000010

EPA Region 5 Records Ctr.
200064

JUL 16 1992

HSE-5J

Mr. Mike Stoner
28498 County Road 10
Elkhart, Indiana 46516

RE: Himco Landfill Site, County Road 10; Site I.D. No. 4J
Sampling and Analysis of the Groundwater System Located at
28498 County Road 10, Elkhart, Elkhart County, Indiana

Dear Mr. Stoner;

Enclosed are the results of this Agency's analysis of your private drinking water supply located at the property identified above. This analysis was performed to determine whether any contaminants associated with the Himco Landfill Site may have migrated to your water supply system and have created inorganic or organic chemical contamination of your water supply. A full analytical scan for all identified organic and inorganic chemical constituents in the water supply system was conducted.

Based on these analyses, no contamination in excess of Safe Drinking Water Act maximum contaminant levels is found.

We hope that we have been helpful in assisting you in determining the current safeness and palatability of your water supply source.

Sincerely,

Paul R. Steadman
On-Scene Coordinator
Emergency and Enforcement Response Branch

Enclosure: 8 page certified analytical report of Stoner residential well

cc: M.E. Gustafson, RPM, Reg. V w/ encl.
T.K. Nash, Asst. Reg. Counsel, ORC, Reg. V w/o encl.
J.R. Smith, IDEM w/encl.
G.S. Downie, Elkhart Co. H.D. w/encl.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no. 92T05967
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW1 - residential well - 5/7/92 @ 1245 - B.E.C. Drinking Water Lab No. 00277

results:

Analyte	Method	Result
Total Arsenic	EPA-600, 206.2	less than 2.5 ug/L
Total Barium	EPA-600, 200.7	less than 100 ug/L
Total Cadmium	EPA-600, 213.2	less than 0.3 ug/L
Total Chromium	EPA-600, 218.2	less than 7.5 ug/L
Total Copper	EPA-600, 220.1	less than 10 ug/L
Total Cyanide	EPA-600, 335.2	less than 0.01 mg/L
Total Iron	EPA-600, 200.7	460 ug/L
Total Lead	EPA-600, 239.2	less than 1.5 ug/L
Total Manganese	EPA-600, 243.2	100 ug/L
Total Mercury	EPA-600, 245.1	less than 0.2 ug/L
Total Selenium	EPA-600, 270.2	less than 2.4 ug/L
Total Silver	EPA-600, 272.2	less than 0.9 ug/L
Total Zinc	EPA-600, 200.7	16 ug/L

date completed:	tech:	approved by:
5/22/92	DVV/KAD/MJK	

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval, as a mutual protection.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no. 92T05967
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW1 - residential well - 5/7/92 @ 1245 - B.E.C. Drinking Water Lab No. 00277

analysis: VOA

procedure: EPA-600, Method 524.2

results:

COMPOUND	RESULTS (ug/L)
Benzene	< 0.500
Bromodichloromethane	< 0.500
Bromobenzene	< 0.500
Bromochloromethane	< 0.500
Bromoform	< 0.500
Bromomethane	< 0.500
n-Butylbenzene	< 0.500
sec-Butylbenzene	< 0.500
tert-Butylbenzene	< 0.500
Carbon tetrachloride	< 0.500
Chlorobenzene	< 0.500
Chlorodibromomethane	< 0.500
Chloroethane	< 0.500
Chloroform	< 0.500
Chloromethane	< 0.500
2-Chlorotoluene	< 0.500
4-Chlorotoluene	< 0.500
1,2-Dibromo-3-Chloropropane	< 0.500
1,2-Dibromoethane (EDB)	< 0.500
Dibromomethane	< 0.500
1,2-Dichlorobenzene	< 0.500
1,3-Dichlorobenzene	< 0.500
1,4-Dichlorobenzene	< 0.500
Dichlorodifluoromethane	< 0.500
1,1-Dichloroethane	< 0.500
1,2-Dichloroethane	< 0.500
1,1-Dichloroethene	< 0.500
cis-1,2-Dichloroethene	< 0.500
1,2-Dichloropropane	< 0.500
1,3-Dichloropropane	< 0.500
2,2-Dichloropropane	< 0.500
1,1-Dichloropropene	< 0.500
cis-1,3-Dichloropropene	< 0.500
trans-1,3-Dichloropropene	< 0.500
Ethyl Benzene	< 0.500

date completed:	tech:	approved by:
5/12/92	JN	

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval as a mutual protection.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no. 92T05967
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW1 - residential well - 5/7/92 @ 1245 - B.E.C. Drinking Water Lab No. 00277

