NEAL ▪ GERBER ▪ EISENBERG

Lisa S. Zebovitz
Attorney at Law

Tel 312.269.8033
Fax 312.429.3502
lzebovitz@ngelaw.com

July 31, 2007

VIA E-MAIL AND FEDEX

Information Quality Guidelines Staff
United States Environmental Protection Agency
Mail Code 281 1R
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Request for Correction

Dear Sir or Madam:

Pursuant to "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by the Environmental Protection Agency, the Muskego Site Groundwater Remediation Group ("MSGRG")[1], hereby submits this Request for Correction of the Vinyl Chloride Footprint Estimate Maps disseminated to a reporter for the Shepard Express and to the local public. The MSGRG appreciates your consideration of this request and looks forward to your response within the 90-day delay contemplated by EPA's guidelines.

Thank you for your attention to this matter.

Very truly yours,

Lisa S. Zebovitz

LSZ:jmo

cc: MSGRG

[1] The MSGRG is comprised of the following entities: A.W. Holding Corp., Blackhawk Leather, Ltd., Cudahy Tanning Co., Inc., General Electric Company, Mittal Steel USA, Inc., Litton Systems, Inc., Newell Company, PPG Industries, Inc., Accuride Corporation, and Waste Management of Wisconsin, Inc.

ENVIRONMENTAL PROTECTION AGENCY
INFORMATION QUALITY ACT GUIDELINES

REQUEST FOR CORRECTON
OF THE
VINYL CHLORIDE FOOT PRINT ESTIMATE

MUSKEGO, WISCONSIN

Pursuant to Section 515(a) of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554), Congress directed the Office of Management and Budget (OMB) to issue government-wide guidelines to provide policy and procedural guidance to federal agencies to ensure the quality, objectivity, utility, and integrity of information they disseminate. In response, OMB developed Quality Guidelines (67 Fed. Reg. at 8452). Section 515(a), also referred to as the "Data Quality Act" or "Information Quality Act," requires each Federal agency to issue its own guidelines to establish administrative mechanisms allowing the public to seek and obtain correction of information disseminated by agencies that do not comply with the guidelines. Accordingly, in October 2002 EPA developed "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency," ("EPA's Guidelines").

Section 1 of EPA's Guidelines provides that all "information" disseminated to the public by EPA should maintain a "basic standard of quality, including objectivity, utility, and integrity." "Information," as defined by EPA's Guidelines in Section 5.3, "includes any communication or representation of knowledge such as facts or data, in any medium or form." Preliminary information EPA disseminates to the public also is considered "information" for purposes of the Guidelines. Such information is "disseminated" when EPA initiates or sponsors the distribution of information to the public." As provided in Section 5.1, "quality" encompasses objectivity,

integrity and utility. "Objectivity" focuses on whether the disseminated information is being presented in an accurate, clear, complete, and unbiased manner, and as a matter of substance, is accurate, reliable and unbiased" (emphasis added). "Utility" refers to the usefulness of the information to the intended users.

On July 24, 2007, EPA disseminated its Vinyl Chloride Footprint Estimate Maps[1] ("EPA's Maps" or "Maps") to a reporter for the Shepard Express, a local newspaper. According to EPA, it also disseminated the Maps to the local public. These Maps reflect EPA's interpretation of the distribution of vinyl chloride within the study area in the vicinity of the Muskego Sanitary Landfill (MSL). One map is based on the maximum vinyl chloride concentration ever measured at selected wells and the other on the most recently measured concentration at selected wells. In practice, these types of maps can be used to illustrate where groundwater contaminants originated, the migration pathways the contaminants have taken, and to project where the contaminants may migrate in the future. However, in preparing these Maps, EPA has ignored basic tenets of hydrogeology that are used in developing contaminant isoconcentation contour maps. By ignoring these basic principles, EPA's Maps are not accurate, reliable or unbiased. Consequently, they do not meet the "objectivity" standard or EPA's "quality" criteria as presented in EPA's Guidelines. They also have no "utility" because an inaccurate, unreliable and biased portrayal of hydrogeological conditions is not useful to the intended users in this case, the public.

Furthermore, EPA's Guidelines recognize a higher standard of quality for "influential scientific, financial, or statistical information" that is disseminated to the general public. The

[1] U.S. EPA. July 23, 2007. Vinyl Chloride, Plume Footprint Estimate Based on Most Recent Measured Concentration at Each Well.

higher standard applies in this case because the information disseminated is influential and scientific. As provided in Section 6.2 "influential" means that EPA "can reasonably determine that dissemination of the information will have or does have a clear and substantial impact (i.e., potential change or effect) on important public policies or private sector decisions." The vinyl chloride footprint estimate identified in the Maps involve issues related to on-going litigation in Dyer et al v. Waste Management of Wisconsin, Inc. et al. (Case No. 01-CV-1866). The presence of vinyl chloride in the groundwater in the City of Muskego is the subject of this lawsuit.

