



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

**Subject: Situation Report #5
Norfolk Southern Train Derailment
Graniteville, SC**

**To: Don Rigger, Chief
Emergency Operations Section, ERRB**

**From: Kevin Misenheimer, OSC
Incident Commander**

Date: January 9, 2005

Operational Period: January 8, 2005 07:00 - January 9, 2005 07:00

The following tasks have been completed during the last operational period:

January 8, 2005 07:00 - 19:00:

- The local fire department asked EPA to conduct air monitoring at a home in which an elderly woman and her mentally handicapped son had remained since the incident Thursday morning. EPA, START and GST entered the house and determined that there were no elevated levels of chlorine. Elevated levels of carbon monoxide were found, most likely due to the HVAC system.
- EPA, START and GST made an entry into the hotzone in the woods behind the Woodhead Plant to continue to support the local search and rescue operations. EPA provided air monitoring support.
- GST provided health and safety support to local coroners to allow them to make an entry into the Woodhead Plant in identifying and recovering the remains of the last unaccounted citizen from the mill.
- GST assisted local EMS and Fire in dumping coal from the boiler of the mill on Gregg St. to mitigate the fire that had started as a result of the incident.
- Norfolk Southern contractors added a lime-slurry to the incident scene area. This operation was to aid in prevention of chlorine releases from the soils near the damaged chlorine tanker rail cars.

- A meeting was held between EPA, State, Norfolk Southern and local officials in order to form a true Unified Command System to better coordinate site activities.

January 8, 2005 19:00 – January 9, 2005 07:00:

- START and USCG GST set up 5 Area Rae chlorine monitors and data receiving facility collocated with the CTEH data center. The entry was conducted in Level B. START is receiving data from 3 of the monitors and working on the connection to the remaining two. Eleven more Area Raes are expected to arrive from ERT.
- Norfolk Southern contractor worked through the night to set up sodium hydroxide pump transfer. Contrary to earlier reports, the tank car of sodium hydroxide was not breached. The contents will be pumped into tanker trucks then discharged to frac tanks staged out of the hot zone. Contractor also worked to construct unit that will sparge chlorine gas into 18% sodium hydroxide to make bleach. EPA met with on-site contractor to review health and safety concerns. EPA noted concerns about respiratory protection at the decontamination line.
- Norfolk Southern continued application of and hydro-mulching of lime on chlorine contaminated soil. The intent is to reduce chlorine gas and hydrogen chloride emissions when the ground is disturbed by heavy equipment.
- A heavy fog rolled in around 4:00AM. An inversion formed. Responders on Highway 1 reported heavy chlorine smell and some irritation. EPA and START drove Highway 1 and took measurements with Multi-Warn Chlorine was detected from 0.05 to 0.25 ppm.
- EPA and DHEC met with Norfolk Southern and their primary contractors to discuss health and safety concerns. EPA established more stringent health and safety over-site of Norfolk Southern's contractors.

Next Steps

- Bring in additional personnel to provide over-site and provide additional air monitoring tasks.
- Receive, calibrate, and install 11 additional Area Rae's to present air monitoring system.
- Continue to provide over-site of NS response activities and continue air monitoring. NS will continue to reconfigure the patch for the damaged chlorine rail car in order to begin offloading of product and vapor in a controlled manner. NS will also set up for transfer operations on the two full and intact chlorine rail cars.
- Continue to support Unified Command.