April 14, 2009

via UPA overnight delivery and email (quality@epa.gov)

Information Quality Guidelines Staff
Mail Code 2811R
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Request for Reconsideration
Request for Correction #7003 (7/31/07)
Muskego Sanitary Landfill Site

Dear Sir or Madam:

Enclosed is a Request for Reconsideration of Region V’s decisions on the Request for Correction submitted by the Muskego Site Groundwater Remediation Group on July 31, 2007.

You may contact the undersigned with any questions.

Very truly yours,

Antoinette R. Stone

Counsel for the Muskego Site
Groundwater Remediation Group

encl
REQUEST FOR RECONSIDERATION OF EPA REGION V’S RESPONSES TO THE
JULY 31, 2007 REQUEST FOR CORRECTION SUBMITTED BY THE MUSKEGO
SITE GROUNDWATER REMEDIATION GROUP

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”) requests that EPA reconsider
Region V’s responses to the MSGRG’s July 31, 2007 Request for Correction (“RFC”) as set
forth in EPA’s letter of January 28, 2008, authored by the Regional Administrator of Region V,
EPA’s Memorandum to the File dated March 16, 2009 (the “2009 Memo”), authored by the
former Remedial Project Manager (“RPM”) for the Muskego Sanitary Landfill Site, Muskego,
Wisconsin, and the “PAL Exceedences of Selected Contaminants” Map, attached to an EPA
Memorandum to File dated March 17, 2009 (the “PAL Map”), authored by the former RPM. A
copy of the January 28, 2008 letter is attached hereto as Exhibit “A.”

BACKGROUND

On July 31, 2007, the MSGRG submitted an RFC of the EPA Region V Vinyl Chloride
Footprint Estimate Maps (the “2007 Maps”) which EPA disseminated to the public on July 24,
2007. The RFC objected to the 2007 Maps because they are inaccurate, unreliable and biased in
their characterization of site conditions, historic migration pathways and potential future
migration pathways. After multiple letters extending EPA’s time for response to the RFC, the
Regional Administrator for Region V responded to the RFC on January 28, 2008, stating that
EPA would respond to the RFC during the Superfund regulatory process.

1 The MSGRG does not attach copies of the 2009 Memo, the 2009 Maps or the PAL Map to this Request for
Reconsideration in order to prevent further improper dissemination of these documents.
On August 5, 2008, EPA issued a Special Notice Letter and a Scope of Work for the Muskego Site, seeking to have potentially responsible parties enter into an administrative order on consent. The Special Notice Letter and accompanying Scope of Work relied on the information in the 2007 Maps, thereby continuing to mislead the public on the site conditions, historic migration pathways and potential future migration pathways of contamination at the Site. The Scope of Work ignored the MSGRG’s RFC and perpetuated the inaccurate information that initially prompted the RFC. Following the issuance of the Special Notice Letter, the MSGRG embarked on a period of negotiation with EPA. The result of the negotiation was the MSGRG’s submission of a scope of work which EPA accepted in principle for incorporation in a consent decree to be negotiated by the MSGRG and the Department of Justice. More than nineteen months after the submittal of the RFC, and almost two months after the close of the successful negotiation period that resulted in acceptance in principle of the scope of work offered by the MSGRG, the former RPM for the Muskego site wrote the 2009 Memo and created the PAL Map, which was attached to a “memorandum to the file” dated March 17, 2009.

The 2009 Memo purports to address the MSGRG’s RFC and attaches new and different maps (the “2009 Maps”). It is not evident from the face of the 2009 Memo, nor has the MSGRG been able to establish, whether the 2009 Memo or the 2009 Maps underwent any supervisory, peer, quality or pre-dissemination review at Region V or at EPA Headquarters. The 2009 Memo states that the 2009 Maps reflect certain corrections to the 2007 Maps. However, the 2009 Memo does not invite any comment from the MSGRG nor does it state whether the 2007 Maps will be retracted or whether any recipients of the 2007 Maps will be informed of the errors in the 2007 Maps. Even though the 2009 Memo purports to be the RPM’s effort at a response to the RFC, it is titled as a “Memo to File” and does not appear to have been filed in connection with
the 2007 RFC. The 2009 Memo was provided to a representative of the MSGRG, but the Memo contains no indication of whether anyone else received a copy. However, the MSGRG has learned that a copy of the 2009 Memo, together with the attached 2009 Maps, was provided to the plaintiffs in *Dyer et al. v. Waste Management of Wisconsin, Inc. et al.*, Case No. 01-CV-1866, Circuit Court, Waukesha County (the "Dyer Litigation") for use in that pending litigation. Immediately after the 2009 memo was provided to the Dyer plaintiffs, it appeared as an attachment to a motion filed by the plaintiffs in the *Dyer Litigation*. The motion seeks leave of court to use the 2009 Memo and the 2009 Maps at trial, now scheduled for May 12, 2009. On information and belief, the former Muskego RPM has provided other documents to the Dyer plaintiffs for use in the litigation, without notifying the MSGRG, which is a defendant in the case.

