

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, District Director

Southeast District Annex
4041 N. Richards Street, Box 12436
Milwaukee, WI 53212-0436
TELEPHONE 414-229-0800
FAX 414-229-0810

January 3, 1997

IN REPLY REFER TO Milwaukee Co. ERP FID# 241437790

Mr. Richard Meinburg
Key Products, Inc.
8634 W Lynx Ave
Milwaukee, WI 53225

Subject: Environmental Contamination, Key Products Property, 8634 W Lynx, Milwaukee

Dear Mr. Meinburg:

I have reviewed the November 1996 Accidental Release Assessment Documentation Report prepared by Materials Management & Training Ltd. for the environmental contamination at the Key Products property, 8634 W Lynx, Milwaukee, WI. The report documents a paint and solvent spill and subsequent cleanup at the Key Products property, and requests that the DNR require no further action.

The report documents that 3,000 ppb PCE was detected in overexcavation confirmation sample REM SS1, which was collected at 12 ft bgs. The report contains a risk based analysis stating that the PCE does not pose a direct contact threat. DNR file information for the Hampton Plumbing site, 8617 W Kaul, Milwaukee, FID # 241731600 indicates that groundwater is likely to occur at 10 to 16 ft bgs (groundwater may not have been encountered during the Key Products excavation because of clayey soil). Based on this information and Equation 9 from the report, there is likely groundwater contamination at the Key Products property that exceeds the NR 140 enforcement standard. Contaminated groundwater may account for the increased PCE concentrations between SS4 and overexcavation confirmation sample REM SS4.

Additional investigation is needed at the Key Products site to determine groundwater quality. You should conduct the groundwater investigation and act accordingly as soon as possible. The conditions present at this site may pose a serious threat to human health and/or the environment. The site specific information known to the WDNR at this time, however, is not adequate to evaluate the relative potential threat from this site.

WDNR SE District Review Prioritization Policy

Due to the WDNR workload, it is necessary to rank all contamination cases for review priority. The highest priority sites have assigned WDNR project managers who are actively reviewing and approving investigation and remediation plans. Lower priority cases do not always have assigned project managers, however, responsible parties are required to proceed with investigation and clean-up efforts. Due to the lack of information about this site, it's relative priority cannot be determined. Therefore, the priority ranking of this site is considered unknown. Until a priority has been assigned to this site, you should proceed with the required response work, submitting all plans and reports, along with quarterly status reports, to this office. The WDNR will notify you if active oversight for you site will be given.

Quality Natural Resources Management
Through Excellent Customer Service

355-5399



Your responsibilities include investigating the extent of the contamination and then selecting and implementing the most appropriate remedial action. Enclosed is information to help you understand what you need to do to ensure your compliance with the spills law.

The purpose of this letter is threefold: 1) to describe your legal responsibilities, 2) to explain what you need to do to investigate and clean up the contamination, and 3) to provide you with information about cleanups, environmental consultants, possible financial assistance, and working cooperatively with the Department of Natural Resources.

Legal Responsibilities:

Your legal responsibilities are defined both in statute and in administrative codes. The hazardous substances spill law, Section 144.76 (3) Wisconsin Statutes, states:

- * **RESPONSIBILITY.** A person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands, or waters of the state.

Wisconsin Administrative Codes chapters NR 700 through NR 728 establish requirements for emergency and interim actions, public information, site investigations, design and operation of remedial action systems, and case closure. Chapter NR 708 includes provisions for immediate actions in response to limited contamination. Wisconsin Administrative Code chapter NR 140 establishes groundwater standards for contaminants that reach groundwater.

