DNR CORTES, AND CTEN
 Wilson ESCORTED SWS-EAGLE SUPERVISOR
 BUTCH WARDEN AND SWS-EAGLE CREW
 DOWN ACCESS ROAD NEAR church
 staging AREA TO TRACKS. START
 AND CTEN AIR MONITORING RESULTS
 RANGED 2.4-3.8 ppm FOR VOC AND 0 ppm
 FOR Cl₂ AND NH₃. ESCORTED SWS-EAGLE
 FROM TRACK ACCESS POINT TO FIRST
 DERAILED CAR. VOC 0.4-2.3 ppm AND

Scale: 1 square=



11/22/10

CROFT, PAYS

0600 0 ppm FOR Cl₂ AND NH₃.

0615 SWS-EAGLE CREW ENTERED CRASH AREA
 TO DETERMINE PRESSURE IN A Cl₂ CAR.
 PRESSURE IN CAR 114053 WAS 150 PSI

0640 CREW EXITED CRASH AREA.

0645 SECOND CREW ENTERED CRASH AREA
 TO DETERMINE PRESSURE FOR RAIL CAR
 DLX 8075. PRESSURE WAS 155 PSI.

0655
 (P) 0700 READINGS FROM CENTER OF TRACK AT
 FIRST DERAILED CAR: VOC 2.9 ppm,
 0 ppm Cl₂, 0 ppm NH₃

0658 MEK ODOR INCREASED. VOC 14.5 ppm,
 0.1 Cl₂, ~~0 ppm NH₃~~ (P) 0 ppm NH₃

0701 SWS-EAGLE EXITED CRASH AREA. ALL
 PERSONNEL DEPARTED FOR STAGING AREA.

0702 READINGS; VOC 20.2 ppm, 0.1 ppm Cl₂
 AND 0 ppm NH₃.

0710 START PAYS AND DNR CORTES DEPARTED
 THE church staging AREA.

0715 ARRIVED AT ~~main~~ MIDVILLE main staging
 AREA FOR BRISFING.

0925 START PAYS AND CROFT DEPART MAIN
 MIDVILLE staging AREA TO SET OUT 2 RABE
 RABE (EAST AND WEST OF CRASH) ON SR 17.

Scale: 1 square=



11/22/10

Croft, Prys

- 0940 Arrived at East monitoring location. AREA RAE #1 was placed at Fifth post from southeast corner. AREA RAE #1 placed at BTS + Son Associates, Inc.
- 1045 START Croft attempted to solve RESPONSE RECEPTION ISSUES.
- 1105 Placed AREA RAE #2 in front of Faith Baptist Church on wooden post EAST of church sign. Location is known as west monitoring position along SR 17. START BEGAN COLLECTING AIR MONITORING DATA FROM BOTH AREA RAES.
- 1225 EPA Stillman moved AREA RAE #1 to
- 1245 START Prys AND Croft WALKED THE pathway to the track site at the church staging AREA. Took AREA RAE #4 to monitor air quality. Backgrounds in staging area:
VOC 1-2 ppm, Cl₂ 0 ppm, NH₃ 0 ppm.
Levels DECREASED from start of pathway to the tracks. Levels at tracks were VOC 0 ppm, Cl₂ 0 ppm, and NH₃ 0 ppm.
- 1315 RETURNING to START vehicles AND continued collecting air quality data.

Scale: 1 square =



11/22/10

Croft, Prys

- 1345 START Prys COLLECTED OPS POINTS of AREA RAE monitoring locations.
- 1430 START Tobar and Fung arrived on site. Ops. briefing with OSCs Stillman, Ball, Nattis and START Croft and Prys.
- 1600 Set up printer and equipment.
- 1800 Response ops. briefing for end of ops. period. Reported 2 Cl₂ carts cleared. Air monitoring report by CTEH, readings did not go up with heat during the day. CTEH ground observations report. Soil is sandy loam and absorbed spilled chemicals. Clean up operations ongoing. Cl₂ cart will be depressurized. may take 12-24 hr. Update on this estimate will be provided at 0630 meeting.
- 1300 meeting to determine evacuation status. Approx need to dig 6-8 ft soil on South end of derailment. Approx 12-20 roll off boxes of soil will be removed.
- 1900 Revised hospital driving directions. Set up staging area for night ops.
- 2046 Checking on site activities on E end of derailment. CTEH confirmed that Cl₂ carts are moved off track and the damaged Cl₂ cart

Scale: 1 square =

11/22/10

Fung, Tobar

has been segregated from the rest of the carts.

From 40 yds away: AreaRAE Unit #3:

Cl₂: 0 ppm NH₃: 0 ppm

VOC: 0.5 ppm O₂: 20.9%

LEL: 0%

MEK cart was also segregated from other carts.

2123 Arrived @ west side of derailment

Readings for AreaRAE Unit #3: 10 yds from carts.

Cl₂: 0 ppm NH₃: 0 ppm

VOC: 6.3 ppm O₂: 20.9%

LEL: 0%

2145 Enroute to check on AreaRAE Unit #1

Performed fresh air calibration, after fresh air calibration LEL changed from 1 ppm to 0 ppm and O₂ from ~21-22% to 20.9%.

