NYC 9/11 Public Portal Document

September 25, 2001 (9:20am)

Final Preliminary Data

New York City/ World Trade Center Sampling Activities
Newtown Creek STP/ Manhattan Pumping Station

Preliminary Results Summary: Laboratory data for all parameters has been received. All parameters were either below permit limits in final effluent, or below levels of concern. The WTC disaster does not appear to have effected influent to the plant.

EPA Personnel: Randy Braun
Stephen Hale
Richard Coleates

Sampling Date: September 15 - 16, 2001

Sampling Time: 24-hour composites beginning at approximately 1:00pm on 9/15/01

Location: Three sampling locations: 1) Newtown Creek STP final treated discharge, 2) Influent to Newtown Creek STP from Brooklyn and Queens, and 3) 13th Street pump station (contains all waste water from southern Manhattan, including WTC area).

Sample Matrix: Water

Analytes (Laboratory):

PCBs (Region 2)
PAHs (Region 2)
Metals (Region 2)
BOD5 (Region 2)
TSS (Region 2)
Dioxins/Furans (contract lab - Paradigm Analytical)
Asbestos (contract lab)

Preliminary Results:

Dioxins/Furans: Two dioxin and two furan compounds were detected in one or more samples. The total TEQ for the Influent about twice as high as the TEQ for the Midtown Pumping Station and the Effluent samples. The TEQ for the Influent was about 8 times less than the total TEQ for the Rector St. Runoff sample collected on 09/14/01, and is also less than the TEQ for the highest sample collected by the Harbor CARP program (22 pg/L).

Pumping Station: OCDD was reported in the midtown pumping station sample at 103 J pg/L, which is about 50 times less than the concentration reported for this compound in Rector St. runoff. The TEQ for the Midtown pumping station is 8.5 pg/L, compared with 122 pg/L for the runoff sample.

Influent: OCDD, 1234678-HpCDD,, and OCDF were detected in the combined influent, resulting in a TEQ of 15.5 pg/L.

Effluent: OCDD and 1234678-HpCDF were detected in the final effluent, with a TEQ of 8 pg/L.

Compound	Manhattan Pumping Station [1] (pg/L)	Influent [1] (pg/L)	Effluent [1] (pg/L)	Rector St. Runoff [2] (pg/L)
1234678-HpCDD	14.6 *	29.7 J	14.6 *	530.58 JK
OCDD	103	176	38..9	5547.62 J
1234678-HpCDF	ND	14.2 J	6.3 J	304.09JK
OCDF	ND	30 J	13.8 *	392.70 J
Total HpCDDs	ND	29.7	ND	---
Total HpCDFs	ND	21.9	ND	---
TEQ[3]	8.5	15.5	8.0	122
TEQ (include EMPC)[3]	8.6	15.6	8.0	----

ND - Non Detect
* Reported as ND with an Estimated Maximum Possible Concentration (EMPC) for this compound
1 Paradigm Analytical (REACT contract)
2 Axys Analytical (NYSDEC contract). Blank corrected.
3 ND (including those not shown) = ½ of Detection Limit

PCBs (Aroclors) :

Pumping Station Not Detected
Influent: Not Detected
Effluent: Not Detected

BOD5 (mg/L):

Pumping Station 120
Influent: 210
Effluent: 38
% Removal 82

PAHs: Permit limits for PAHs and semi-volatiles do not exist. Levels were elevated in the pumping station sample and the influent. PAHs were not detected in the effluent.

Pumping Station (ug/L) Napthalene (5.8); 2- methyl napthalene (10); 1-methyl napthalene (6.7); biphenyl (1.5); 2,6- dimethylnapthalene (7.9); 2,3,5-trimethylnapthalene (4.5).

NYC 9/11 Public Portal Document

Influent (ug/L) Napthalene (1.4); 2- methyl napthalene (1.0); 1-methyl napthalene (0.65); biphenyl (2.7); 2,6- dimethylnapthalene (0.53).

Effluent (ug/L) Not Detected

Mercury:

Pumping Station Not Detected
Influent: Not Detected
Effluent: Not Detected

Non-Filterable Residue (TSS) (mg/L):

Pumping Station 85
Influent 120
Effluent 33 (Permit 30 day average 35%)
% Removal 73%

Metals: No metals were detected above permit discharge limits.

NYC-WTC_000417570