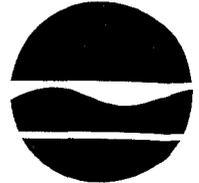


**New York State Department of Environmental Conservation
Division of Environmental Remediation**

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Denise M. Sheehan
Commissioner

Received 15 Sept 2006

Mr. Raymond Pilon
U.S. Army Corp of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY 14207

RE: Guterl Specialty Steel site # 932032

Dear Mr. Pilon:

Enclosed please find one hard copy and one electronic copy of the draft final Remedial Investigation /Feasibility Study (RI/FS) work plan for the Guterl Specialty Steel site, located in Lockport. This investigation will simultaneously focus on the former landfill and excise areas of the Guterl facility.

If you have any questions or require additional information, I may be contacted, toll free, at (888) 459-8667 or email to jbmccull@gw.dec.state.ny.us. We anticipate commencing field work at the facility in October 2006.

Sincerely,

Jeffrey McCullough
Project Manager
Remedial Bureau - D
Division of Environmental Remediation

cc: A.J. White/file

MACTEC, Engineering and Consulting, PC.

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MEMORANDUM

TO: Mr. Jeffrey McCullough
FROM: David Bufo, MACTEC
SUBJECT: Response to comments, Guterl Specialty Steel Site Draft Work Plan
DATE: August, 2006

Responses to comments received from NY DER Region 9, NY DEC, Bureau of Remediation, and the USACE, in regard to the Guterl Draft Work Plan:

Section 2.0, Site Background and Physical Setting:

Comment: The page numbering for this section is incorrect (i.e., page 1-x instead of 2-x).

Response: Page numbering has been corrected.

Section 2.4, Prior Investigations, Excised Area,

Comment: Page 1-10: As a point of clarification, the IIWA conducted by Ecology & Environment (E&E) in 1997 was incorporated into the IIWA Report issued by the NYSDEC in 2000. E&E was only hired to complete the soil boring program, the well installation program and health & safety monitoring. That is why analytical results were not included in E&E's IIWA Report; all samples were collected by NYSDEC personnel and analyzed by NYSDEC contract labs.

Response: The text has been modified to clarify that E&E was hired to complete specific field activities associated with the IIWA and that the IIWA activities conducted by E&E were incorporated into the IIWA Report issued by NYSDEC in 2000.

Section 2.7, Data Review, Data Gaps and RI Technical Activities:

Comment: Excised Area Surface Soil, Page 1-15: The appendix number for USEPA's xrf data is not specified in paragraph 1 of this subsection.

Response: USEPA XRF data is included in Appendix D of the Work Plan. The text has been modified to reflect this information.

Comment: *Excised Area Subsurface Soil, Page 1-16: There is an incorrect reference to TAGM 4046 in paragraph 3 of this subsection. Also, in paragraph 6, the data being discussed is listed as "surface soil". If this is correct, this paragraph should be moved to the preceding subsection.*

Response: The reference to TAGM 4042 has been corrected to reference TAGM 4046. Additionally, "surface soil" in paragraph 6 has been changed to "subsurface soil".

Comment: *Surface Water/Sediments, Page 1-19: In addition to the contaminants listed in the 2nd full paragraph of this subsection, PCBs were also detected at elevated concentrations (38 and 44 ppm) in the pump sump sediment.*

Response: The text has been modified to reflect that PCBs were also detected at concentrations of 38 and 44 ppm in the pump sump sediment.

Section 3.2.2, Radiological Issues

Comment: *Page 3-4: Will the presence of radiation at the site effect the results of the XRF unit?*

Response: According to the XRF unit manufacturer, the presence of radiation at the site should not affect the results of the XRF analyses. Further, the XRF will be based in a site trailer located outside the Excised Area and away from the known areas of elevated radiological levels.

