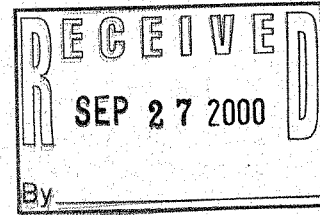


ENVIRONMENTAL • CIVIL/GEOTECH • COMPLIANCE

W66 N215 Commerce Court
Cedarburg, Wisconsin 53012
(262) 375-4750
(800) 645-7365
Fax (262) 375-9680



September 13, 2000

Mr. John Feeney
Wisconsin Department of Natural Resources
4041 North Richards Street
Post Office Box 12436
Milwaukee, Wisconsin 53212-0436

Reference: Project Status Update
Tecumseh Products Company-Grafton Facility
900 North Street
Grafton, Wisconsin 53024
FID #: 246009170
BRRTS #: 02-46-000751

KEY ENGINEERING GROUP, LTD.
File No. 1007010

Dear Mr. Feeney:

The purpose of this letter is to provide the Wisconsin Department of Natural Resources (WDNR) with an update on the status of the remediation of soil contaminated with trichlorethene (TCE) and 1,1,1-trichloroethane (TCA) at the above referenced site. Three remediation areas were proposed based on target clean up levels of 1 milligram per kilogram (mg/kg) of TCE and 10 mg/kg of TCA. These three areas represent approximately 90 percent of the total TCE/TCA mass at the site, as documented in *Contaminant Mass Calculations* (Key Engineering Group, Ltd. (KEY), July 12, 2000). This project update has been prepared by KEY on behalf of Tecumseh Products Company.

Soil excavation began in Area 1 on August 23, 2000 and was completed on August 28, 2000. Area 1 was located in the vicinity of soil boring SB-18 TCA and was identified in the *Remedial Action Options and Design Report - East Parking Lot Area* (RMT, Inc., July 16, 1999). Area 1 was originally estimated to be 35 feet wide by 45 feet long and 12 feet deep with an approximate volume of 700 cubic yards; however, the actual excavation area included two separate excavations on either side of a buried propane gas line located east of boring SB-18 TCA. Soil was excavated to approximately 12 feet below ground surface (bgs) in the east excavation and approximately 10 feet bgs in the west excavation. A total of approximately 1,000 cubic yards of soil was excavated and placed in the treatment tanks. Laboratory analytical results from the sidewalls of the excavation indicate that the target cleanup objectives were substantially met; however, some residual soil contamination above the WDNR approved target levels that was not accessible remains beneath the propane gas line, and the propane filling shed and associated concrete pad. Due to heavy truck traffic and the presence of buried utilities in the vicinity of the excavations, the excavations were backfilled with imported clean fill material on August 29 and 30, 2000.

The excavations and soil sample locations are shown on the attached Figure 1. Soil samples were preserved in the field in methanol and submitted to APL, Inc. (APL) for TCE and TCA analyses using the electron capture

Mr. John Feeney
September 13, 2000
Page 2

detection (ECD) method. Samples were also analyzed by APL for volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 8260 to confirm the concentration of residual soil contamination. Results of both analyses are summarized on the attached Figure 1 and on Table 1.

Soil samples were collected from the treatment tanks and were analyzed for TCE and TCA using the ECD method to monitor the progress of the soil treatment process. Laboratory analytical results for the treatment tank samples are summarized in Table 2 and indicate that residual TCE and TCA concentrations are decreasing during treatment. Confirmation soil samples from the treatment tanks were analyzed for VOCs using USEPA Method 8260 and indicate that TCE and TCA concentrations are below the target clean up levels. The treatment tank confirmation sampling results are summarized in Table 3.


Proposed Future Activities


The next area to be excavated is Area 2 in the vicinity of the former TCA filling area. Excavation in this area is anticipated to begin on Thursday September 14, 2000. Treated soil from excavation Area 1 will be used as backfill for Area 2.

Please call us at (262) 375-4750 if you have any questions regarding the progress of this project.

Sincerely,

KEY ENGINEERING GROUP, LTD.


Larry J. Wehrheim, CHMM, P.G.
Senior Project Manager


Gregory L. Johnson, CHMM, P.H., P.G., P.E.
Senior Engineer/Scientist

LJW/kar

Enclosures: Table 1 Summary of Excavation Soil Sample Analytical Results
 Table 2 Summary of Treatment Tank Soil Sample Analytical Results
 Table 3 Summary of Treatment Tank Confirmation Soil Sample Analytical Results
 Figure 1 Summary of Soil Sample Analytical Results

cc: Mr. Kerry DeKeyser, Tecumseh Products Company
 Mr. Chuck Scheffer, North Shore Environmental Construction, Inc.
 Mr. Bernd Rehm, RMT, Inc.

