UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

14 MAY 2007

Khouane Ditthavong, Esq.
King & Spalding, LLP
1700 Pennsylvania Avenue, N.W.
Washington, D.C. 20006

Re: Request for Correction (RFC) regarding EPA's Dissemination of Information with respect to the Doe Run Herculaneum Lead Smelter Site, Herculaneum, Missouri (RFC #07001)

Dear Mr. Ditthavong:

This letter is in response to your Request for Correction (RFC), on behalf of The Doe Run Company (Doe Run), dated October 19, 2006, and received by the U.S. Environmental Protection Agency (EPA), pursuant to the *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency* (EPA Guidelines). Your request cites a number of concerns with EPA's soil recontamination data for the Herculaneum Lead Smelter Site (Site) in Herculaneum, Missouri. Specifically, you state that the soil recontamination data does not comply with the EPA Guidelines, the EPA Quality Manual 5360 A1 (May 5, 2000), or the EPA Order 5360.1 A2 (May 5, 2000), because the data were not collected in accordance with the appropriate Quality Assurance Project Plan (QAPP), and that EPA improperly changed its soil sampling procedures at the Site.

EPA's soil recontamination data for the Site is periodically analyzed for statistical trends, and the analysis is posted on EPA's website. In consideration of the specific concerns raised in your letter, EPA conducted a thorough review of the QA and sampling procedures associated with the soil recontamination data for the Site. Based on this review, EPA acknowledges that there are documents in the record which may cause confusion as to the soil sampling collection procedures utilized by EPA. This response seeks to eliminate any confusion and describes EPA's plans to clarify certain documents at issue. EPA wants to confirm, however, that the soil recontamination data was, and still is being properly collected consistent with the procedures described in the *Quality Assurance Project Plan for a Site Characterization at the Herculaneum Lead Smelter*[1] (2001 QAPP).

[1] Quality Assurance Project Plan for a Site Characterization at the Herculaneum Lead Smelter. EPA, September 2001.

Background

In accordance with EPA Order 5360.1 A2, the EPA Quality Manual and the EPA Region 7 Quality Management Plan, Revision No. 2 (August 21, 2001), the Region prepares a Quality Assurance Project Plan (QAPP) for activities performed by or for the Region that involve environmental data generation or use. All QAPPs for the Site were prepared in accordance with *EPA Requirements for QA Project Plans*, EPA QA/R-5 (March 2001), and approved by the EPA project manager and the Regional QA Manager or their designee, prior to the initiation of the environmental data generation or use activity.

Soil data collected by EPA at the Site is collected in accordance with the 2001 QAPP.[2] The 2001 QAPP was originally developed for purposes of performing characterization of soils at the Site, and oversight of Doe Run's soil characterization and excavation activities pursuant to an Administrative Order on Consent (AOC).[3] In February 2002, EPA determined it was also appropriate to use the 2001 QAPP for purposes of collecting soil samples to determine whether recontamination of residential yard soils with lead may be occurring.

2001 QAPP

The 2001 QAPP specifies that surface soil samples "will be collected from the upper 1 inch of soil" with a clean, dedicated stainless steel spoon. No measuring device is used or required during sample collection; therefore samples are collected from the upper portion of the 1 inch soil horizon, so as to ensure that a depth of 1 inch is not exceeded. Pursuant to the AOC, Doe Run also follows the 2001 QAPP for purposes of soil characterization at the Site and collects samples in the same manner, with no measuring device.

It is to be noted that the 2001 QAPP envisions collection of soil samples from the upper inch of soil; it does not specify where, within that upper inch, the sample is to be collected. Since implementation of the QAPP, EPA has not altered the manner in which it has collected soil samples at the Site, whether for purposes of soil characterization or soil recontamination monitoring, despite any statements that suggest otherwise in the *Technical Report for Focus Group Recommendations, Herculaneum, MO*, October 6, 2003 (Focus Group Report). To clarify confusion that has been caused by the Focus Group Report, a memorandum has been added, upon release of this response to you, to the Site File and Administrative Record. This memorandum responds to inaccurate statements in the Focus Group Report. All future EPA disseminations of the Focus Group Report will include this memorandum. A copy of this memorandum is enclosed.