Section 3.2.3, Excised Area

Comment: *Page 3-4: 350 surface soil samples using XRF verified by approximately 70 lab samples seems excessive for a Phase 1 RI. I also have concerns over the heavy reliance on XRF data. This technology was utilized at the Roblin Steel plants in Dunkirk and Tonawanda, and produced extremely poor correlation with the lab data. Has the technology improved to the point that it is more reliable?*

Response: 350 surface soil samples to be analyzed using XRF are expected to provide adequate spatial representation of surface conditions at the site in order to minimize the need for further surface soil sampling in Phase II. The 70 samples to be sent for offsite analysis are intended for human health risk assessment.

MACTEC utilized XRF for metals analysis during site and remedial investigations for the States of Connecticut, Massachusetts, Maine, and Rhode Island; and during property transfer investigations for industrial clients in Louisiana and Florida. The most recent utilization of the portable XRF was to analyze estuarine sediment samples collected to delineate the lateral and vertical extent of contamination in support of a remedial investigation/feasibility study

(RI/FS) to complete a record of decision (ROD) at a former copper, lead, and zinc sulfide ore mine site on a unique coastal location in Maine.

Five hundred and thirty seven samples were collected and analyzed by on-site XRF during a twenty five day period. Sufficient sediment volume was collected to fill eight ounce soil jars. An aliquot was removed, dried, sieved and analyzed in accordance with USEPA Method 6200. The remaining original sample was archived. Thirty seven sediment samples (seven percent) were submitted to a contracted commercial laboratory for metals analysis by USEPA Method 6010B (ICP)/6020 (ICP-MS). Samples were analyzed for antimony, arsenic, barium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, and zinc. Metal concentrations reported by the commercial laboratory were compared to the on-site XRF concentrations to determine precision, accuracy, and bias of the XRF data.

In all instances where a detection was reported by the XRF, a detection was reported by the commercial laboratory. The average relative percent differences (RPDs) between the XRF and commercial laboratory results ranged from 24 to 68 for copper (24), lead (58), zinc (37), arsenic (68), and manganese (35) indicating good comparability. Barium (192), cadmium (91), and chromium (196) had high average RPDs ranging from 91 to 192 in sediment detections. A general trend of higher concentrations reported by XRF was observed indicating a possible high bias for these analytes.

Of the 176 calculated RPDs, 70 exceeded 50 (the USEPA Region I guidelines for comparing solid matrices field duplicates). There were no instances where a positive detection was reported by XRF and a non-detect was reported by the commercial laboratory indicating false positive reporting by XRF did not occur. There were three instances when a non-detect was reported by XRF and a positive detection above the XRF reporting limit was reported by the commercial lab. In all cases the concentration reported in the commercial lab was in the same relative concentration range as the on-site reporting limit.

Section 3.2.5, Site Groundwater

Comment: Page 3-7: Paragraph 1: Will the 20 shallow wells be overburden or bedrock wells? Also, will they be micro-wells or standard 2-inch diameter wells? Clarification is required.

Response: The text has been modified to indicate the 20 shallow wells will be installed to monitor the first groundwater encountered. Due to seasonal fluctuations in the groundwater, it cannot be determined whether the first encountered groundwater will be in the overburden or the bedrock. The text has also been modified to indicate that the wells will be 2" PVC, flush mounted.

Comment: Paragraph 2: The "grab" overburden groundwater samples may

not tell us much if they are extremely turbid. As a result, the Work Plan should include a provision to filter these samples if high turbidity is observed.

Response: The Quality Assurance Project Plan (Appendix A) includes provisions for filtering turbid groundwater “grab” samples.

Comment: *Paragraph 3: The locations of the wells discussed in this paragraph should be shown on Figure 3-3 because it is difficult to determine their locations from the descriptions given.*

Response: The locations of the wells discussed in this paragraph are indicated on Figure 3-3 as “Proposed Water Samples”. This is done to distinguish them from the monitoring wells to be installed as part of the Landfill investigative activities.