2200 Received information from OSC Nottis and CTEH Contractor that a cart caught fire from sparks. Continued performing bump test on AreaRAE Unit #1. No elevated readings on AreaRAE Unit #3 during fire report. Majority of plume is on S side. Finished bump test Cl₂ 10.8 ppm

2312 Recording coordinates of point as RR track:

Scale: 1 square=

11/22/10

Fung, Tobar

next to 4 Cl₂ carts. N 32.81715 W 82.22086

Cl₂: 0 ppm NH₃: 0 ppm

VOC: 1.2 ppm O₂: 20.9%

LEL: 0%

Large fire flare with ~20' tall plumes occurred at 2239. on North side of derailment at culvert.

2332 Enroute to Fire Station.

2337 Arrived @ Fire station to meet with fire dept. and CTEH personnel.

2351 Briefing begins. Wrecking equipment hooked to carts, cable pulled slack across steel, sparks went into culvert @ N end and fire ignited. → This is the report by CTEH. MEK cart was empty, however moved out of schedule.

11/23/10

Fung, Tobar

0026 Briefing ends

404 808 5500 Brig.

0100 START Fung contacts HBS officer Draper to verify hazards of caustic soda at site

0124 START Fung and OSC Ball enroute to oversee Cl₂ cart barging procedure. START Tobar verifying GPS coordinates collected and creating operations map.

Scale: 1 square=

11/23/10

Fung, Tobar

- 0230 CTEH Air Monitoring locations:
- * ARO4 32.81730 -82.22890
 - ARO3 32.81584 -82.22060
 - ARO1 32.81974 -82.22526
 - ARO2 32.81740 -82.22081
- * Only pump station. (12hr samples)
- 0239 Enroute to check Cl₂ cart with OSC Ball
No elevated readings observed from berm. Crew at tank operating with level B PPE.
- 0259 Enroute to staging Area
staging area (Church Parking lot)
monitoring location: 32.82021 -82.21919
First Ave monitoring loc: 32.81827 -82.22869
- 0400 OSC Ball and start Fung overseeing Cl₂ car operations. Start Tobar compiled air monitoring locations for map.
- 0600 Start Croft and Prys arrive onsite, briefing on operations status.
- 0630 Operations briefing at Fire Station.
- 0717 Enroute to site.
- 0725 EPA Ball and start Prys at west side of crash. Discussed movement of NAOH tanks with NS David Walker.

Scale: 1 square =



11/23/10

Croft, Prys

- 0725 NS will create a bermed area and move NAOH cars into it. Bermed area north of tracks. Approx 10 ft northwest of cars, black liquid substance pooled. EPA Mattis checked and has pH of 12-13.
- 0740 NS began making bermed area north of tanks for NAOH tanks. Unknown sludge type of material northeast of NAOH tanks. (~100ft²) EPA Mattis informed NS Walker that he did not know what it was and personnel should avoid walking through it. NS personnel began cleaning up KCl salt up from around north end of NAOH tanks.
- 0750 NS personnel began moving first NAOH tank (TANK 6193).
- 0840 Start Prys back start Croft back to chnash staging area.
- 0855 Start Prys returned to west side ops for continued oversight. NS personnel moved first NAOH tank to bermed area. Began moving second NAOH tank (TANK 90631)

Scale: 1 square =



11/23/10

CROFT, PAYS

0855 to BURNED AREA.

0940 START PAYS noticed a small amount of smoke coming from ground south of stacked cars. Also, noticed small fires still burning in track line south of stacked cars. Informed GA EPD of the situation. Spoke to CTEH tech^(P) after they visually inspected the area. It appears to be residual MEK that may still be saturated in the soil.

0950 Completed moving 2nd NAOH tank (GATE 90681).

0955 Began moving 3rd NAOH tank (TILK 10381). NS personnel used an excavator (track hoe) to hold/stabilize cars stacked on top of tank while tank was moved out.

1020 Completed moving 3rd NAOH tank to burned area. and continued pulling down stacked rail cars. Discussed residual fires with CTEH Chief Day. HE said there were little to no concentrations of VOLS detected from the smoke^(P) burning. Sludge like materials according to CTEH Day was

Scale: 1 square=



11/23/10

CROFT, PAYS

1020 Located NAOH. CTEH Day said locations were GPS'd and would be excavated once cars were removed. Note: Start Pays spoke to Mike Feneaster in this entry and not Chip Day.

1100 NS personnel completed removal of cars from the track and began removal of debris from on and around the track.

1150 NS personnel continued working to restore the railroad track. Last portion of beam still had not been installed around NAOH banks. Start Pays departed west ops area.

1202 Start Pays picked up AREA ZONE #1 from the substation located on First Ave. (across from 191 First Ave).

1207 Returned to church staging area. Assisted Start Croft with packing up equipment for demob.

1242 Start Croft and Pays depart church staging area to conduct air monitoring in nearby neighborhoods. Results are in logbook 1.

Scale: 1 square=

11/23/10

Croft, Prys

Contacts:



Center for Toxicology and Environmental Health, L.L.C.

David R. Cawthon, Ph.D., DABT

Project Toxicologist

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 Main Fax: 501-801-8501

Direct: 501-801-8496
 Cell: 501-366-1505
 E-mail: dcawthon@cteh.com

Emergency: 1-866-869-2834 (TOX-CTEH)

Website: www.cteh.com

University of Arkansas for Medical Sciences Bioventures Program Associate



Center for Toxicology and Environmental Health, L.L.C.

Glenn Millner, Ph.D.

Senior Toxicologist

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University of Arkansas for Medical Sciences Bioventures Program Associate

Scale: 1 square=_____

11/23/10

Croft, Prys



Center for Toxicology and Environmental Health, L.L.C.