TABLE 1

SUMMARY OF EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS

Tecumseh Products - Grafton Facility
 900 North Street
 Grafton, Wisconsin

SAMPLE IDENTIFICATION	ECD SCREENING		GC/MS RESULTS	
	TCA	TCE	TCA	TCE
	mg/kg	mg/kg	mg/kg	mg/kg
S-1-1	0.033	6.700		
S-1-2	0.025	2.450		
S-1-3	0.327	26.400		
S-1-4	0.076	1.970		
S-1-5	0.030	0.023		
S-1-6	0.059	0.397		
S-1-7	0.120	0.132	0.143	0.196
C-1-1			<0.025	<0.025
S-1-8	0.022	1.170		
S-1-9	0.046	4.180		
S-1-10	0.074	0.638		
S-1-11	0.029	0.857		
S-1-12	0.057	1.390		
S-1-13	0.081	0.819	0.090	1.090
S-1-14	0.138	0.813	0.146	1.050
S-1-15	0.011	1.830		
S-1-16	0.089	1.760		
S-1-17	0.018	4.270		
S-1-18	0.149	19.500		
S-1-19	0.079	9.860		
S-1-20	0.383	9.450		
S-1-21	0.158	22.500		
S-1-22	0.103	12.100		
S-1-23	0.015	0.173	<0.025	0.225
S-1-25	0.102	15.500		
S-1-26	0.067	5.650		
S-1-27	0.072	1.860	0.066	1.670
S-1-29	0.062	1.260	0.060	1.290

Notes:

ECD - electron capture detection
 GC - gas chromatography
 mg/kg - milligrams per kilogram
 MS - mass spectrophotometry
 TCA - 1,1,1-trichloroethane
 TCE - trichloroethene

TABLE 2

SUMMARY OF TREATMENT TANK SOIL ANALYTICAL RESULTS

Tecumseh Products - Grafton Facility
 900 North Street
 Grafton, Wisconsin

	SOUTH TANK SOIL SCREENING RESULTS							
	TCE (mg/kg)				TCA (mg/kg)			
Date	8/25/00	8/30/00	9/1/00	9/6/00	8/25/00	8/30/00	9/1/00	9/6/00
ST-1	2.950	1.290	0.353	0.420	0.098	0.050	0.020	0.022
ST-2	0.596	1.140	0.701	0.472	0.038	0.046	0.041	0.030
ST-3	2.610	1.220	0.452	0.294	0.065	0.089	0.053	0.022
ST-4	0.684	0.536	0.390	0.211	0.074	0.037	0.044	0.021
ST-5	0.784	1.780	0.807	0.370	0.113	0.097	0.033	0.024
ST-6	1.160	0.641	0.231	0.271	0.131	0.056	0.017	0.020
ST-7	0.272	0.762	0.788	1.250	0.020	0.037	0.044	0.049
ST-8	1.510	1.160	1.090	0.490	0.062	0.043	0.043	0.041
Average	1.321	1.066	0.602	0.472	0.07513	0.057	0.037	0.029

	NORTH TANK SOIL SCREENING RESULTS					
	TCE (mg/kg)			TCA (mg/kg)		
Date	8/30/00	9/1/00	9/6/00	8/30/00	9/1/00	9/6/00
NT-1	4.170	2.510	0.999	0.056	0.032	0.016
NT-2	2.100	0.798	0.362	0.014	0.016	0.014
NT-3	1.260	0.548	0.409	0.028	0.043	0.016
NT-4	0.419	0.559	0.463	0.065	0.026	0.018
NT-5	0.823	0.972	0.562	0.022	0.019	0.014
NT-6	3.940	1.320	0.468	0.016	0.029	0.018
NT-7	5.760	0.474	0.509	0.068	0.029	0.022
NT-8	0.533	2.060	0.635	0.045	0.037	0.016
Average	2.376	1.15513	0.55088	0.039	0.02888	0.01675

Notes:

mg/kg - milligrams per kilogram

Samples were analyzed using the electron capture detector method.

TCA - 1,1,1-trichloroethane

TCE - trichloroethene

TABLE 3

SUMMARY OF TREATMENT TANK CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS

Tecumseh Products - Grafton Facility
 900 North Street
 Grafton, Wisconsin

1 10

	SOUTH TANK	
	TCE (mg/kg)	TCA (mg/kg)
Date	9/7/00	9/7/00
ST-1	0.378	<0.017
ST-3	0.198	<0.017
ST-5	0.246	0.027
ST-7	0.357	<0.017

