

kenmore, new york 14217 • municipal building • 877-8800

own of  
onawanda

office of the town engineer  
THEODORE A. KREHBIEL

MEMORANDUM

SUBJECT: NOTICE OF JOINT PUBLIC HEARING  
New York State Public Interest Research Group's (NYPIRG)  
Report on Toxics in the Niagara River

Gentlemen:

The Town of Tonawanda had an analysis made for priority pollutants in our potable drinking water, sewage collection, wastewater treatment and discharge of treated sewage effluent back into the Niagara River.

Samples were taken at the following locations:

- (1) Raw water intake from Niagara River for drinking water
- (2) Influent to sewage treatment plant
- (3) Effluent to Niagara River after treatment at sewage plant.

Sample (1) shows the quality of water the Town residents drink.

The difference between samples (1) and (2) indicates the pollution Tonawanda industries are adding to our sewerage collection system.

The difference between samples (2) and (3) indicate the removal by the Town Sewage Treatment Plant.

Sample (3) shows the pollution the Town is discharging to the River.

Although the Town has not had an opportunity to examine each toxic pollutant in detail, we were told by Mr. Gary Hahn of Ecology and Environment, Inc. that our raw water supply was pretty darn "clean", that an industry or two were adding several toxic organics to our system, but that our treatment plant was doing a good job in cleaning up industrial pollution before discharging the effluent to Niagara River.

We intend to elaborate more on the subject of toxic pollutants in the Town as soon as we have an opportunity to study the results.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Theodore A. Krehbiel'.

Theodore A. Krehbiel  
Town Engineer

TAK/bw



# ecology and environment, inc.

195 SUGG ROAD, P.O. BOX D, BUFFALO, NEW YORK 14225, TEL. 716-632-4491, TELEX 91-9183

International Specialists in the Environmental Sciences

December 10, 1981

Mr. Ted Krehbiel  
Town of Tonawanda  
Municipal Building  
Kenmore, NY 14217

Dear Mr. Krehbiel:

Enclosed is the Laboratory Report of the organic priority pollutant analysis conducted on three twenty-four hour composite samples collected by Town of Tonawanda personnel on November 30th and December 1, 1981.

Each sample consisted of a one gallon container and eight volatile organics (VOA) vials. The samples were identified as follows:

E & E Lab Number	Identification
1955	Weir, wastewater treatment plant discharge
1956	Inlet, wastewater treatment plant
1957	Influent, water plant

All samples were collected in prewashed containers supplied by E & E. Samples were kept at 4°C until analysis.

Analyses were performed in accordance with methods described in 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants," 44 FR 69464, December 3, 1979.

Parameter	Method
Volatile Organics	624
Base/Neutral Acids	625
Organochlorine Pesticides and PCB's	608

The results are summarized in the following tables which list the priority pollutants for each analysis and their corresponding results. If I can be of further assistance, please contact me.

Very truly yours,

*Caryn Wojtowicz*  
Caryn Wojtowicz  
GC/MS Group Leader

CW:gb  
Enclosure

recycled paper



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LABORATORY REPORT  
FOR  
TOWN OF TONAWANDA

GC/MS FRACTION - VOLATILE COMPOUNDS - METHOD 624  
(Detection limits: at least 10 ug/L except for Acrolein and Acrylonitrile at 100 ug/L)  
ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER  E & E Lab Number	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
1V. Acrolein (107-02-8)	ND	ND	ND
2V. Acrylonitrile (107-13-1)	ND	ND	ND
3V. Benzene (71-43-2)	ND	635	ND
4V. Bis (Chloro- methyl) Ether (542-88-1)	ND	ND	ND
5V. Bromoform (75-25-2)	ND	ND	ND
6V. Carbon Tetrachloride (56-23-5)	ND	ND	ND
7V. Chlorobenzene (108-90-7)	ND	ND	ND
8V. Chlorodi- bromomethane (124-48-1)	ND	ND	ND
9V. Chloroethane (75-00-3)	ND	ND	ND
10V. 2-Chloro- ethylvinyl Ether (110-75-8)	ND	ND	ND
11V. Chloroform (67-66-3)	ND	ND	ND

SHEET 1 OF 3

TOWN OF TONAWANDA

GC/MS FRACTION - VOLATILE COMPOUNDS - METHOD 624 (Continued)