Justin Rhodes

Environmental Scientist/Project Manager
 Assistant Manager, Toxicology Emergency Response Program

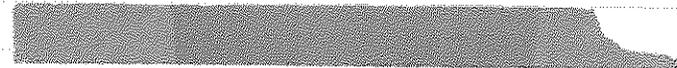
5120 North Shore Drive
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 Cell: 501-258-0582
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Emergency: 1-866-869-2834 (TOX-CTEH)

Website: www.cteh.com

University of Arkansas for Medical Sciences Bioventures Program Associate



HEPACO, Inc.
 2275 Tucker Industrial Road
 Tucker, GA 30084

Phone: 770-934-1180
 Fax: 770-621-0238
 Direct: 770-325-3939
 Mobile: 404-372-9089

Email: rwood@hepaco.com

Home Page: http://www.hepaco.com

24 HOUR EMERGENCY
800-888-7689

HEPACO

Serious experience for serious times.

Robert Wood

Emergency Response Manager

Scale: 1 square=_____

11/23/10

Croft, Prys



Michael J. Black, CIH, CSP
Manager
Industrial Hygiene

Norfolk Southern Corporation
1200 Peachtree Street, NE - Box 136
Atlanta, GA 30309

Phone 404/529-1628
Cell 404/558-5792
Fax 404/527-2630
Email mijblack@nscorp.com



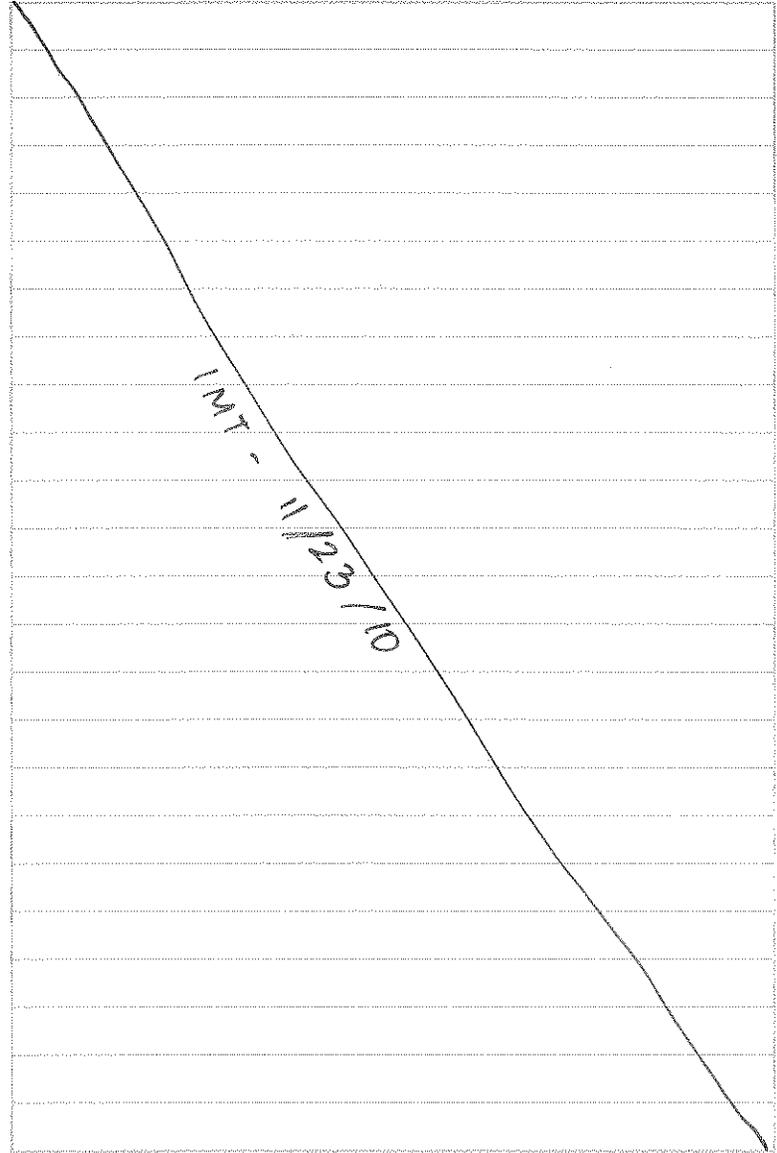
Gilbert O. Turner
Engineer Environmental Operations

Norfolk Southern Corporation
Environmental Protection Dept.
312 W. Liddell Street
Charlotte, NC 28206

Phone 704/378-3841
Cell 704/578-1835
Fax 704/378-3846



Scale: 1 square=_____



Scale: 1 square=_____

APPENDIX E
TABLE OF WITNESSES
(One Page)

**TABLE OF WITNESSES
MIDVILLE TRAIN DERAILMENT
MIDVILLE, BURKE COUNTY, GEORGIA**

Mr. Randy Nattis
Mr. Terry Stilman
Mr. Stephen Ball
On-Scene Coordinator U.S. Environmental Protection Agency
61 Forsyth Street, SW – 11th Floor
Atlanta, GA 30303
Telephone No.: (404) 562-8757

Mr. Brian Croft, Site Manager
Mr. Paul Prys
Mr. Didi Fung
Ms. Ingrid Tobar
Superfund Technical Assessment and Response Team
Tetra Tech EM Inc.
1955 Evergreen Blvd. – Building 200, Suite 300
Duluth, GA 30096
Telephone No.: (678) 775-3113