Steps to Take:

The longer contamination is left in the environment the farther it can spread and the more it may cost to clean up. Quick action may lessen damage to your property and to neighboring properties and reduce your costs in investigating and cleaning up the contamination. To ensure that your cleanup complies with Wisconsin's laws and administrative codes, you should hire a professional environmental consultant who understands what needs to be done. These are the first four steps to take:

1. By February 28, 1996⁷ please submit written verification (such as a letter from the consultant) that you have hired an environmental consultant. You will need to work quickly to meet this timeline.
2. By March 31, 1996⁷ your consultant must submit a workplan and a schedule for conducting the investigation. The consultant must follow the Department's administrative codes and our technical guidance documents. Please include with your workplan a copy of any previous information that has been completed (such as an underground tank removal report or a preliminary soil excavation report).
3. Please keep us informed of what is being done at your site. You or your consultant must provide us with a brief report at least every 90 days, starting after your workplan is submitted. These quarterly reports should summarize the work completed since the last report. Quarterly reports need only include one or two pages of text, plus any relevant maps and tables. However, please note that should conditions at your site warrant, you may receive a letter requiring more frequent contacts with the Department.

4. When the site investigation is complete, your consultant must submit a full report on the extent and degree of soil and groundwater contamination and a proposal for cleaning up the contamination.

Due to the number of contaminated sites and our staffing levels, we will be unable to respond to each report. To maintain your compliance with the spills law and chs. NR 700 through NR 728, do not delay the investigation and cleanup of your site by waiting for WDNR responses. We have provided detailed technical guidance to environmental consultants. Your consultant is expected to be familiar with our technical procedures and administrative codes and should be able to answer your questions on meeting Wisconsin's cleanup requirements.

Your correspondence and reports regarding this site should be sent to the Department at the following address:

Mr. Jim Schmidt
c/o ERR/ERP
Wisconsin Department of Natural Resources
P.O. Box 12436
Milwaukee, Wisconsin 53212

Unless otherwise requested, please send only one copy of all plans and reports. Correspondence should be identified with the assigned WDNR facility identification number (FID#, ERR/ERP) which is listed at the top of this letter.

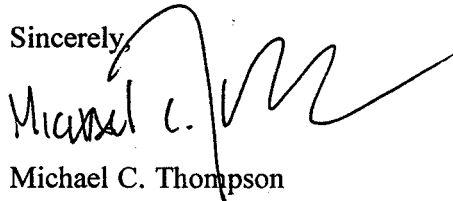
Information for Site Owners:

Enclosed is a list of environmental consultants and some important tips on selecting a consultant. If you are eligible for reimbursement of costs under Wisconsin's PECFA program (see last paragraph) you will need to compare at least three consultants' proposals before hiring a consultant. Consultants and laboratories working in the PECFA program are required to carry errors and omissions insurance to help protect you against unsuitable work. Also enclosed are materials on controlling costs, understanding the cleanup process, and choosing a site cleanup method. This information has been prepared to help you understand your responsibilities and what your environmental consultant needs to do. Please read this information carefully.

If you are interested in obtaining the protection of limited liability under s. 144.765, Stats., please contact Mark Giesfeldt at (608) 267-7562 or Darsi Foss at (608) 267-6713, in the Department of Natural Resources' Madison office for more information. The liability exemption under s. 144.765, Stats., is available to persons who meet the definition of "purchaser" in s. 144.765(1)(c) and receive Department approval for the response actions taken at the property undergoing cleanup. The Department will determine eligibility for this program on a case-by-case basis, prior to the "purchaser" developing a scope of work for conducting a ch. NR 716 site investigation at the property.