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[2] Your request notes the existence of more than one version of the 2001 QAPP, bearing signature pages dated in September 2001 and October 2001. However, the two versions of the 2001 QAPP do not differ in regard to sample depth or collection methodology.

[3] Administrative Order of Consent, Docket No. RCRA-7-2000-0018 and CERCLA-7-2000-0029 (AOC).

On August 30, 2006, EPA issued an addendum to the 2001 QAPP, for purposes of clarifying the sample collection methodology EPA has consistently implemented at the Site. This addendum was issued in response to questions by Doe Run regarding sample collection methodology by EPA and Doe Run under the 2001 QAPP and AOC. The addendum, which has inadvertently contributed to further confusion rather than clarification, in fact did not modify or change what was already being implemented in practice by EPA pursuant to the 2001 QAPP since its inception. A new memorandum, upon release of this response to you, has been added to the docket. All future disseminations of the 2001 QAPP will include a dissemination of this clarifying memorandum. A copy of this memorandum is enclosed.

2002 QAPP

In August 2002, EPA developed a *Quality Assurance Project Plan for Lead Deposition at Herculaneum, Missouri* (2002 QAPP). The stated purpose of the 2002 QAPP is to assess whether recontamination is occurring at the Site. Part of this assessment includes recontamination monitoring, using composite surface soil samples, to observe what is occurring in excavated surface soils at varying distances and directions from the smelter. The 2002 QAPP did not replace the 2001 QAPP, but instead memorializes this soil sampling plan and describes additional techniques, namely air monitoring and soil boxes, to be used in conjunction with the soil sampling to evaluate deposition rates from smelter operations. The methods for soil sampling remain as specified in the 2001 QAPP, which was included as an addendum to the 2002 QAPP. The additional monitoring techniques described in the 2002 QAPP were later discontinued. Preparation of the 2002 QAPP to address the sampling plan and additional monitoring techniques does not invalidate or otherwise affect the previous 2001 QAPP sampling procedures. EPA intended for the procedure used for recontamination sampling of surface soil to be the same as that used for characterization sampling of surface soil. This was done to provide consistency between soil recontamination monitoring data and data to be used in risk assessment and soil excavation decisions for the site.

In addition, you note statements in the 2002 QAPP regarding the "top 1 in. of soil". These statements refer to how the rate of soil recontamination would be expressed using modeling techniques, and were not intended to modify the sample collection methodology.

Conclusion

Based upon the above analysis, I have concluded that the methodology used to obtain soil recontamination data is consistent with EPA's objectives of quality, objectivity, utility, and integrity. Therefore, no corrections to the data obtained from that methodology are warranted, however, as noted above, EPA has implemented the following steps to clarify any potentially confusing statements in the documents noted:

1. EPA has issued a memorandum to respond to inaccurate statements in the Focus Group Report which suggest that EPA instituted a change in its surface soil sampling methodology.

2. EPA has issued an addendum to the 2001 QAPP to supersede the August 2006 addendum, and to clarify that in practice, and since inception of the 2001 QAPP, EPA's soil samples have been collected from the upper portion of the 1 inch soil horizon so as to ensure that a depth of 1 inch is not exceeded.

Thank you for alerting EPA to your concerns. We will continue to work with Doe Run on implementation of the AOC and other matters that relate to the Site.

