

DCA13MR002
Conrail - Shared Assets
Derailment/Hazardous Material Release
Paulsboro, New Jersey
November 30, 2012

Hazardous Materials
Group Factual Report

ATTACHMENT 46 - WATER SAMPLING PLAN

PH
PFD

PJD
MJDEP

TW
USCG

East Jefferson Street Derailment

Water Sampling plan (corrected)

12/1/12

William Parry (CSX Manager of Environmental Remediation, cell # 973-**** PII ****) is managing the water sampling plan for the responsible party. The RP (CSX) has engaged the services of Arcadis as the overall environmental contractor. They have also engaged Enviroscience to take the water samples. Arcadis has an LSRP (Christopher Motta **** PII ****) to manage the information, review the data and look downrange towards final closure as this moves to a site remediation issue.

The water sampling glassware and personnel are on scene and they are ready to employ the plan as soon as the survey of the wreck is complete and the personnel safety considerations at the scene have been met. **The samples will be analyzed by Test America in Edison, NJ and a 24 hr. sample turnaround has been ordered.**

The **parameter being analyzed for is Vinyl Chloride**. The breakdown product from the decay of vinyl chloride is Hydrochloric Acid. Given the immense buffering capacity of the Mantua Creek and the Delaware River, and taking into account the gaseous nature of the release, the potential for water quality issues related to the presence of residual HCL is insignificant.

A total of 6 transects of the Mantua Creek have been identified as sample locations.

3 transects of the Mantua Creek have been identified for sampling on the West (Delaware River) side of the incident and 3 transects of the creek have been identified on the East side of the incident. The samples will be taken along these transects when the direction of the tide will push the sampling boats away from the wreck rather than pushing them into it for safety considerations. CTEH personnel will provide air monitoring on the boats while sampling is taking place. PPE will be available for personnel if the action level of >1 ppm of vinyl chloride is exceeded.

The 2 transects closest to the wreck, both East and West of the incident (a total of 4 transects) will each be sampled at 3 locations. These locations are North bank, middle and South bank. 3 samples will be taken at each location. These locations will be surface, mid column, and bottom interface. This represents a total of 36 water samples.

The remaining 2 transects to the West of the bridge and the remaining 1 transect to the East of the wreck will be sampled only at the surface for total of 9 additional water samples.

The **water sampling will be performed in 3 phases.** The first round (or phase) of sampling will be performed when the survey of the damaged rail car is completed.

The second round of sampling will be performed after the residual contents of the damaged rail car are evacuated.

The third round of sampling will be performed after all the wreckage has been removed. Bottom sediment samples will be taken in the area of the bridge at that time.

Sample locations on intertidal mud flat locations are being identified to determine if there has been any impact to those ecologically sensitive areas for potential NRDA purposes.

Background water samples will be taken on the Delaware River as a control.

Residential potable well locations and municipal supply well locations have been plotted for sampling as it becomes necessary.