Section 3.3, Report Preparation:

Comment: *Data Usability Summary Report, Page 3-9: Soil vapor samples are mentioned in this subsection. The collection of these samples, however, is not discussed in Section 3.0, and it not clear that they will actually be collected.*

Response: The collection of up to 6 soil vapor samples with 1-liter, 20 minute flow, summa canisters from 6 Geoprobe™ locations near property boundaries is discussed in Section 3.2.3. These samples will be collected to assess potential impacts from VOC contamination via soil vapor.

Comment: *Contamination Assessment, Page 3-9: Soil vapor samples are mentioned in this subsection. The collection of these samples, however, is not discussed in Section 3.0, and it not clear that they will actually be collected.*

Response: The collection of up to 6 soil vapor samples with 1-liter, 20 minute flow, summa canisters from 6 Geoprobe™ locations near property boundaries is discussed in Section 3.2.3. These samples will be collected to assess potential impacts from VOC contamination via soil vapor.

Section 3.5, Feasibility Study:

Comment: *Paragraph 2, Page 3-11: Soil vapor samples are mentioned in this section. The collection of these samples, however, is not discussed in Section 3.0, and it not clear that they will actually be collected.*

Response: The collection of up to 6 soil vapor samples with 1-liter, 20 minute flow, summa canisters from 6 Geoprobe™ locations near property boundaries is discussed in Section 3.2.3. These samples will be collected to assess potential impacts from VOC contamination via soil vapor.

Comment: *Paragraph 3, Page 3-11: The FS should not be restricted to a detailed analysis of only 3 alternatives for each media as other potentially applicable alternatives may be identified during the initial screening.*

Response: MACTEC recognized that more than 3 potentially applicable remedial alternatives could be identified during initial screening. In order to reasonably constrain scope and schedule; MACTEC intends to perform detailed analysis of up to 3 alternatives. Should detailed analysis indicate that none of the 3 alternatives is viable for the site, MACTEC may perform detailed analysis of additional alternatives identified during screening.

Figure 3.1:

Comment: *It is difficult to differentiate between the historic rad samples (if any) and the proposed RI soil samples. Perhaps different symbols should be used. Also, it does not appear that drum samples from the Excised Area have been collected. If correct, this symbol should be deleted from the legend.*

Response: The symbols for Historic Rad Samples and Drum Samples have been removed from Figure 3-1.

Figure 3.2:

Comment: *It is difficult to differentiate between the historic drum samples (if any) and the proposed RI soil samples. Perhaps different symbols should be used.*

Response: The symbols have been modified to make them easier to differentiate from proposed RI soil samples.

Table 3.1:

Comment: *This table includes items not discussed in the text. For example, the table indicates that up to 20 subsurface samples will be collected from the Excised Area, while the only subsurface samples discussed in the text are associated with the Guterl Landfill. Also, the proposed soil gas samples shown in the table are not discussed in Section 3.0.*

Response: Reference to subsurface sampling, as described in Table 3.1, has been added to Section 3.2.3. Additionally, the collection of up to 6 soil vapor samples with 1-liter, 20 minute flow, summa canisters from 6 Geoprobe™ locations near property boundaries is discussed in Section 3.2.3. These samples will be collected to assess potential impacts from VOC contamination via soil vapor.

Comment: *The NYSDOH typically advocates collecting surface soil samples from 0" - 2" depth. This table, however, specifies a sample depth of 0" - 6".*

Response: MACTEC understands that NYSDOH typically advocates the collection of surface soil samples from 0-2" for the purpose of assessing potential impacts to human health. Further, for the purposes of remedial alternative analysis and design, soil samples collected from 0-6" provide a good basis for assessment of costs related to soil removal or treatment. MACTEC intends to collect 25% of surface soils from 0-2" and 75% from 0-6" to meet the various goals of the investigation. The text and tables have been modified to reflect this intent.

Comment: *In the Description and Methodology column, the subsurface samples proposed for the Landfill (page 2 of Table 3.1) references the Excised Area instead of the Landfill.*

Response: The reference has been changed to reflect that subsurface samples will be collected from the Landfill.