In particular, on April 6, 2009, the plaintiffs in the *Dyer Litigation* provided the PAL Map to counsel for the MSGRG.\(^2\) As with the 2009 Memo, the PAL Map does not indicate whether it was subjected to any supervisory, peer, quality or pre-dissemination review at Region V. Nor does the PAL Map indicate whether it is a response to the RFC, although its date, one day after the date of the 2009 Memo which does reference the RFC, suggests that it is. However, like the 2009 Memo, the PAL Map is attached to a "Memo to File" and does not appear to have been filed in connection with the RFC. The PAL Map purports to identify locations at which water samples exceeded the PALs for vinyl chloride, chromium, lead, cadmium, benzene, PCE and TCE. The plaintiffs in the *Dyer Litigation* have notified the MSGRG that they intend to use the PAL Map as an exhibit at the trial.

\(^2\) In an April 1, 2009 response to the MSGRG's March 11 FOIA request, EPA provided a copy of the 2009 Memo, but not the PAL Map, which apparently was provided only to the *Dyer* plaintiffs, unbeknownst to the MSGRG.
THE 2009 MEMO, THE 2009 MAPS AND THE PAL MAP ARE INACCURATE, LACK CLARITY AND SHOW BIAS

The MSGRG reviewed the 2009 Memo and the PAL Map in light of the standards outlined in EPA’s October 2002 Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by the Environmental Protection Agency (EPA Quality 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.” 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.”

EPA’s Guidelines recognize a higher standard of quality for “influential, scientific, financial, or statistical information” that is disseminated to the general public. 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 2009 Memo and the PAL Map involve issues implicated in the ongoing Dyer Litigation because the alleged presence of contaminants in the groundwater at the Site is the subject of this lawsuit.

The author of the 2009 Memo and the PAL Map, the former RPM for the Muskego site, is very familiar with the Dyer Litigation, frequently communicates with the plaintiffs, and, on information and belief, has provided numerous documents to the plaintiffs for
use in the litigation without notifying the MSGRG. Consequently, the 2009 Memo, the 2009 Maps and the PAL Map 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.

Neither the 2009 Memo, the 2009 Maps nor the PAL Map meet the EPA Guidelines’ standard of quality, including the higher standard applicable to influential information, because the 2009 Maps and the PAL Map lack clarity, and the 2009 Memo, the 2009 Maps and the PAL Map are inaccurate and show bias.

• Lack of Clarity:

1. The 2009 Maps

The only stated purpose of the 2009 Maps is for use in considering the development of institutional controls. However, EPA does not limit the use of the 2009 Maps for other purposes. Although the 2009 Memo identifies certain limitations on the potential use of the 2009 Maps, these limitations do not appear on the Maps themselves. As a result, the 2009 Maps do not meet the clarity standard of the EPA Quality Guidance. It is unlikely that the average user of the 2009 Maps will comprehend the limitations expressed in complex jargon and discussed in an 11-page, highly technical document. Thus, the 2009 Maps likely will be used for purposes for which they were not intended, and for which there may be severe limitations imposed by the assumptions or methods underlying their construction. For example, they could be used to show contaminant origin, historic migration pathways or potential future migration pathways, even though EPA states in the 2009 Memo that the 2009 Maps do not provide information regarding these issues (2009 Memo, p. 2). In fact, the plaintiffs in the Dyer Litigation have submitted a request to the
court, which is now pending, for court permission to use the 2009 Memo and the 2009 Maps for just that purpose. In that request, the plaintiffs specifically state that the 2009 Maps prove that the contamination is “originating at the landfill” and “has further migrated downgradient.” Plaintiffs have ignored the limitations hidden in the Memo.