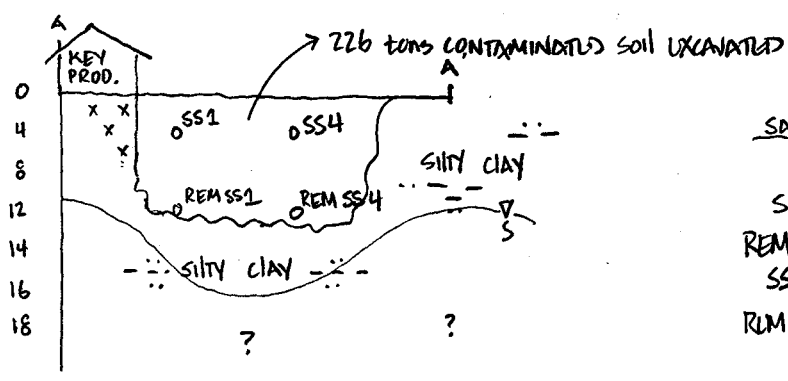
Please contact me if you have questions or comments; your call or letter will receive a prompt response.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael C. Thompson". The signature is fluid and cursive, with a large, sweeping flourish at the end.

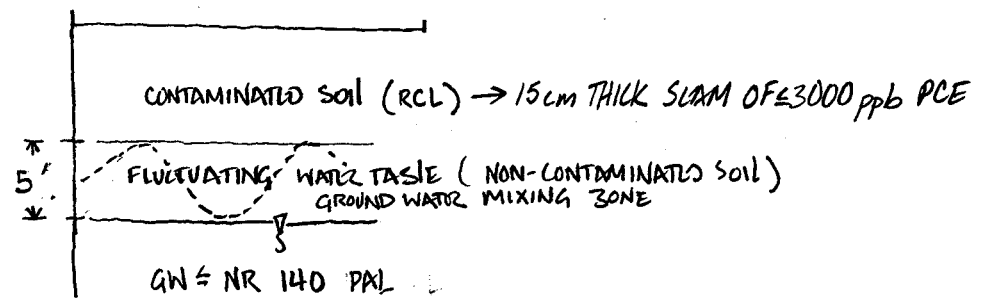
Michael C. Thompson
Department of Natural Resources-Southeast Region Spill Coordinator
(414) 229-0838

cc: Mr. Don Gagas, Materials Management & Training Ltd, 3271 N 84th St.,
Milwaukee, WI 53222



SAMPLE	CONCENTRATION PCE (PPb)
SS 1	↑↑ PNOCS
REMSS 1	3000
SS 4	DIRECT PNOCS
REM SS4	1500

EGU 9: ALGORITHM FOR GW MIXING ZONE DAF FOR NR 720 GENERIC RCL'S FROM 08 NOV 96 KLY PRODUCTS REPORT →
ASSUMPTIONS:



$$1) \text{ RESIDUAL CONTAMINANT LWL (mg/kg)} = \text{NR. 140 PAL} \times 10^{-3} \text{ mg/mg} \cdot K_{oc} \cdot f_{oc} \cdot \text{DAF}$$

$$2) \text{ NR 140 PAL} \times 10^{-3} \text{ mg/mg} = \frac{\text{RCL}}{K_{oc} \cdot F_{oc} \cdot \text{DAF}}$$

$$3) C_{GW} \times 10^{-3} \text{ mg/mg} = \frac{C_{\text{soil}}}{K_{oc} \cdot F_{oc} \cdot \text{DAF}} \approx 83 \text{ ppb PCE}$$

$$* \text{ DAF} = \frac{d}{\theta t} (K_{oc} f_{oc} \rho + n) = \left(\frac{152.4 \text{ cm}}{-1 \text{ cm}^3/\text{cm}^3 \cdot 15 \text{ cm}} \right) (3.64 \times 10^2 \text{ ml/g} \cdot .001 \text{ g/g} \cdot 1.35 \text{ g/cm}^3 + .49 \text{ cm}^3/\text{cm}^3)$$

$$\text{DAF} = (101.6)(.9814) = 99.71$$

CONCLUSION: BASED ON EGU 9 FROM THE 08NOV96 KLY PRODUCTS REPORT; A 15 cm THICK SLAM OF 3000 ppb PCE CONTAMINATED SOIL WOULD RESULT IN A GW CONCENTRATION OF ≈ 83 ppb PCE. ASSUMING A 5' GW MIXING ZONE, $PCE_{K_{oc}} = 3.64 \times 10^2 \text{ L/kg}$, $f_{oc} = .001 \text{ g/g}$, $\theta = .1 \text{ cm}^3/\text{cm}^3$, $\rho = 1.35 \text{ g/cm}^3$, AND $n = .49 \text{ cm}^3/\text{cm}^3$.