Mr. Michael Black, Manager Industrial Hygiene
Mr. Gilbert Turner, Engineer Environmental Operations
Norfolk Southern Corporation
1200 Peachtree Street, NE – Box 136
Atlanta, GA 30309
Telephone No.: (404) 529-1628

Mr. Chip Day, Project Manager
Mr. David Cawthon
Mr. Glen Millner
Mr. Justin Rhodes
Center for Toxicology and Environmental Health, L.L.C.
5120 North Shore Drive
Little Rock, AR 72118
Telephone No.: (501) 801-8500

Mr. Robert Wood, Emergency Response Manager
Hepaco
2275 Tucker Industrial Road
Tucker, GA 30084
Telephone No.: (770) 934-1180

ATTACHMENT A

NRC REPORTS

(15 Pages)

NATIONAL RESPONSE CENTER 1-800-424-8802

*** For Public Use ***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 960451

INCIDENT DESCRIPTION

*Report taken at 17:48 on 21-NOV-10
 Incident Type: RAILROAD
 Incident Cause: DERAILMENT
 Affected Area:
 The incident occurred on 21-NOV-10 at 17:07 local time.
 Affected Medium: RAIL REPORT (N/A) ATMOSPHERE

SUSPECTED RESPONSIBLE PARTY

XX

Type of Organization: UNKNOWN

INCIDENT LOCATION

County: BURKE
 City: MIDVILLE State: GA
 MILE POST S95.5

RELEASED MATERIAL(S)

CHRIS Code: UNK Official Material Name: UNKNOWN MATERIAL
 Also Known As:
 Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER IS REPORTING A DERAILMENT WITH AN APPARENT RELEASE OF AN UNKNOWN HAZARDOUS MATERIAL. CALLER STATED THERE IS A CLOUD OF MATERIAL FORMING AROUND THE AREA WHERE THE DERAILMENT OCCURRED, BUT IT IS UNKNOWN WHAT MATERIAL AND HOW MANY CARS ARE INVOLVED. THE TRAIN WAS CARRYING CARS WITH METHYL ETHYL KETONE, 4 CAR WITH SODIUM HYDROXIDE SOLUTION, 5 CARS EMPTY CHLORINE RESIDUE, HEXAMETHYLENEDIAMINE UN 1783, AMMONIA AND SULPHUR. THE TOWN OF MIDVILLE WAS EVACUATED.

INCIDENT DETAILS

Grade Crossing: NO
 Location Subdivision: GEORGIA
 Railroad Milepost: S95.5
 Type of Vehicle Involved:
 Crossing Device Type:
 Device Operational: YES
 DOT Crossing Number:
 Date and Time Service was/will be Restored:
 Brake Failure: NO
 Federal Post-Accident 219.201 Sub Part C Testing Required: NO
 Passenger Train Route: NO
 Passenger Train Delay Expected: NO
 Passenger Train Delay Handling:

---RAILROAD INFORMATION---

Railroad Involved: NORFOLK SOUTHERN RAILROAD
 Train Number: 192G521
 Train Type: FREIGHT Train Direction: E
 Train Speed: Track Speed:
 Locomotives: 2 Cars: 90 Derailed:
 Suspected DOT Regulation Non Compliance: NO

DERAILED CARS:

Pos.	Carnumber	Type	Cargo
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DAMAGES

Fire Involved: UNKNOWN Fire Extinguished: UNKNOWN

INJURIES: NO Hospitalized: Empl/Crew: Passenger:

FATALITIES: NO Empl/Crew: Passenger: Occupant:

EVACUATIONS: YES Who Evacuated: PRIVATE Radius/Area:
CITIZENS

Damages: YES \$

<u>Closure Type</u>	<u>Description of Closure</u>	<u>Length of Closure</u>	<u>Direction of Closure</u>
Air:	N		
Road:	N		Major Artery: N
Waterway:	N		
Track:	Y MAIN TRACK		ALL

Passengers Transferred: NO

Environmental Impact: UNKNOWN

Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS

INVESTIGATION UNDERWAY, EMERGENCY RESPONDERS ON SCENE.

Release Secured: NO

Release Rate:

Estimated Release Duration:

WEATHER

Weather: CLEAR, 65°F

ADDITIONAL AGENCIES NOTIFIED

Federal: NONE

State/Local: EMS

State/Local On Scene: EMS

State Agency Number: NONE

NOTIFICATIONS BY NRC

USCG ICC (ICC ONI)

21-NOV-10 18:01

DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER)

21-NOV-10 18:01

DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER CON'T)

21-NOV-10 18:01

DHS SOUTH CAROLINA FUSION CENTER (LE SENSITIVE ADVISORS & LIASON PROGRAM)

21-NOV-10 18:01

DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)

21-NOV-10 18:01

FEDERAL RAILROAD ADMIN. (MAIN OFFICE)

21-NOV-10 18:05

EPA OEM (MAIN OFFICE)

21-NOV-10 18:03

EPA OEM (WEEKEND CONTACT)

21-NOV-10 18:03

U.S. EPA IV (MAIN OFFICE)

21-NOV-10 18:02

FEDERAL EMERGENCY MANAGEMENT AGENCY (MAIN OFFICE)

21-NOV-10 18:01

USCG NATIONAL COMMAND CENTER (MAIN OFFICE)