2. **The PAL Map**

The PAL Map strongly suggests that all of the constituents identified as “contaminants” are related to or released from the Muskego Landfill, even though it contains no reference to an explanation of the source of the constituents. It refers to all the constituents as “contaminants,” even though some of the constituents occur naturally in the groundwater or are present in samples as a result of sampling and analytical bias that EPA has already acknowledged. The lack of any description, qualification or purpose for the PAL Map gives rise to no inference other than that the constituents identified are “contaminants” emanating from the landfill.

With respect to the organic constituents (benzene, PCE and TCE), the PAL Map contains no explanation of the significance of the PAL. As described to EPA and confirmed by the Wisconsin Department of Natural Resources at a February 2009 meeting, Wisconsin regulation NR-140 applies the PAL for two purposes for constituents that are not contained in the background water quality. The PAL is a flag to indicate that if a constituent is present or increases above a PAL, the condition should be evaluated to determine whether the concentration may increase. The MSGRG’s 2007 Expanded Groundwater Monitoring (“EGM”) Report recognized the presence of these constituents in groundwater above PAL concentrations. However, it also demonstrated that the concentrations did not exceed the Enforcement Standards near the landfill, and that they were either stable or declining. Therefore, these constituents did not require additional evaluation, only continued monitoring. Although these PAL exceedences
were resolved in a manner consistent with NR-140, the PAL Map makes no reference to this resolution. Instead, the PAL Map lacks clarity by implying that the PAL exceedences require action to address the “contamination.”

- **Inaccuracy and Bias:**

  1. **The 2009 Memo and Maps**

     The RFC demonstrated that EPA’s 2007 Maps were not accurate because they showed the contouring of water quality between wells in the Upper Sand Unit and the Lower Sand Unit on one map, incorrectly assuming that the water quality is continuous between the two geologic units. The 2009 Memo states that this type of continuity was not assumed (2009 Memo, p. 4). However, the very method used to develop the 2009 Maps (2-D kriging) explicitly assumes that this type of continuity exists. Therefore, EPA’s denial that it made such an assumption is misleading and wrong. An example of an area where this assumption results in potentially inaccurate conditions is the area between well MW03, MW10/MW 10A and MW07. Well MW03 is in the Upper Sand Unit whereas MW07 is in the Lower Sand Unit. Approximately 100 feet of very low permeability clay exists in the vertical separation between the sand units in these two wells. The sand units clearly are separated between these wells. Yet, EPA’s map indicates that the presence of vinyl chloride is continuous between these two wells.

     The method EPA used to develop the 2009 Maps involves a complex protocol for selection, exclusion and interpolation of data, which plainly introduced bias in the development of the 2009 Maps. EPA claims to have created the 2009 Maps to remove the “confusion” caused by the 2007 Maps. However, the 2009 Maps not only fail to remove any confusion but they also present inaccurate and biased information as a result of EPA’s failure to consider geology and groundwater flow conditions.
An example of inaccuracy and bias in the 2009 Maps is the band of 0.02 µg/L to 0.2 µg/L around City water supply well 7 (CW07). This band suggests the presence of vinyl chloride in the vicinity of CW07 which could imminently impact CW07. However, the three primary data points connecting this band are in the Upper Sand Unit (i.e., MW03, MW09 and PW-Thiele), whereas CW07 is pumping water from a lower aquifer, the Lower Sand Unit. A thick till sequence separates these sand units, protecting the aquifer being used by CW07 from the vinyl chloride detected in the Upper Sand Unit. The distribution of vinyl chloride in the Lower Sand Unit near well CW07 is better indicated by the wells in that unit (i.e. CW07, CountyPark 2, MW03A and MW08A), where only one well has current detections of vinyl chloride (MW08A). Therefore, the 2009 Maps show vinyl chloride in the vicinity of CW07, but biases that data with data from a shallow aquifer. Use of only wells in the same aquifer as CW07 would indicate a much smaller area of vinyl chloride. The residents of the City of Muskego are likely to incorrectly interpret these data as showing that their water supply is at imminent risk by a large area of vinyl chloride in the aquifer supplying water to CW07.