The EPA Remedial Project Manger is very familiar with the on-going litigation and has frequent contacts with at least one of the plaintiffs. Consequently, these Maps fall well within the definition of "influential." Section 6.3 of EPA's Guidelines, provides that influential information be evaluated as follows:

> It is important that analytic results for influential information have a higher degree of transparency regarding (1) the source of the data used, (2) the various assumptions employed, (3) the analytic methods applied, and (4) the statistical procedures employed. . . . .and that all factors be presented and discussed.

Again, EPA's Maps do not meet the standard of quality articulated in EPA's Guidance.

EXPLANATION OF INFORMATION THAT DOES NOT COMPLY WITH OMB/EPA INFORMATION QUALITY GUIDELINES

The Maps disseminated by EPA are not consistent with the Guidelines' standard of "Quality." They are not objective because they are not accurate or reliable and, therefore, have no utility as defined by the guidelines. Further, the Maps do not meet the higher standard required for "influential" information.

As discussed below, EPA's Maps are not accurate or reliable because the 1) combine water quality from multiple geologic units violating the contouring method's assumption for

continuity between data points; 2) bias the water quality data; and 3) ignore groundwater flow directions, resulting in the distribution of vinyl chloride being inconsistent with groundwater flow directions.

1. Combining Multiple Geologic Units

The Maps combine water quality data from multiple geologic layers that are not connected in most of the area being contoured. Water quality data points which are in the same migration pathway are generally related and typically can be contoured. However, water quality data points in separate migration pathways which are separated by an effective confining layer are unrelated, so estimating the water quality between these points is not accurate and the results are unreliable. In mathematical terms, contouring water quality data as presented in the Maps, assumes that the water quality varies continuously between the data points (e.g., contouring a slope between two elevations on the ground surface assumes there are no vertical cliffs between the two points). An effective confining layer between two data points results in a discontinuity (i.e., a virtual vertical cliff) between the two water quality data points, so they are unrelated. The resulting contour map is unreliable because the mathematical function is not continuous, violating a basic assumption of contouring methods typically used for contouring water quality data.

EPA's Maps combine data from sand layers that are separated by very low permeability silty clay. One example is the combination of data east of the site in the Upper Sand Unit (i.e., PWM, Pet Supplies, PW-Thiele, and MW03) with data to the southeast of the site (MW07, Dyer Barn, MW05, etc.) that reflect water quality in the Lower Sand Unit. The cross sections in the December 2006 Expanded Groundwater Monitoring (EGM) Report clearly indicate the unit sampled by each of these wells. Contouring water quality between wells in the Upper Sand Unit

and the Lower Sand Unit on one map assumes that the water quality in these two units are continuous between the two geologic units (i.e., the 110 ft of very low permeability silty clay is not an effective confining layer). In contrast, the EGM Report demonstrates that the silty clay is a very effective, low permeability confining layer, effectively separating the water quality between these units.

Another example of contouring adjacent data between multiple geologic units is between adjacent wells P64C (Lower Sand Unit), PW9 (Upper Sand Unit), and PW22 (Lower Sand Unit). The water quality can not be assumed to be continuous between these two geologic units. Therefore, contouring the water quality data between these wells is inappropriate, violates assumptions in the contouring methods, and results in inaccurate and unreliable maps.

2. Bias of Water Quality Data

The manner in which water quality data are used bias the results of EPA's Maps. Besides combining Upper and Lower Sand Units, EPA's Maps use vinyl chloride results reported as non-detect as non-zero values[2]. While this may be appropriate for a typical parameter where the detection limit is substantially below a standard, it is inappropriate for vinyl chloride where the standards are significantly below historical, or in some cases, current detection limits.[3] A prime example of an inappropriate data use is PW-D, located south of Pet Supplies. This data point was reported as non-detect (<10 µg/L) in 1984. However, EPA's use of this non-detect value extends the area of the vinyl chloride footprint beyond this data point, approximately 1,000 ft

[2] Some typical approaches for mapping non-detected compounds is to use the data point as zero, 50% of the detection limit, or the detection limit, depending on the compound and the use of the map.

[3] Standards for Vinyl Chloride are NR-140 Preventive Action Limit (PAL) = 0.02 µg/L and the Enforcement Standard (ES) =0.2. The U.S. EPA's Drinking Water Maximum Contaminant Limit (MCL) is 2 µg/L.

east of Hillendale Drive and significantly south of Janesville Road. This practice clearly biases EPA's Maps, indicating the presence of vinyl chloride in an area where the data point indicated a non-detectable concentration. Other data points with non-detectable concentrations that extend the vinyl chloride footprint are located on the "Most Recent" EPA's Map along the west side of the landfill. All the wells along this side of the landfill have non-detectable vinyl chloride, yet there are vinyl chloride concentration contours shown in this area. By identifying vinyl chloride in an area with recent non-detectable concentrations, the representations demonstrate that EPA's Maps are not accurate and the data have been biased.