A GROUND WATER CONCENTRATION OF 83 ppb PCE EXCEEDS THE NR 140 PAL (.5 ppb PCE) AND THE NR 140 ES (5 ppb PCE)

13-782
42-381
42-382
42-392
42-399
500 SHEETS, FILLER, 6 SQUARE
50 SHEETS, EYEGLASS, 5 SQUARE
100 SHEETS, EYEGLASS, 5 SQUARE
200 SHEETS, EYEGLASS, 5 SQUARE
100 RECYCLED WHITE, 5 SQUARE
200 RECYCLED WHITE, 5 SQUARE
Made in U.S.A.



$$DAF = \frac{d}{\theta t} (k_{oc} f_{oc} \rho + n) = (101.6)(.9814) = 99.71$$

$$a = \frac{152.4 \text{ cm}}{.1 \text{ cm}^3 \cdot \frac{15 \text{ cm}}{1 \text{ cm}^3}} = \frac{152.4 \text{ cm}}{1.5 \text{ cm}} = 101.6$$

$$b = \left(\frac{3.64 \times 10^2 \text{ L}}{\text{kg}} \cdot \frac{.001 \text{ g}}{\text{g}} \cdot \frac{1.35 \text{ g}}{\text{cm}^3} \right) + \frac{.49 \text{ cm}^3}{\text{cm}^3}$$

$$= \left(\frac{364 \text{ L}}{\text{kg}} \cdot \frac{1 \times 10^{-6} \text{ kg}}{\text{g}} \cdot \frac{1.35 \text{ g}}{.001 \text{ L}} \right) + \frac{.49 \text{ cm}^3}{\text{cm}^3}$$

$$b = (.4914 + .49) = .9814$$

$$C_{GW} \cdot 10^{-3} \frac{\text{mg}}{\text{mg}} = \frac{C_{soil}}{k_{oc} \cdot f_{oc} \cdot DAF} \cong 83 \text{ ppb PCE}$$

1 kg = 1000 g

$$X = \frac{\left[\frac{(3000 \text{ mg})}{\text{kg}} \text{ PCE @ REM SS1} \right]}{\left(\frac{364 \text{ L}}{\text{kg}} \right) \cdot \left(\frac{1 \times 10^{-6} \text{ kg}}{\text{g}} \right) \cdot \left(\frac{99.71}{1} \right)} = \left[\frac{3000 \text{ mg}}{1000 \text{ g}} \cdot \frac{1 \text{ g}}{.0363 \text{ L}} \right] \cong 82.6 \text{ mg/L}$$

$$\frac{.0363 \text{ L}}{\text{g}}$$

$$\left(C_{GW} \cdot 10^{-3} \frac{\text{mg}}{\text{mg}} \right) = X$$

$$C_{GW} = \frac{83 \text{ mg}}{\text{L}} \cdot \frac{1 \text{ mg}}{10^{-3} \text{ mg}} \cdot \frac{1 \text{ mg}}{.001 \text{ g}} \cdot \frac{1 \times 10^{-6} \text{ g}}{1 \text{ mg}} = 83 \text{ mg/L}$$

13-782 500 SHEETS, FILLER, 5 SQUARE
42-381 50 SHEETS, EYEGLASS, 5 SQUARE
42-382 100 SHEETS, EYEGLASS, 5 SQUARE
42-383 200 SHEETS, EYEGLASS, 5 SQUARE
42-392 100 RECYCLED, WHITE, 5 SQUARE
42-399 200 RECYCLED, WHITE, 5 SQUARE
Made in U.S.A.