A second example of inaccuracy and bias is shown in the area of wells E100A, TW62, EW02 and E092P, where no vinyl chloride has been detected, with a detection limit of 0.24 µg/L. These wells are located inside the region mapped as having vinyl chloride between 0.2 µg/L and 2 µg/L but were excluded from the evaluation because their detection limit was greater than the 0.2 µg/L standard for this area. While the detection limits are slightly over 0.2 µg/L, elimination of these data points is tantamount to concluding that the vinyl chloride would be detected between 0.2 µg/L and 0.24 µg/L at each of these four locations. The assumption that vinyl chloride is present within this very small range injects an element of bias that casts doubt on the accuracy of the 2009 Maps in this area.
To compound the effect of these biases, the RPM uses colored areas (deep orange, orange and yellow) on the maps which improperly suggest that contamination exists in locations where it has not been detected. Also, the titles of the maps are “Vinyl Chloride Plume Statistics and Estimated Footprints for Recent Conditions” (Figure 1) and “Vinyl Chloride (VC) Footprints…” (Figure 3). The 2009 Memo repeatedly refers throughout its text to a “plume statistic footprint.” The term “plume statistic footprint” is not a term of art but rather a term created by EPA to suggest that the 2009 Memo is factual rather than merely EPA opinion.\(^3\) That suggestion is belied by the fact that the 2009 memo is replete with references to “opinion,” “surmise,” “subjective expertise,” “interpretations,” “judgment” and “interpolate.” (2009 memo, pp. 2, 6, 7, 9, 10, 11).

2. **The PAL Map:**

All of the cadmium and chromium indicators shown on the PAL Map reflect inaccuracy and bias because they represent analysis of unfiltered samples. The 2006 and 2007 EGM Reports demonstrate that the inclusion of suspended soil particles in unfiltered samples collected and analyzed for metals in 2006 biases the results because of the metals present in the soil particles. For this reason, EPA approved the use of field filtering for the 2007 groundwater samples in the Phase II Workplan and QAPP. Approval of field filtering shows EPA’s recognition in 2007 that all of the cadmium and chromium in the monitoring wells shown on the PAL Map are based on biased data.

The 2007 EGM Report demonstrated that lead detected in groundwater samples is unrelated to the landfill. With only one exception, the presence of lead in the monitoring wells above the PAL on the PAL Map is due to unfiltered metals analysis, for the same reason

\(^3\) The former RPM relies on the definition of “statistic” found in Wikipedia, the on-line “encyclopedia” consisting of unverified, unauthoritative, anonymous entries. (2009 Memo, p. 2). Citing Wikipedia to lend an aura of objectivity to EPA’s unsubstantiated opinions adds nothing to the validity of the 2009 Memo or the 2009 Maps.
explained above with respect to cadmium and chromium. The lead at the private wells is also unrelated to the landfill and is probably due to lead plumbing or some other factor unrelated to groundwater quality. Therefore, EPA’s inclusion of samples with lead exceeding the PAL shows a biased perspective of site conditions.

All of the arsenic identified on the PAL Map is within the range of concentrations that have been shown to naturally occur throughout the Midwest, including the area of the Muskego Landfill, according to a 2003 United States Geological Survey (USGS) report. Yet, arsenic is incorrectly identified on the PAL Map as a “contaminant” associated with the Muskego Landfill. We have learned that the plaintiffs in the Dyer Litigation seek to use the PAL Map’s misleading identification of “arsenic exceedences” as a basis for imposition of punitive damages on the defendants. They have argued to the court that EPA’s PAL Map, with its identification of “arsenic exceedences,” justifies the characterization of the groundwater as “poisoned” and a “sewer.” This is clear proof that the PAL Map is being used for improper purposes.

RECOMMENDATION FOR CORRECTIVE ACTION

The 2009 Memo acknowledges deficiencies in the 2007 EPA Maps, but it does not retract the 2007 Maps. The 2007 Maps should be retracted immediately due to the magnitude of the errors and omissions they contain, and all recipients of the 2007 Maps should be notified of the retraction.