21-NOV-10 18:03

GA BUREAU OF INVESTIGATION (COMMAND CENTER)
21-NOV-10 18:01

GA U.S. ATTORNEY'S OFFICE (MAIN OFFICE)
21-NOV-10 18:01

NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
21-NOV-10 18:01

NOAA RPTS FOR GA (MAIN OFFICE)
21-NOV-10 18:01

NATIONAL RESPONSE CENTER HQ (MAIN OFFICE)
21-NOV-10 18:04

NTSB PIPELINE (MAIN OFFICE)
21-NOV-10 18:01

NTSB RAIL (MAIN OFFICE)
21-NOV-10 18:01

HOMELAND SEC COORDINATION CENTER (MAIN OFFICE)
21-NOV-10 18:01

PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS)
21-NOV-10 18:04

PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS FAX#2)
21-NOV-10 18:01

SC EMERGENCY MANAGEMENT DIVISION (MAIN OFFICE)
21-NOV-10 18:01

SECTOR CHARLESTON (COMMAND CENTER)
21-NOV-10 18:01

GEORGIA EMERGENCY MNGMT AGENCY (MAIN OFFICE)
21-NOV-10 18:01

SC DEPT OF ENV CNTL ATTN: ERS (MAIN OFFICE)
21-NOV-10 18:01

TN BUREAU OF INVESTIGATION (TBI)
21-NOV-10 18:01

USCG DISTRICT 7 (ATTN: LCDR MARTIN MUELLER)
21-NOV-10 18:01

ADDITIONAL INFORMATION

CALLER HAD NO ADDITIONAL INFORMATION.

*** END INCIDENT REPORT # 960451 ***

NATIONAL RESPONSE CENTER 1-800-424-8802

*** For Public Use ***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 960459

INCIDENT DESCRIPTION

*Report taken at 04:57 on 22-NOV-10
 Incident Type: RAILROAD
 Incident Cause: DERAILMENT
 Affected Area:
 The incident occurred on 21-NOV-10 at 17:07 local time.
 Affected Medium: AIR / ATMOSPHERE / POSSIBLE BALLAST

SUSPECTED RESPONSIBLE PARTY

XX

Type of Organization: UNKNOWN

INCIDENT LOCATION

County: BURKE
 City: MIDVILLE State: GA
 MILEPOST: S95.5

RELEASED MATERIAL(S)

CHRIS Code: CLX Official Material Name: CHLORINE
 Also Known As: CHLORINE (VAPOR)
 Qty Released: 0 UNKNOWN AMOUNT
 CHRIS Code: MEK Official Material Name: METHYL ETHYL KETONE
 Also Known As:
 Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

UPDATE TO REPORT # 960451. CALLER IS REPORTING THAT THERE IS A VAPOR RELEASE OF CHLORINE FROM THE 7TH HEAD CAR (OLNX114053) AND METHYL ETHYL KETONE FROM THE 9TH HEAD CAR (SCMX4309) FROM AN EARLIER DERAILMENT. CALLER STATED THAT 38 CARS DERAILED AND THAT THERE WAS PRECAUTIONARY EVACUATIONS OF 25 HOMES (FROM THE HOMES 59 PEOPLE WERE EVACUATED).

INCIDENT DETAILS

Grade Crossing: NO
 Location Subdivision: UNKNOWN
 Railroad Milepost: S95.5
 Type of Vehicle Involved:
 Crossing Device Type:
 Device Operational: YES
 DOT Crossing Number:
 Date and Time Service was/will be Restored:
 Brake Failure: UNKNOWN
 Federal Post-Accident 219.201 Sub Part C Testing Required: UNKNOWN
 Passenger Train Route: NO
 Passenger Train Delay Expected: NO
 Passenger Train Delay Handling:

---RAILROAD INFORMATION---

Railroad Involved: NORFOLK SOUTHERN RAILROAD
 Train Number: 192.21
 Train Type: FREIGHT Train Direction: E
 Train Speed: Track Speed:

FEDERAL EMERGENCY MANAGEMENT AGENCY (MAIN OFFICE)
22-NOV-10 05:23

USCG NATIONAL COMMAND CENTER (MAIN OFFICE)
22-NOV-10 05:29

GA BUREAU OF INVESTIGATION (COMMAND CENTER)
22-NOV-10 05:23

GA U.S. ATTORNEY'S OFFICE (MAIN OFFICE)
22-NOV-10 05:23

NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
22-NOV-10 05:23

NOAA RPTS FOR GA (MAIN OFFICE)
22-NOV-10 05:23

NATIONAL RESPONSE CENTER HQ (MAIN OFFICE)
22-NOV-10 05:30

NTSB PIPELINE (MAIN OFFICE)
22-NOV-10 05:23

NTSB RAIL (MAIN OFFICE)
22-NOV-10 05:23

HOMELAND SEC COORDINATION CENTER (MAIN OFFICE)
22-NOV-10 05:23

PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS)
22-NOV-10 05:30

PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS FAX#2)
22-NOV-10 05:23

SC EMERGENCY MANAGEMENT DIVISION (MAIN OFFICE)
22-NOV-10 05:23

SECTOR CHARLESTON (COMMAND CENTER)
22-NOV-10 05:23

GEORGIA EMERGENCY MNGMT AGENCY (MAIN OFFICE)
22-NOV-10 05:23

SC DEPT OF ENV CNTL ATTN: ERS (MAIN OFFICE)
22-NOV-10 05:23

TN BUREAU OF INVESTIGATION (TBI)
22-NOV-10 05:23

USCG DISTRICT 7 (ATTN: LCDR MARTIN MUELLER)
22-NOV-10 05:23

ADDITIONAL INFORMATION

CALLER HAD NO ADDITIONAL INFORMATION.