If you are dissatisfied with this decision, you may submit a Request for Reconsideration (RFR). The EPA requests that any such RFR be submitted within 90 days of the date of EPA's response. If you choose to submit a RFR, please send a written request to the EPA Information Quality Guidelines Processing Staff via mail (Information Quality Guidelines Processing Staff, Mail Code 2811R, U.S. EPA, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460); electronic mail (quality@epa.gov); or fax [(202) 565-2441]. If you submit a RFR, please reference the request number assigned to the original Request for Correction (RFC #07001). Additional information about how to submit a RFR is listed on the EPA Information Quality Guidelines website at www.epa.gov/quality/informationguidelines. Please contact Dana Skelley at (913) 551-7923, should you have any questions about this response.

Sincerely,

John B. Askew
Regional Administrator

Enclosure

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MAY 0 9 2007

MEMORANDUM

SUBJECT: Response to Focus Group Report Statements
Herculaneum Lead Smelter Site

FROM: Bruce Morrison, Project Manager
SUPR/FFSE

TO: Site File and Administrative Record

The *Technical Report for Focus Group Recommendations, Herculaneum, MO*, dated October 6, 2003 (Focus Group Report), was prepared by Dr. C. Scott Clark from the University of Cincinnati and Dr. David A. Sterling from Saint Louis University and funded by the Environmental Protection Agency (EPA). Their report examined development of a site-specific, health-based cleanup standard and action strategy for lead dust contamination present in home interiors. As part of this process, they provided analysis of ongoing response actions to address lead contamination at the site, including review of site-specific environmental data, as well as recommendations for site-specific sampling protocols and additional actions to be taken to address interior dust.

This memorandum is being provided to respond to inaccurate statements in the Focus Group Report suggesting that EPA instituted a change in the protocol for collecting surface soil samples used to evaluate potential lead recontamination. The Focus Group Report indicated that EPA's surface soil samples were collected by sampling the top one-inch soil horizon, and that EPA instituted a new surface soil scraping protocol in 2003 whereby surface soil samples were collected from less than the entire one-inch soil horizon. Specifically, the Focus Group Report states that:

> "Since soil recontamination would be initiated with the top layers of soil becoming contaminated from fallout or ground level transport of lead containing particles, the top one-inch soil lead sample would not readily reflect such contamination. Surface scraping samples are a more sensitive indicator of contamination of the replaced soil by lead dust and were instituted by the EPA in Herculaneum during 2003. We did not have the opportunity to review the additional surface soil sampling data and so cannot comment on those results. If a written protocol is not yet prepared, a protocol for a soil-scraping sample is available in the Protocol from the Three City Urban Soil-Lead Abatement Demonstration Project (EPA 1993)."

In actuality, the EPA did not institute any changes in its surface soil sample collection protocol. Consistent with the September 10, 2001, Quality Assurance Project Plan (QAPP) for the Site, surface soil samples had always been collected from the upper portion of the one-inch soil horizon so as to ensure that a depth of one inch was not exceeded because exact measuring devices are not used when collecting sample aliquots. At the time of the Focus Group Report, EPA evaluated its surface soil sample collection protocol and concluded it was appropriate for use in investigating the potential recontamination of surface soil. The EPA continues to collect surface soil samples at the Herculaneum Lead Smelter Site from the upper portion of the one-inch soil horizon, consistent with the September 10, 2001, QAPP for the Site.

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MEMORANDUM

SUBJECT: Addendum to the Quality Assurance Project Plan (QAPP) for Site Characterization for the Herculaneum Lead Smelter Superfund Site

FROM: Bruce A. Morrison, RPM
SUPR/FFSE

TO: EPA Quality Assurance Branch

This Memorandum is intended to supersede the previous addendum approved on September 5, 2006.

At the Herculaneum Lead Smelter Superfund Site surface soil samples are collected in accordance with the September 10, 2001, Quality Assurance Project Plan which states that samples are to "be collected from the upper 1 inch of soil". In practice, since the inception of the 2001 QAPP, EPA's samples are collected from the upper portion of the 1 inch soil horizon so as to ensure that a depth of 1 inch is not exceeded because exact measuring devices are not used when collecting sample aliquots.