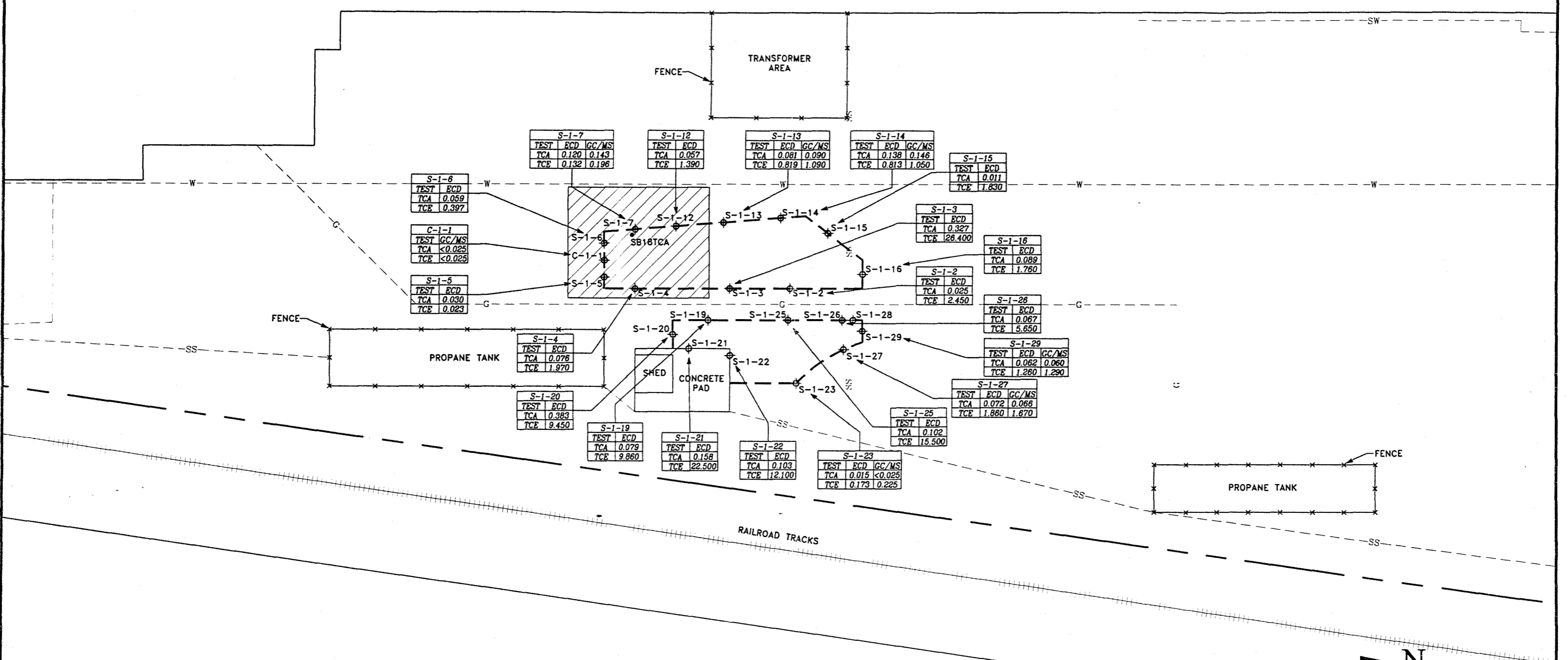
	NORTH TANK			
	TCE (mg/kg)		TCA (mg/kg)	
Date	9/7/00	9/11/00	9/7/00	9/7/00
NT-1	1.260	0.528	0.035	<0.017
NT-3	0.802	---	0.039	---
NT-5	0.449	---	<0.017	---
NT-7	0.775	---	<0.017	---

Notes:

mg/kg - milligrams per kilogram
 TCA - 1,1,1-trichloroethane
 TCE - trichloroethene

ecd resu AS

TECUMSEH PLANT



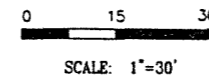
NOTES

TCA: 1,1,1-TRICHLOROETHANE, mg/kg
 TCE: TRICHLOROETHENE, mg/kg
 mg/kg: MILLIGRAMS PER KILOGRAM
 <: LESS THAN

ECD 0.022 1.170	LABORATORY RESULTS FOR TCE/TCA IN SOIL IN MILLIGRAMS PER KILOGRAM USING ELECTRON CAPTURE DETECTOR METHOD
GC/MS <0.025 <0.025	LABORATORY RESULTS FOR TCE/TCA IN SOIL IN MILLIGRAMS PER KILOGRAM USING EPA METHOD 8260

LEGEND

- ⊕ SOIL SAMPLE LOCATION
- SOIL BORING PERFORMED BY RMT, INC.
- ▨ PROPOSED EXCAVATION AREA 1
- G- PROPANE GAS LINE
- SS- SEWER LINE
- W- WATER LINE



DRN. BY: J.J.J.	DATE: 09/08/00
DSN. BY: L.J.W.	FILE NO.: 1007010
CHK. BY: L.J.W.	DWG. NO.: 10070102
REV. BY: G.L.J.	SHEET NO.: 1



© 2000 Key Engineering Group Ltd.

FIGURE 1
 SUMMARY OF SOIL
 SAMPLE ANALYTICAL RESULTS

REMEDIAL ACTION
 EAST PARKING LOT AREA
 TECUMSEH PRODUCTS COMPANY
 900 NORTH STREET
 GRAFTON, WISCONSIN