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DEPARTMENT OF THE NAVY
NAVY PUBLIC WORKS CENTER
AND
ENGINEERING FIELD ACTIVITY MIDWEST
BUILDING 1-A
201 DECATUR AVENUE
GREAT LAKES, IL 60088-2801

19 Mar 03

Mr. James Moore
Illinois Environmental Protection Agency
1021 North Grand Avenue
P.O. Box 19276
Springfield, Illinois 62794-9276

Dear Mr. Moore,

SUBJECT: Bldg 105 Remedial Action for Naval Training
Center, Great Lakes, Illinois
IEPA Site # 0971255004
USEPA # IL7170024577

As we discussed during the conference call on March 19, 2003, we are submitting this request for a coordinated closure at Bldg 105 as part of CERCLA/IRP actions covered under the DSMOA with your Agency. In support of this request, we are providing the following:

- ξ Building 105 is located at the Great Lakes Naval Training Center (GLNTC), Lake County, Illinois. The GLNTC has been in existence since 1911. The facility (EPA# IL7170024577) has operated with RCRA interim status authorization since November 19, 1980 for a 8.9' x 10' container storage area (SO1) that was located inside the building along the northeast wall (Chain Link Wire Cage on Figures 2-6 and 2-7). GLNTC covers approximately 1,600 acres.
- ξ Building 105 was constructed in 1939 and was utilized as a dry cleaning facility until 1993 or 1994 when it was converted to a vending machine supply and repair station. The slab-on-grade building measures approximately 150 feet by 70 feet while the container storage area is only 8.9' x 10'. The 10,500 square floor building sits on a lot approximately 250 feet by 115 feet. As of March 2003, operations have ceased and Building 105 was abandoned and is being prepared for demolition.
- ξ Soil and groundwater sampling taken at Building 105 indicates contamination of concern in the soil are

limited to tetrachloroethane (PCE) and cis-1,2-dichloroethene (DCE). PCE and DCE are also the contaminants of concern in groundwater. The source of the soil and groundwater contamination is uncertain. It is postulated that the soil and groundwater contamination that was identified at Building 105 was generated from the dry cleaners operations and not specifically from the container storage area (S01). These results have been attached to this letter and include Tables 1 and 2 with analytical results of the soil and groundwater samples, respectively. The extent of the PCE and DCE plumes based on the information to date is provided on Figures 2-6 and 2-7, respectively. Please note that the PCE contamination appears centered south and east of the former storage area and the DCE plume is actually south of the former storage area.

- ξ Decontamination of the container storage area (S01) occurred around 1994 with the removal of the remaining residues from the drum storage area, and the contaminated concrete resulting from earlier operations will be disposed of during demolition of the building.
- ξ The removal of contaminated soils under the facility will be accomplished upon completion of a limited remedial investigation under development. The work plans will be submitted to your office under a separate cover for review, comment, and approval prior to initiation of field activities. The future planned investigation will meet both the CERCLA and RCRA requirements.
- ξ Once the extent of vertical and horizontal contamination has been determined, a remedial action will be proposed and submitted to your office for review, comment, and approval in a coordinated closure as part of CERCLA activities at this site. Confirmatory sampling will be completed as part of any remedial actions. The future planned remediation of this unit will meet both the CERCLA and RCRA requirements for final closure of this unit.
- ξ A closure certification report to document the final closure activities will be submitted summarizing the analytical results.

If you should have any questions, please contact the undersigned at (847) 688-5999, ext 161.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel M. Fleming". The signature is stylized with large, overlapping loops and a long, sweeping tail that extends to the right.

Daniel M. Fleming
Environmental Department
By direction of
The Commanding Officer

Table 1
Soil Sample Analytical Results - Volatile Organics
Building 105
Great Lakes Naval Training Center, Great Lakes, Illinois