*** END INCIDENT REPORT # 960459 ***

NATIONAL RESPONSE CENTER 1-800-424-8802

*** For Public Use ***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 960492

INCIDENT DESCRIPTION

*Report taken at 11:50 on 22-NOV-10

Incident Type: RAILROAD

Incident Cause: DERAILMENT

Affected Area:

The incident was discovered on 22-NOV-10 at 10:30 local time.

Affected Medium: BALLAST

SUSPECTED RESPONSIBLE PARTY

XX

Type of Organization: UNKNOWN

INCIDENT LOCATION

MP: S95.5 County: BURKE

City: MIDVILLE State: GA

RELEASED MATERIAL(S)

CHRIS Code: NCC Official Material Name: NO CHRIS CODE

Also Known As: SODIUM CARBONATE PEROXYHYDRATE

Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER REPORTED A TRAIN DERAILMENT THAT HAD A RAIL CAR WITH HAZARDOUS MATERIALS IN IT. THE MATERIAL HAS SPILLED ONTO THE BALLAST.

INCIDENT DETAILS

Grade Crossing: NO

Location Subdivision: GEORGIA

Railroad Milepost: 95.5

Type of Vehicle Involved:

Crossing Device Type:

Device Operational: YES

DOT Crossing Number:

Date and Time Service was/will be Restored:

Brake Failure: UNKNOWN

Federal Post-Accident 219.201 Sub Part C Testing Required: UNKNOWN

Passenger Train Route: NO

Passenger Train Delay Expected: NO

Passenger Train Delay Handling:

---RAILROAD INFORMATION---

Railroad Involved: NORFOLK SOUTHERN RAILROAD

Train Number: 192G521

Train Type: FREIGHT Train Direction:

Train Speed: Track Speed:

Locomotives: 2 Cars: 90 Derailed: 38

Suspected DOT Regulation Non Compliance: NO

DERAILED CARS:

Pos.	Carnumber	Type	Cargo
------	-----------	------	-------

DAMAGES

Fire Involved: NO Fire Extinguished: UNKNOWN
 INJURIES: NO Hospitalized: Empl/Crew: Passenger:
 FATALITIES: NO Empl/Crew: Passenger: Occupant:
 EVACUATIONS: YES Who Evacuated: PRIVATE Radius/Area:
 CITIZENS
 Damages: NO

<u>Closure Type</u>	<u>Description of Closure</u>	<u>Length of Closure</u>	<u>Direction of Closure</u>
Air:	N		
Road:	N		Major Artery: N
Waterway:	N		
Track:	N		

Passengers Transferred: NO
 Environmental Impact: UNKNOWN
 Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS

CLEAN UP UNDERWAY, INVESTIGATION UNDERWAY.
 Release Secured: NO
 Release Rate:
 Estimated Release Duration:

WEATHER

Weather: CLEAR, 70°F

ADDITIONAL AGENCIES NOTIFIED

Federal: NONE
 State/Local: NONE
 State/Local On Scene: NONE
 State Agency Number: NONE

NOTIFICATIONS BY NRC

USCG ICC (ICC ONI)
 22-NOV-10 11:54
 DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER)
 22-NOV-10 11:54
 DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER CON'T)
 22-NOV-10 11:54
 DHS SOUTH CAROLINA FUSION CENTER (LE SENSITIVE ADVISORS & LIASON PROGRAM)
 22-NOV-10 11:54
 DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
 22-NOV-10 11:54
 FEDERAL RAILROAD ADMIN. (MAIN OFFICE)
 22-NOV-10 12:03
 EPA OEM (MAIN OFFICE)
 22-NOV-10 11:59
 U.S. EPA IV (MAIN OFFICE)
 22-NOV-10 11:56
 FEDERAL EMERGENCY MANAGEMENT AGENCY (MAIN OFFICE)
 22-NOV-10 11:54
 USCG NATIONAL COMMAND CENTER (MAIN OFFICE)
 22-NOV-10 12:00
 GA BUREAU OF INVESTIGATION (COMMAND CENTER)
 22-NOV-10 11:54
 GA U.S. ATTORNEY'S OFFICE (MAIN OFFICE)
 22-NOV-10 11:54
 NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)

22-NOV-10 11:54
NOAA RPTS FOR GA (MAIN OFFICE)
22-NOV-10 11:54
NATIONAL RESPONSE CENTER HQ (MAIN OFFICE)
22-NOV-10 12:01
NTSB PIPELINE (MAIN OFFICE)
22-NOV-10 11:54
NTSB RAIL (MAIN OFFICE)
22-NOV-10 11:54
HOMELAND SEC COORDINATION CENTER (MAIN OFFICE)
22-NOV-10 11:54
PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS)
22-NOV-10 11:57
PIPELINE & HAZMAT SAFETY ADMIN (OFFICE HAZARDOUS MATERIALS FAX#2)
22-NOV-10 11:54
SC EMERGENCY MANAGEMENT DIVISION (MAIN OFFICE)
22-NOV-10 11:54
SECTOR CHARLESTON (COMMAND CENTER)
22-NOV-10 11:54
GEORGIA EMERGENCY MNGMT AGENCY (MAIN OFFICE)
22-NOV-10 11:54
SC DEPT OF ENV CNTL ATTN: ERS (MAIN OFFICE)
22-NOV-10 11:54
TN BUREAU OF INVESTIGATION (TBI)
22-NOV-10 11:54
USCG DISTRICT 7 (ATTN: LCDR MARTIN MUELLER)
22-NOV-10 11:54

ADDITIONAL INFORMATION

THIS IS AN UPDATE TO A PREVIOUS DERAILMENT.

