

November 5, 2001 (10:36am)

Preliminary Data

New York City/ World Trade Center Sampling Activities
Exchange Place PATH Dewatering 3 (10/26/01 Sample)



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Sampling Date: October 26, 2001

Location: Grab samples from direct discharge to the Hudson River.

Sample Matrix: Aqueous

Analytes (Laboratory): VOCs + Freon + MTBE (EPA Region 2)
Microbiology (EPA Region 2)

Objective: The sampling was conducted primarily to evaluate whether PATH tunnel discharge water contains chlordifluoromethane (Freon 22) which has been detected at increasing

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concentrations in air at Ground Zero. Total and fecal coliforms and heterotrophic plate count were included in the sampling regime to address NYSDOH concerns regarding pathogens in WTC basement and PATH tunnel water.

The discharge at Exchange Place was discontinued around noon on November 2 (previous report of October 31 was incorrect), and PATH tunnel/basement effluent is currently pumped out from the PATH terminal area of the WTC in Manhattan and routed to the Newtown Creek POTW.

Preliminary Results Summary:

General Characteristics: Sample was a light amber color and had a "sewage-like" odor.

VOCs: Eight VOCs were detected in the sample. Chlorodifluoromethane (Freon 22) was detected at a concentration of 1600 ug/L. An analytical standard for this compound was not included in analysis of the samples collected on 10/03/01 or 10/10/01. Notwithstanding, it would have been identified as a "tentatively identified compound" (TIC) if it had been present at significant concentrations in those samples, and it was not. Freon 22 has been detected in air samples at the site, as well as in basement water samples collected by PANYNJ and others. Methyl-tertiary butyl ether (MTBE) was detected at 110 ug/L, which is slightly higher than the concentration detected in the 10/10/01 sample. Concentrations of the other six detected VOCs were consistent with those detected in the 10/03/01 and 10/10/01 samples.

Volatile Organic Compounds Detected in Exchange Place PATH Tunnel Effluent			
Date	10/03/01	10/10/01	10/26/01
Compound	Result (ug/L)	Result (ug/L)	Result (ug/L)
Chloromethane	10 QE	ND	ND
Acetone	80 QE	90 QR	99
Methylene Chloride	12	17	16
2-Butanone	21 QE	21	22
Toluene	13	18	21
2-Hexanone	10	ND	ND QE
m/p Xylenes	ND	10	12
Methyl Tert-Butyl Ether	68	65	110
Dichlorodifluoromethane	ND*	ND*	45 QS
Chlorodifluoromethane	ND*	ND*	1600

QE - Accuracy check sample below lower acceptance limit

QS- Spike recoveries above upper acceptance limit

* Analytical standard not run, but not detected as a TIC in these samples

Microbiology: Total and fecal coliforms were both detected at 3000 MPN/100 ml. This is an order of magnitude or more less than the level (10^4 - 10^6 /100 ml) in "typical" untreated domestic wastewater (Metcalf and Eddy, 1991). The heterotrophic plate count (HPC) result was to numerous to count (TNTC/1 ml).