Sample ID/Depth Interval	1,1 Dichloro- ethene	Trans-1,2- Dichloro- ethene	Cis-1,2- Dichloro- ethene (DCE)	Tetrachloro- ethene (PCE)
	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)
TOL01-GP01 (8-12')	6	16	750	10,000
TOL01-GP02 (8-12')	ND (U)	ND (U)	44	1,100
TOL01-GP03 (8-12')	ND (U)	ND (U)	ND (U)	2,900
TOL01-GP04 (8-12')	ND (U)	ND (U)	820	550,000
TOL01-GP06 (8-12')	ND (U)	ND (U)	ND (U)	30,000
TOL01-GP09 (8-12')	ND (U)	ND (U)	21	5,200
TOL01-GP11 (4-8')	ND (U)	ND (U)	ND (U)	9,400
TOL01-GP14 (0-4')	ND (U)	ND (U)	ND (U)	ND (U)
GL93-105S-1 (0-6")	-	-	-	340
GL95-105S-1 (30-36")	-	-	-	90
GL93-105S-2 (0-6")	-	-	-	29,000
GL95-105S-2 (30-36")	-	-	-	2,000
GL93-105S-3 (0-6")	-	-	-	530
GL95-105S-3 (30-36")	-	-	-	290
GL93-105S-4 (0-6")	-	-	-	6,000
GL95-105S-4 (30-36")	-	-	-	3,000
GL95-105S-5 (0-6")	-	-	-	13
GL95-105S-5 (30-36")	-	-	-	24
GL95-105S-6 (0-6")	-	-	-	53
GL95-105S-6 (30-36")	-	-	-	250
GL95-105S-6 (066-72")	-	-	-	150
GL95-105S-7 (0-6")	-	-	-	830
GL95-105S-8 (0-6")	-	-	-	150,000
GL95-105S-8 (30-36")	-	-	-	9,600
GL95-105S-9 (0-6")	-	-	-	2,200
GL95-105S-9 (30-36")	-	-	-	2,000
GL95-105S-10 (0-6")	-	-	-	29,000
GL95-105S-10 (30-36")	-	-	-	1,000
GL95-105S-11 (30-36")	-	-	-	120
GL95-105S-12 (0-6")	-	-	-	370,000
GL95-105S-12 (30-36")	-	-	-	600,000
GL95-105S-12 (66-72")	-	-	-	26,000

Table 1, continued Soil Sample Analytical Results - Volatile Organics Building 105 Great Lakes Naval Training Center, Great Lakes, Illinois				
Sample ID/Depth Interval	1,1 Dichloro- ethene	Trans-1,2- Dichloro- ethene	Cis-1,2- Dichloro- ethene (DCE)	Tetrachloro- ethene (PCE)
	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)
GL95-105S-13 (0-6")	-	-	-	15,000
GL95-105S-13 (30-36")	-	-	-	1,500,000
GL95-105S-13 (66-72")	-	-	-	28,000
GL98-105S-11 (9.5-10")	-	-	820	-
GL98-105S-12 (5.5-6")	-	-	-	30
GL98-105S-13 (5.5-6")	-	-	-	160
GL98-105S-14 (7-8")	-	-	-	130
GL98-105S-15 (7.5-8")	-	-	-	10
IEPA TIER 2 CLEAN UP OBJECTIVES				
Residential Ingestion Pathway	700,000	1,600,000	780,000	12,000
Residential inhalation Pathway	1,500,000	3,100,000	1,200,000	11,000
Industrial Ingestion Pathway	18,000,000	41,000,000	20,000,000	110,000
Industrial Inhalation Pathway	15,000,000	3,100,000	1,200,000	20,000
Construction Worker Ingestion Pathway	1,800,000	41,000,000	20,000,000	2,400,000
Construction Worker Inhalation Pathway	1,500,000	3,100,000	1,200,000	28,000
Soil Component of GW Ingestion Class I	60	700	400	60
Soil Component of GW Ingestion Class II	300	3400	1100	300

UNITS are in ug/Kg = micrograms per kilogram (parts per billion)

ToiTest Samples (TOL Series)

ND = Not detected

U = Analyte was not detected at or above the reporting limit.

Samples obtained November 1 and 2, 2001

EarthTech Samples (GL Series)

Nomenclature for 1993 and 1995 samples denotes boring location followed by depth designation. For instance, samples ending in 1 are from 0-6" of depth; 3 are from 30-36" of depth; 4 are from 66-72" of depth. Samples from 1998 appear to be from distinct locations all with variable depth designations.

Designation of dashed line (-) denotes analyte not detected above clean up objective, as reported by EarthTech (DCE @ 70 ug/Kg; PCE @ 5 ug/Kg)

The results shown above do not include the numerous sample locations where compounds were not detected.

Table 2
 Ground Water Sample Analytical Results - Volatile Organics
 Building 105
 Great Lakes Naval Training Center, Great Lakes, Illinois

Sample ID	1,1 Dichloro- ethene	Trans-1,2- Dichloro- ethene	Cis-1,2- Dichloro- ethene (DCE)	Tetrachloro- ethene (PCE)
	(ug/L)	(ug/L)	(ug/L)	(ug/L)
TOL01-GP01	ND (U)	35 (J)	3,200	6,900
TOL01-GP02	ND (U)	1	30	150
TOL01-GP05	0.6 (J)	11	130	11
TOL01-GP07	ND (U)	ND (U)	0.7 (J)	7
TOL01-GP08	ND (U)	ND (U)	4	21
TOL01-GP13	ND (U)	ND (U)	ND (U)	2
GL98-105G-13	NA	NA	1,300	38
Class I Groundwater Objectives	7	100	70	5
Class II Groundwater Objectives	35	500	200	250

Notes:

ug/L = micrograms per liter (parts per billion)

NA = Not analyzed

ND = Not detected

J = Result is less than the reporting limit, but greater than or equal to the method detection limit.

U = Analyte was not detected at or above the reporting limit.

TolTest samples obtained November 1 and 2, 2001

Groundwater Objectives from Title 35, Part 742, Appendix B, Table E: Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route.