*** END INCIDENT REPORT # 960492 ***

NATIONAL RESPONSE CENTER 1-800-424-8802

*** For Public Use ***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 960549

INCIDENT DESCRIPTION

*Report taken at 19:52 on 22-NOV-10
 Incident Type: RAILROAD
 Incident Cause: OTHER
 Affected Area:
 The incident occurred on 22-NOV-10 at 14:00 local time.
 Affected Medium: OTHER CONTAINMENT

SUSPECTED RESPONSIBLE PARTY

Organization: NORFOLK SOUTHERN RAILROAD
 ATLANTA, GA 30303

Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

County: BURKE
 City: MIDVILLE State: GA
 MILE S95.3

RELEASED MATERIAL(S)

CHRIS Code: SCE Official Material Name: SODIUM CARBONATE SOLUTIONS
 Also Known As:
 Qty Released: 25 TON(S)

DESCRIPTION OF INCIDENT

CALLER IS REPORTING A RELEASE OF MATERIAL FROM A DAMAGED HOPPER TRAY ON A RAILCAR DURING RE-RAILMENT. CALLER STATED THE MATERIAL DISCHARGED INTO A CONTAINMENT TRAY THAT WAS PLACED UNDER THE CAR PRIOR TO RE-RAILING.

INCIDENT DETAILS

Grade Crossing: NO
 Location Subdivision: GEORGIA
 Railroad Milepost: S95.3
 Type of Vehicle Involved:
 Crossing Device Type:
 Device Operational: YES
 DOT Crossing Number:
 Date and Time Service was/will be Restored:
 Brake Failure: NO
 Federal Post-Accident 219.201 Sub Part C Testing Required: NO
 Passenger Train Route: NO
 Passenger Train Delay Expected: NO
 Passenger Train Delay Handling:

---RAILROAD INFORMATION---

Railroad Involved: NORFOLK SOUTHERN RAILROAD
 Train Number: TCMX 450166
 Train Type: RAIL CAR Train Direction:
 Train Speed: Track Speed:
 Locomotives: Cars: 1 Derailed:
 Suspected DOT Regulation Non Compliance: NO

DERAILED CARS:

Pos.	Carnumber	Type	Cargo
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DAMAGES

Fire Involved: NO Fire Extinguished: UNKNOWN
 INJURIES: NO Hospitalized: Empl/Crew: Passenger:
 FATALITIES: NO Empl/Crew: Passenger: Occupant:
 EVACUATIONS: NO Who Evacuated: Radius/Area:
 Damages: NO

<u>Closure Type</u>	<u>Description of Closure</u>	<u>Length of Closure</u>	<u>Direction of Closure</u>
Air:	N		
Road:	N		Major Artery: N
Waterway:	N		
Track:	Y MAIN TRACK		ALL

Passengers Transferred: NO
 Environmental Impact: NO
 Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS

MATERIAL DISCHARGED INTO CONTAINMENT AND WAS CLEANED UP.
 Release Secured: YES
 Release Rate:
 Estimated Release Duration:

WEATHER

Weather: CLEAR, 65°F

ADDITIONAL AGENCIES NOTIFIED

Federal: NONE
 State/Local: NONE
 State/Local On Scene: NONE
 State Agency Number: NONE

NOTIFICATIONS BY NRC

USCG ICC (ICC ONI)
 22-NOV-10 19:57
 DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER)
 22-NOV-10 19:57
 DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER CON'T)
 22-NOV-10 19:57
 DHS SOUTH CAROLINA FUSION CENTER (LE SENSITIVE ADVISORS & LIASON PROGRAM)
 22-NOV-10 19:57
 DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
 22-NOV-10 19:57
 FEDERAL RAILROAD ADMIN. (MAIN OFFICE)
 22-NOV-10 20:00
 U.S. EPA IV (MAIN OFFICE)
 22-NOV-10 19:58
 GA BUREAU OF INVESTIGATION (COMMAND CENTER)
 22-NOV-10 19:57
 GA U.S. ATTORNEY'S OFFICE (MAIN OFFICE)
 22-NOV-10 19:57
 NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
 22-NOV-10 19:57
 NOAA RPTS FOR GA (MAIN OFFICE)
 22-NOV-10 19:57
 NTSB RAIL (MAIN OFFICE)
 22-NOV-10 19:57
 HOMELAND SEC COORDINATION CENTER (MAIN OFFICE)

22-NOV-10 19:57
SC EMERGENCY MANAGEMENT DIVISION (MAIN OFFICE)
22-NOV-10 19:57
SECTOR CHARLESTON (COMMAND CENTER)
22-NOV-10 19:57
GEORGIA EMERGENCY MNGMT AGENCY (MAIN OFFICE)
22-NOV-10 19:57
SC DEPT OF ENV CNTRL ATTN: ERS (MAIN OFFICE)
22-NOV-10 19:57
TN BUREAU OF INVESTIGATION (TBI)
22-NOV-10 19:57
USCG DISTRICT 7 (ATTN: LCDR MARTIN MUELLER)
22-NOV-10 19:57

ADDITIONAL INFORMATION

CALLER HAD NO ADDITIONAL INFORMATION.