Detection limits: at least 10 ug/L except for Acrolain and Acrylonitrile at 100 ug/L  
 ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
12V. Dichloro- bromomethane (75-27-4)	ND	ND	ND
13V. Dichloro- difluoromethane (75-71-8)	ND	ND	ND
14V. 1,1-Dichloro- ethane (75-34-3)	ND	ND	ND
15V. 1,2-Dichloro- ethane (107-06-2)	ND	ND	ND
16V. 1,1-Dichloro- ethylene (75-35-4)	ND	ND	ND
17V. 1,2-Dichloro- propane (78-87-5)	ND	ND	ND
18V. 1,2-Dichloro- propylene (542-75-6)	ND	ND	ND
19V. Ethylbenzene (100-41-4)	ND	ND	ND
20V. Methyl Bromide (74-83-9)	ND	ND	ND
21V. Methyl Chloride (74-87-3)	ND	ND	ND
22V. Methylene Chloride (75-09-2)	ND	ND	ND
23V. 1,1,2,2-Tetra- chloroethane (79-34-5)	ND	ND	ND
24V. Tetrachloro- ethylene (127-18-4)	ND	ND	ND

SHEET 2 OF 3

TOWN OF TONAWANDA

GC/MS FRACTION - VOLATILE COMPOUNDS - METHOD 624 (Continued)

(Detection limits: at least 10 ug/L except for Acrolein and Acrylonitrile at 100 ug/L;  
 ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER  E & E Lab Number	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
25V. Toluene (108-88-3)	ND	331	ND
26V. 1,2-Trans- Dichloroethylene (156-60-5)	ND	ND	ND
27V. 1,1,1-Tri- chloroethane (71-55-6)	ND	ND	<10
28V. 1,1,2-Tri- chloroethane (79-00-5)	ND	ND	ND
29V. Trichloro- ethylene (79-01-6)	ND	ND	ND
30V. Trichloro- fluoromethane (75-69-4)	ND	ND	ND
31V. Vinyl Chloride (75-01-4)	ND	ND	ND

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LABORATORY REPORT

TOWN OF TONAWANDA

GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS - METHOD 625

(Detection limits: at least 10 ug/L)

ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER  E & E Lab Number	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
1B. Acenaphthene (83-32-9)	ND	ND	ND
2B. Acenaphthylene (208-96-8)	ND	ND	ND
3B. Anthracene (120-12-7)	ND	<10	ND
4B. Benzidine (92-87-5)	ND	ND	ND
5B. Benzo (a) Anthracene (56-55-3)	ND	ND	ND
6B. Benzo (a) Pyrene (50-32-8)	ND	ND	ND
7B. 3,4-Benzo- Fluoranthene (205-99-2)	ND	ND	ND
8B. Benzo (ghi) Perylene (191-24-2)	ND	ND	ND
9B. Benzo (k) Fluoranthene (207-08-9)	ND	ND	ND
10B. Bis (2-Chloro- ethoxy) Methane (111-91-1)	ND	ND	ND
11B. Bis (2-Chloro- ethyl) Ether (111-44-4)	ND	ND	ND

TOWN OF TONAWANDA

GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS - METHOD 625 (Continued)

Detection limits: at least 10 ug/L

ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
12B. Bis (2-Chloro- isopropyl) Ether (39638-32-9)	ND	ND	ND
13B. Bis (2-Ethyl- hexyl) Phthalate (117-81-7)	ND	ND	ND
14B. 4-Bromo- phenyl Phenyl Ether (101-55-3)	ND	ND	ND
15B. Butyl Benzyl Phthalate (85-68-7)	ND	ND	ND
16B. 2-Chloro- naphthalene (91-58-7)	ND	ND	ND
17B. 4-Chloro- phenyl Phenyl Ether (7005-72-3)	ND	ND	ND
18B. Chrysene (218-01-9)	ND	ND	ND
19B. Dibenzo (a,h) Anthracene (53-70-3)	ND	ND	ND
20B. 1,2-Dichloro- benzene (95-50-1)	ND	ND	ND
21B. 1,3-Dichloro- benzene (541-73-1)	ND	ND	ND
22B. 1,4-Dichloro- benzene (106-46-7)	ND	ND	ND
23B. 3,3'-Dichloro- benzidine (91-94-1)	ND	ND	ND

SHEET 2 OF 4

TOWN OF TONAWANDA

GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS - METHOD 625 (Continued)

(Detection limits: at least 10 ug/L)

ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER  E & E Lab Number	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
248. Diethyl Phthalate (84-65-2)	ND	ND	ND
258. Dimethyl Phthalate (131-11-3)	ND	ND	ND
268. Di-N-Butyl Phthalate (84-74-2)	ND	ND	ND
278. 2,4-Dinitro- toluene (121-14-2)	ND	ND	ND
288. 2,6-Dinitro- toluene (606-20-2)	ND	ND	ND
298. Di-N-Octyl Phthalate (117-84-0)	ND	ND	ND
308. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)	ND	ND	ND
318. Fluoranthene (206-44-0)	ND	ND	ND
328. Fluorene (86-73-7)	ND	ND	ND
338. Hexa- chlorobenzene (118-71-1)	ND	ND	ND
348. Hexa- chlorobutadiene (87-68-3)	ND	ND	ND
358. Hexachloro- cyclopentadiene (77-47-4)	ND	ND	ND