analysis: VOA

results: continued

COMPOUND	RESULTS (ug/L)
Hexachlorobutadiene	< 0.500
Isopropylbenzene	< 0.500
4-Isopropyltoluene	< 0.500
Methylene Chloride	< 0.500
Naphthalene	< 0.500
n-Propylbenzene	< 0.500
Styrene	< 0.500
1,1,1,2-Tetrachloroethane	< 0.500
1,1,2,2-Tetrachloroethane	< 0.500
Tetrachloroethene	< 0.500
Toluene	< 0.500
1,2,3-Trichlorobenzene	< 0.500
1,2,4-Trichlorobenzene	< 0.500
1,1,1-Trichloroethane	< 0.500
1,1,2-Trichloroethane	< 0.500
Trichloroethene	< 0.500
Trichlorofluoromethane	< 0.500
1,2,3-Trichloropropane	< 0.500
1,2,4-Trimethylbenzene	< 0.500
1,3,5-Trimentylbenzene	< 0.500
Vinyl chloride	< 0.500
m & p-Xylenes	< 0.500
o-Xylenes	< 0.500

SURROGATES:

Compound	% Recovery	Acceptable Range
1,2-Dichloroethane-d4	80.6	76-114
Toluene-d8	104	88-110
4-Bromofluorobenzene	114	86-115

date completed: 5/12/92 | tech: JM | approved by: J E Nuffer

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval as a mutual protection.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no. 92T05967
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW1 - residential well - 5/7/92 @ 1245 - B.E.C. Drinking Water Lab No. 00277

analysis: Base Neutrals/Acid Extractables

procedure: EPA-600, Method 525 *

results:

BASE NEUTRALS	RESULTS (ug/L)
Acenaphthylene	< 5
Anthracene	< 5
Benzo (a) anthracene	< 5
Benzo (a) pyrene	< 5
Benzo(b)fluoroanthene	< 5
Benzo(k)fluoroanthene	< 5
Benzo (ghi) perylene	< 5
Butyl benzyl phthalate	< 5
Chrysene	< 5
Dibenzo(a,h) anthracene	< 5
Diethyl phthalate	< 5
Dimethyl phthalate	< 5
Di(2-ethylhexyl)adipate	6.58
Fluorene	< 5
Hexachlorobenzene	< 5
Hexachlorocyclopentadiene	< 5
Indeno(1,2,3-cd)pyrene	< 5
Phenanthrene	< 5
Pyrene	< 5

SURROGATE RECOVERY:

Compound	% Recovery	Acceptable Range
Nitrobenzene - d5	89.3	35 - 114
2-Fluorobiphenyl	81.7	43 - 116
p-Terphenyl-d14	88.4	33 - 141

* NOTE: Solid phase extraction was not used, liquid-liquid separatory funnel was used for extraction.

ACID EXTRACTABLES	RESULTS (ug/L)
Pentachlorophenol	< 25

SURROGATE RECOVERY:

Compound	% Recovery	Acceptable Range
2-Fluorophenol	71.5	21-100
Phenol-d6	52.6	10-94
2,4,6-Tribromophenol	102	10-123

date completed: 5/18/92 | tech: AMG | approved by: J E Ruffin

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval as a mutual protection.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no: 92T05968
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW2 - residential well - 5/7/92 @ 1700 - B.E.C. Drinking Water Lab No. 00278

results:

Analyte	Method	Result
Total Arsenic	EPA-600, 206.2	less than 2.5 ug/L
Total Barium	EPA-600, 200.7	less than 100 ug/L
Total Cadmium	EPA-600, 213.2	less than 0.3 ug/L
Total Chromium	EPA-600, 218.2	less than 7.5 ug/L
Total Copper	EPA-600, 220.1	less than 10 ug/L
Total Cyanide	EPA-600, 335.2	less than 0.01 mg/L
Total Iron	EPA-600, 200.7	less than 80 ug/L
Total Lead	EPA-600, 239.2	less than 1.5 ug/L
Total Manganese	EPA-600, 243.2	2.0 ug/L
Total Mercury	EPA-600, 245.1	less than 0.2 ug/L
Total Selenium	EPA-600, 270.2	less than 2.4 ug/L
Total Silver	EPA-600, 272.2	less than 0.9 ug/L
Total Zinc	EPA-600, 200.7	less than 15 ug/L

date completed: 5/22/92 | tech: DVV/KAD/MJK | approved by:

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval, as a mutual protection.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no. 92T05968
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW2 - residential well - 5/7/92 @ 1700 - B.E.C. Drinking Water Lab No. 00278

analysis: VOA

procedure: EPA-600, Method 524.2

results:

COMPOUND	RESULTS (ug/L)
Benzene	< 0.500
Bromodichloromethane	< 0.500
Bromobenzene	< 0.500
Bromochloromethane	< 0.500
Bromoform	< 0.500
Bromomethane	< 0.500
n-Butylbenzene	< 0.500
sec-Butylbenzene	< 0.500
tert-Butylbenzene	< 0.500
Carbon tetrachloride	< 0.500
Chlorobenzene	< 0.500
Chlorodibromomethane	< 0.500
Chloroethane	< 0.500
Chloroform	< 0.500
Chloromethane	< 0.500
2-Chlorotoluene	< 0.500
4-Chlorotoluene	< 0.500
1,2-Dibromo-3-Chloropropane	< 0.500
1,2-Dibromoethane (EDB)	< 0.500
Dibromomethane	< 0.500
1,2-Dichlorobenzene	< 0.500
1,3-Dichlorobenzene	< 0.500
1,4-Dichlorobenzene	< 0.500
Dichlorodifluoromethane	< 0.500
1,1-Dichloroethane	< 0.500
1,2-Dichloroethane	< 0.500
1,1-Dichloroethene	< 0.500
cis-1,2-Dichloroethene	< 0.500
1,2-Dichloropropane	< 0.500
1,3-Dichloropropane	< 0.500
2,2-Dichloropropane	< 0.500
1,1-Dichloropropene	< 0.500
cis-1,3-Dichloropropene	< 0.500
trans-1,3-Dichloropropene	< 0.500
Ethyl Benzene	< 0.500

date completed:	tech:	approved by:
5/12/92	JM	

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval, as a mutual protection.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no. 92T05968
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW2 - residential well - 5/7/92 @ 1700 - B.E.C. Drinking Water Lab No. 00278

analysis: VOA

results: continued

COMPOUND	RESULTS (ug/L)
Hexachlorobutadiene	< 0.500
Isopropylbenzene	< 0.500
4-Isopropyltoluene	< 0.500
Methylene Chloride	2.55 (B)
Naphthalene	< 0.500
n-Propylbenzene	< 0.500
Styrene	< 0.500
1,1,1,2-Tetrachloroethane	< 0.500
1,1,2,2-Tetrachloroethane	< 0.500
Tetrachloroethene	< 0.500
Toluene	< 0.500
1,2,3-Trichlorobenzene	< 0.500
1,2,4-Trichlorobenzene	< 0.500
1,1,1-Trichloroethane	< 0.500
1,1,2-Trichloroethane	< 0.500
Trichloroethene	< 0.500
Trichlorofluoromethane	< 0.500
1,2,3-Trichloropropane	< 0.500
1,2,4-Trimethylbenzene	< 0.500
1,3,5-Trimentylbenzene	< 0.500
Vinyl chloride	< 0.500
m & p-Xylenes	< 0.500
o-Xylenes	< 0.500

SURROGATES:

Compound	% Recovery	Acceptable Range
1,2-Dichloroethane-d4	91.7	76-114
Toluene-d8	98.8	88-110
4-Bromofluorobenzene	106	86-115

6/12/92

date completed:	tech:	approved by:
5/12/92	JM	

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval as a mutual protection.

Ecology & Environment
111 W. Jackson Blvd.
Chicago, IL 60614

ATTN: Mary Jane Ripp

biological & environmental control laboratories, inc.
615 front street
toledo, ohio 43605
(419) 693-5307

1632 enterprise parkway
twinsburg, ohio 44087
(216) 425-8200

lab no. 92T05968
p.o. no.

sample description: T05-9203-028 - Project # ZT1051 - grab - Station # RW2 - residential well - 5/7/92 @ 1700 - B.E.C. Drinking Water Lab No. 00278

analysis: Base Neutrals/Acid Extractables

procedure: EPA-600, Method 525 *

results:

BASE NEUTRALS	RESULTS (ug/L)
Acenaphthylene	< 5
Anthracene	< 5
Benzo (a) anthracene	< 5
Benzo (a) pyrene	< 5
Benzo(b)fluoroanthene	< 5
Benzo(k)fluoroanthene	< 5
Benzo (ghi) perylene	< 5
Butyl benzyl phthalate	< 5
Chrysene	< 5
Dibenzo(a,h) anthracene	< 5
Diethyl phthalate	< 5
Dimethyl phthalate	< 5
Di(2-ethylhexyl)adipate	6.18
Fluorene	< 5
Hexachlorobenzene	< 5
Hexachlorocyclopentadiene	< 5
Indeno(1,2,3-cd)pyrene	< 5
Phenanthrene	< 5
Pyrene	< 5

SURROGATE RECOVERY:

Compound	% Recovery	Acceptable Range
Nitrobenzene - d5	81.9	35 - 114
2-Fluorobiphenyl	77.3	43 - 116
p-Terphenyl-d14	82.1	33 - 141

* NOTE: Solid phase extraction was not used, liquid-liquid separatory funnel was used for extraction.

ACID EXTRACTABLES	RESULTS (ug/L)
Pentachlorophenol	< 25

SURROGATE RECOVERY:

Compound	% Recovery	Acceptable Range
2-Fluorophenol	66.6	21-100
Phenol-d6	52.3	10-94
2,4,6-Tribromophenol	98.6	10-123

date completed: 5/18/92
tech: AMG
approved by: J E Duffy

All reports are submitted as confidential communications. Authorization for duplication in whole or part is reserved pending our written approval as a mutual protection.