*** END INCIDENT REPORT # 960549 ***

NATIONAL RESPONSE CENTER 1-800-424-8802

*** For Public Use ***

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 960630

INCIDENT DESCRIPTION

*Report taken at 16:25 on 23-NOV-10
Incident Type: RAILROAD
Incident Cause: DERAILMENT
Affected Area:
The incident occurred on 22-NOV-10 at 19:00 local time.
Affected Medium: LAND RAIL BALLAST, SOIL

SUSPECTED RESPONSIBLE PARTY

XX

Type of Organization: UNKNOWN

INCIDENT LOCATION

County: BURKE
City: MIDVILLE State: GA
MILEPOST: S95.5

RELEASED MATERIAL(S)

CHRIS Code: MEK Official Material Name: METHYL ETHYL KETONE
Also Known As:
Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER IS REPORTING A RELEASE OF METHYL ETHYL KETONE FROM A RAIL CAR (#SCMX4309) THAT WAS INVOLVED IN A FREIGHT TRAIN DERAILMENT. CALLER STATES THE ACTUAL DERAILMENT WAS ORIGINALLY REPORTED (NRC #960451) AND THE RELEASE OCCURRED WHILE CLEANING UP THE DERAILMENT. THE ORIGINAL REPORT INVOLVED 38 RAIL CARS THAT DERAILED.

INCIDENT DETAILS

Grade Crossing: NO
Location Subdivision: GEORGIA
Railroad Milepost: S95.5
Type of Vehicle Involved:
Crossing Device Type:
Device Operational: YES
DOT Crossing Number:
Date and Time Service was/will be Restored:
Brake Failure: UNKNOWN
Federal Post-Accident 219.201 Sub Part C Testing Required: NO
Passenger Train Route: NO
Passenger Train Delay Expected: NO
Passenger Train Delay Handling:

---RAILROAD INFORMATION---

Railroad Involved: NORFOLK SOUTHERN RAILROAD
Train Number: 192G521
Train Type: FREIGHT Train Direction:
Train Speed: Track Speed:
Locomotives: 2 Cars: 90 Derailed: 38
Suspected DOT Regulation Non Compliance: NO
DERAILED CARS:

Pos.	Carnumber	Type	Cargo
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DAMAGES

Fire Involved: NO Fire Extinguished: UNKNOWN
 INJURIES: NO Hospitalized: Empl/Crew: Passenger:
 FATALITIES: NO Empl/Crew: Passenger: Occupant:
 EVACUATIONS: UNKN Who Evacuated: Radius/Area:
 Damages: UNKNOWN

Closure Type	Description of Closure	Length of Closure	Direction of Closure
Air:	N		
Road:	N		Major Artery: N
Waterway:	N		
Track:	Y MAIN LINE		E/W

Passengers Transferred: NO
 Environmental Impact: UNKNOWN
 Media Interest: NONE Community Impact due to Material:

REMEDIAL ACTIONS

CALLER STATES A CONTRACTOR (HEPACO) HAS BEEN HIRED TO HANDLE THE CLEANUP AND THEY ARE ASSISTING WITH THE SITUATION.
 Release Secured: YES
 Release Rate:
 Estimated Release Duration:

WEATHER

Weather: PARTLY CLOUDY, 58°F

ADDITIONAL AGENCIES NOTIFIED

Federal: NONE
 State/Local: NONE
 State/Local On Scene: NONE
 State Agency Number: NONE

NOTIFICATIONS BY NRC

USCG ICC (ICC ONI)
 23-NOV-10 16:34
 DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER)
 23-NOV-10 16:34
 DHS CUSTOMS AND BORDER PATROL (GEORGIA COMMAND CENTER CON'T)
 23-NOV-10 16:34
 DHS SOUTH CAROLINA FUSION CENTER (LE SENSITIVE ADVISORS & LIASON PROGRAM)
 23-NOV-10 16:34
 DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)
 23-NOV-10 16:34
 FEDERAL RAILROAD ADMIN. (MAIN OFFICE)
 23-NOV-10 16:37
 U.S. EPA IV (MAIN OFFICE)
 23-NOV-10 16:36
 GA BUREAU OF INVESTIGATION (COMMAND CENTER)
 23-NOV-10 16:34
 GA U.S. ATTORNEY'S OFFICE (MAIN OFFICE)
 23-NOV-10 16:34
 NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)
 23-NOV-10 16:34
 NOAA RPTS FOR GA (MAIN OFFICE)
 23-NOV-10 16:34
 NATIONAL RESPONSE CENTER HQ (MAIN OFFICE)

23-NOV-10 16:38
NTSB RAIL (MAIN OFFICE)
23-NOV-10 16:34
HOMELAND SEC COORDINATION CENTER (MAIN OFFICE)
23-NOV-10 16:34
SC EMERGENCY MANAGEMENT DIVISION (MAIN OFFICE)
23-NOV-10 16:34
SECTOR CHARLESTON (COMMAND CENTER)
23-NOV-10 16:34
GEORGIA EMERGENCY MNGMT AGENCY (MAIN OFFICE)
23-NOV-10 16:34
SC DEPT OF ENV CNTL ATTN: ERS (MAIN OFFICE)
23-NOV-10 16:34
TN BUREAU OF INVESTIGATION (TBI)
23-NOV-10 16:34
USCG DISTRICT 7 (ATTN: LCDR MARTIN MUELLER)
23-NOV-10 16:34

ADDITIONAL INFORMATION

CALLER STATES THERE WAS ALREADY A PRECAUTIONARY EVACUATION FROM THE PREVIOUS NRC REPORT. THE TRACK CLOSURE IS STILL ONGOING.

*** END INCIDENT REPORT # 960630 ***