SHEET 3 OF 4



TOWN OF TONAWANDA

GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS - METHOD 625 (Continued)  
 (Detection limits: at least 10 ug/L)  
 ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER  E & E Lab Number	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
368. Hexachloro- ethane (67-72-1)	ND	ND	ND
378. Indeno (1,2,3-cd) Pyrene (193-39-5)	ND	ND	ND
388. Isophorone (78-59-1)	ND	ND	ND
398. Naphthalene (91-20-3)	ND	33	ND
408. Nitrobenzene (98-95-3)	ND	ND	ND
418. N-Nitrosodi- methylamine (62-75-9)	ND	ND	ND
428. N-Nitrosodi- N-Propylamine (621-64-7)	ND	ND	ND
438. N-Nitro- sodiphenylamine (86-30-6)	ND	ND	ND
448. Phenanthrene (85-01-8)	ND	< 10	ND
458. Pyrene (129-00-0)	ND	ND	ND
468. 1,2,4-Tri- chlorobenzene (120-82-1)	ND	ND	ND

SHEET 4 OF 4



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LABORATORY REPORT  
FOR  
TOWN OF TONAWANDA

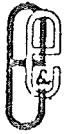
GC/MS FRACTION - ACID COMPOUNDS

(Detection limits: 25 ug/L except for "Dinitro" compounds at 250 ug/L)

ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER  E & E Lab Number	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
1A. 2-Chlorophenol (95-57-8)	ND	ND	ND
2A. 2,4-Dichloro- phenol (120-83-2)	ND	ND	ND
3A. 2,4-Dimethyl- phenol (105-67-9)	ND	71	ND
4A. 4,6-Dinitro-0- Cresol (534-52-1)	ND	ND	ND
5A. 2,4-Dinitro- phenol (51-28-5)	ND	ND	ND
6A. 2-Nitrophenol (88-75-5)	ND	ND	ND
7A. 4-Nitrophenol (100-02-7)	ND	ND	ND
8A. P-Chloro-M- Cresol (59-50-7)	ND	ND	ND
9A. Pentachloro- phenol (87-86-5)	ND	ND	ND
10A. Phenol (108-95-2)	ND	435	ND
11A. 2,4,6-Tri- chlorophenol (88-06-2)	ND	ND	ND

SHEET 1 OF 1



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## LABORATORY REPORT FOR TOWN OF TONAWANDA

GC/MS FRACTION - PESTICIDES - METHOD 608  
(Detection limits: at least 10 ug/L for GC/MS confirmation)  
ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER  E & E Lab Number	CONCENTRATION, ug/L		
	1957 Influent	1956 Inlet	1955 Weir
1P. Aldrin (309-00-2)	ND	0.23 ug/L	0.05 ug/L
2P. $\alpha$ -BHC (319-84-6)	ND	ND	ND
3P. $\beta$ -BHC (319-85-7)	ND	ND	ND
4P. $\gamma$ -BHC (58-89-9)	ND	ND	ND
5P. $\delta$ -BHC (319-86-8)	ND	ND	ND
6P. Chlordane (57-74-9)	ND	ND	ND
7P. 4,4'-DDT (50-29-3)	ND	ND	ND
8P. 4,4'-DDE (72-55-9)	ND	ND	ND
9P. 4,4'-DDD (72-54-8)	ND	ND	ND
10P. Dieldrin (60-57-1)	ND	ND	ND
11P. $\alpha$ -Endosulfan (115-29-7)	ND	ND	ND
12P. $\beta$ -Endosulfan (115-29-7)	ND	ND	ND

SHEET 1 OF 2

TOWN OF TONAWANDA

GC/MS FRACTION - PESTICIDES - METHOD 608 (Continued)  
 (Detection limits: at least 10 ug/L for GC/MS confirmation)  
 ND: Material was analyzed for but not detected

POLLUTANT AND CAS NUMBER	CONCENTRATION, ug/L			
	E & E Lab Number	1957 Influent	1956 Inlet	1955 Weir
13P. Endosulfan Sulfate (1031-07-8)		ND	ND	ND
14P. Endrin (72-20-8)		ND	ND	ND
15P. Endrin Aldehyde (7421-93-4)		ND	ND	ND
16P. Heptachlor (76-44-8)		ND	ND	ND
17P. Heptachlor Epoxide (1024-57-3)		ND	ND	ND
18P. PCB-1242 (53469-21-9)		ND	ND	ND
19P. PCB-1254 (11097-69-1)		ND	ND	ND
20P. PCB-1221 (11104-28-2)		ND	ND	ND
21P. PCB-1232 (11141-16-5)		ND	ND	ND
22P. PCB-1248 (12672-29-6)		ND	ND	ND
23P. PCB-1260 (11096-82-5)		ND	ND	ND
24P. PCB-1016 (12674-11-2)		ND	ND	ND
25P. Toxaphene (8001-35-2)		ND	ND	ND

SHEET 2 OF 2