For the reasons stated above, the 2009 Maps and the PAL Map lack clarity and the 2009 Memo, the 2009 Maps and the PAL Map are inaccurate and show bias. The 2009 Memo, including the Maps labeled Figures 1 and 3, and the PAL Map should be retracted and all

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4 One of the two filtered samples from well MW11A was greater than the PAL, and the other sample was less than the PAL. The only reasonable explanation for the sample showing lead greater than the PAL is that it is an anomaly.  
recipients of these documents should be notified of the retraction. After the MSGRG performs the work required under the consent decree that is about to be negotiated, the MSGRG and EPA can address the question of whether new, corrected maps should be prepared.

**EFFECTS OF THE ERROR/BENEFITS OF A CORRECTION**

EPA erred in preparing the 2007 Maps. The errors were not corrected but rather perpetuated in the 2009 Maps and the PAL Map. The 2009 Maps, as well as the 2009 Memo, and the PAL Map are unclear, inaccurate and biased. As a result, they continue to mislead the public on the site conditions, historic migration pathways and potential future migration pathways of contamination. In addition, the MSGRG may also be unfairly prejudiced by the 2009 Memo, the 2009 Maps and the PAL Map because the information they contain could be improperly used to unfairly prejudice the MSGRG in the *Dyer Litigation*.

**CONTACT INFORMATION**

Questions may be addressed to the undersigned counsel for the MSGRG.

Dated: April 14, 2009

Respectfully submitted,

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*Counsel for the Muskego Site*
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EXHIBIT A
Lisa S. Zebovitz, Esq.
Neal, Gerber & Eisenberg LLP
Two North LaSalle Street
Chicago, Illinois 60602-3801

RE: Request for Correction (RFC #07003):
Muskego Sanitary Landfill Superfund Site

Dear Ms. Zebovitz:

This letter is in response to your Request for Correction (RFC) on behalf of the Muskego Site Groundwater Remediation Group (MSGRG), dated July 31, 2007. In your letter, you request correction of initial vinyl chloride footprint estimate maps. The maps were included in the July 2007 Memorandum to the Muskego Sanitary Landfill Superfund Site file (Memorandum) prepared by the U.S. Environmental Protection Agency's (EPA's) Remedial Project Manager (RPM). The 2007 Memorandum was used to support EPA's comments on the MSGRG's Draft Phase I Expanded Groundwater Monitoring Report (Report). Your letter states that the information in the vinyl chloride footprint estimate maps is not consistent with the EPA Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency (EPA IOG).

As you are aware, this RFC was received during an on-going Superfund regulatory process for the Muskego Sanitary Landfill Site. This process allows the MSGRG to provide comments on the vinyl chloride footprint estimate maps and Draft Report. EPA envisions the maps being challenged in this RFC will be refined when MSGRG provides additional information for the Agency's consideration. EPA believes this on-going regulatory process is the appropriate vehicle to address MSGRG's concerns about the vinyl chloride footprint estimate maps.

On October 4, 2007, EPA met with the MSGRG to discuss the technical justifications and procedures used to develop the vinyl chloride footprint estimate maps. At this meeting,

the MSGRG indicated that it would provide a written response to EPA's comment letter by November 1, 2007. EPA received the response on December 3, 2007, and we are in the process of reviewing it. During the review process, which will include review of the issues raised in this RFC, we will determine if revisions to the maps are needed to ensure the information is consistent with the EPA IQG. Thus we will respond to the comments raised in this RFC during the Superfund regulatory process.

If you are dissatisfied with this response, you may submit a "Request for Reconsideration" (RFR). The EPA recommends that this request be sent within 90 days of the date of this letter. To do so, send a written request to the EPA Information Quality Guidelines Processing Staff by mail (Information Quality Guidelines Processing Staff, Mail Code 2811R, U.S. EPA, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460), electronic mail (quality@epa.gov), or fax (202-565-2441). The RFR should reference RFC #07003. Additional criteria for information that should be included in the request are listed on the EPA IQG web site (http://www.epa.gov/quality/informationguidelines).

If you have additional questions on this matter, please contact Thomas J. Krueger, staff attorney at 312-886-0562 or Sheri L. Bianchin, RPM at 312-886-4745. Thank you for your interest in EPA's information quality.

Sincerely,

Mary A. Gade
Regional Administrator