Other data does not appear to have been utilized in developing EPA's Maps, including that from monitoring well PZDyer. This monitoring well, located north of Dyer Barn, showed non-detectable vinyl chloride concentrations in EPA's July 2006 data. Yet, this well is located in the Lower Sand Unit in an area where the map shows a contour interval of ≥ 2 µg/L of vinyl chloride. Exclusion of this datum, without an explicitly stated reason, results in bias of the data. Inclusion of this datum illustrate the sporadic nature of the distribution of vinyl chloride.

3. Ignored Groundwater Flow Directions

The distribution of vinyl chloride on EPA's Maps suggest a relatively simple groundwater flow direction from the landfill to the southeast, passing the area of well PW-22 and moving on to MW05. However, data presented in the 2006 EGM Report, and overlain on EPA's Maps (see enclosed Figures), indicate that groundwater flow is from MW05 toward the area of PW-22, not as suggested by EPA's Maps. This inconsistency between the groundwater flow directions and the Maps indicates that relevant information was not considered in the interpretation of the geologic and hydrogeologic conditions used as background when developing reasonable and accurate depictions of the distribution of vinyl chloride. Groundwater

flow directions presented in the EGM Report indicate that for vinyl chloride to move from the landfill to the area of MW05 would probably require migration from the vicinity of the west side of the landfill to the south, then east toward MW05, then north into the valley bottom centered on MW07. EPA's Maps are not accurately reflecting groundwater flow direction in the landfill vicinity.

RECOMMENDATION FOR CORRECTIVE ACTION

The MSGRG recommends that the only appropriate corrective action is that these Maps be immediately retracted due to the magnitude of the errors and omissions and all recipients of this information should be so notified. After consultation with the Wisconsin Department of Natural Resources, (WDNR) EPA should reissue the Maps for each potential migration pathway (i.e., the Upper Sand Unit and Lower Sand Unit) without the concentration contour lines, to identify a footprint of vinyl chloride within each potential migration pathway. Such a depiction would be analogous to Figure 22 in the December 2006 Expanded Groundwater Monitoring Report (enclosed), that identifies the vinyl chloride data on a map, indicating the geologic unit which each well is monitoring. (Figure attached)

EFFECTS OF THE ERROR/BENEFITS OF A CORRECTION

The MSGRG submits that EPA has erred in preparing the Maps which purport to identify the concentrations of vinyl chloride near the Muskego Sanitary Landfill. By doing so, EPA is misleading the public on the potential historic migration pathways and potential future migration pathways. As currently presented, EPA's Maps are inaccurate and unreliable and serve no benefit to the public. If corrective action is not taken now, the MSGRG will be forced to expend significant resources to demonstrate the inaccuracies of EPA's Maps.

CONCLUSION

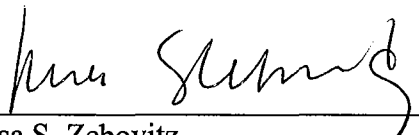
The MSGRG is submitting this Request for Correction of the Vinyl Chloride Footprint Estimate Maps disseminated to a reporter for the Shepard Express, and to the local public. These Maps, which reflect EPA's interpretation of the distribution of vinyl chloride in the vicinity of the Muskego Sanitary Landfill, fail to meet the EPA's standards of quality, integrity, objectivity, and utility in the "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency." As such, the MSGRG respectfully requests that these Maps be immediately retracted. Additionally, the MSGRG requests that EPA, after consulting with WDNR, reissues maps for each potential migration pathway without the concentration contour lines, to identify a footprint of vinyl chloride within each potential migration pathway.

CONTACT INFORMATION

The MSGRG may be contacted through undersigned counsel, Lisa S. Zebovitz at Neal, Gerber & Eisenberg LLP.

Respectfully Submitted,

MUSKEGO SITE GROUNDWATER
REMEDIATION GROUP

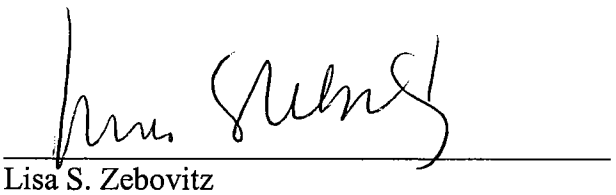
By: 

Lisa S. Zebovitz
Neal, Gerber & Eisenberg LLP
Two North LaSalle Street
Chicago, IL 60602
Phone number (312) 269-8033
Fax (312) 429-3502
E-mail: Lzebovitz@ngelaw.com

CERTIFICATE

I hereby certify that this Request for Correction was submitted to the United States Environmental Protection Agency on this date by E-mail to quality@epa.gov and by Federal Express to Information Quality Guidelines Staff (Mail code 2811R), U.S.EPA, 1200 Pennsylvania Ave., N.W., Washington, D.C., 20460.

This 31st day of July 2007.



Lisa S. Zebovitz

NGEDOCS: 014450.0625:1448105.2