Comment: *Groundwater collection from the monitoring wells is only included for the Phase 2 RI. Section 3.2.5 of the Work Plan, however, indicates that the wells will be sampled during both phases. Clarification is required.*

Response: The initial round of groundwater sampling is noted on page 1 and 2 of Table 3.1 as part of Phase I.

Comments from the NYSDEC Bureau of Radiation

General Comments

Comment: *1. As a general comment, the document refers to on site gamma spectroscopy as one mechanism for field screening and to reduce the amount of samples sent off-site for analysis. At other sites where on-site analyses are performed, we have required that, at the beginning of the project, a number of samples analyzed on site be then sent to an off-site laboratory to demonstrate the accuracy of the on-site analysis. We recommend such a requirement in this work plan. In cases where off-site analysis is being performed isotopic uranium and isotopic thorium needs to be performed in addition to gamma spectroscopy. By performing isotopic uranium and isotopic thorium analysis, these results can be used to demonstrate XRF measurement adequacy.*

Response: The use of using gamma spectroscopy for screening of samples collected and the Guterl Specialty Steel site is to ensure that no radioactive samples are sent to the off-site laboratory. Off-site analytical analyses will only be for non-radiological parameters and the local laboratory does not have appropriate procedures, controls, or license for working with radioactive samples. In the event that there are radioactive samples that need off-site analyses, then arrangements will be made to send the samples to an appropriately qualified

laboratory for handling radioactive samples. Since the gamma spectroscopy results are not going to be used as characterization data for radiological parameters, there is no need for off-site gamma spectroscopy comparison.

Comment: 2. *As a second general comment, if the work plan can not specify the number of samples that will be sent off-site for analysis, the work plan should at least include a discussion regarding the frequency of off-site analysis and what factors (exceeding a particular screening value, etc.) will be used for selecting samples for off-site analysis. In addition please supply the name of your contracted laboratory who will perform the off-site radiological analysis.*

Response: Since this is not a radiological characterization, no samples will be sent to an off-site laboratory for radiological analyses. Samples will be available to the NYSDEC Bureau of Radiation if they wish to perform additional radiological analyses.

Comment: 3. *Another general comment is that a section should be added to the document which outlines how and when the XRF will be used for radiological contaminant identification. This section should include a discussion concerning what radionuclides the XRF will and won't identify including uranium and thorium.*

Response: The XRF will only be used for metals analysis and quantification and not for radiological contaminant identification. Radiological contaminants will be identified by typical radiation survey instrumentation and gamma spectroscopy.

Comment: *Since the XRF is a fixed base source, MACTEC will be required to register the unit with the New York State Department of Health (NYSDOH) Bureau of Radiation (518) 402-7550.*

Noted – this will be performed prior to the beginning of the field work.

Section 1.0;

Comment: *The statement on the bottom of page 1-3, that reads, "The parcel of land, fronting Ohio Street, which has been used for the uranium and thorium milling operations by Simonds, is currently held by the Guterl Steel Bankruptcy Trustee at the Western Bankruptcy Court in Pittsburgh, Pennsylvania (Buri, 1990; Drake, 1990; and Everett, 1990)" is not true. This property has been legally abandoned and the court no longer has jurisdiction. The above statement is also written in the last paragraph of Section 2.2.1 of Appendix C, Community Participation Plan. This also needs correcting.*

Response: Both the Work Plan and CPP text have been modified to reflect that the property has been legally abandoned and the court no longer has

jurisdiction.

Section 3.0

Comment: On page 3-3 in the first paragraph it is stated; "Drilling equipment will be decontaminated by steam cleaning with potable water prior to each boring, and before leaving the Site. Drilling equipment (i.e. drill rods and casing) will be decontaminated on a temporary decontamination pad constructed in an area designed by the NYSDEC. Decontamination fluids will be released on-site to the ground surface in the area of decontamination, so as to allow the liquids to infiltrate into the soil and not run off-site. In the event that decontamination fluids exhibit visual or olfactory evidence of contamination, fluids will be containerized for testing and off-site disposal. In addition to chemical decontamination, all drilling equipment will be screened for radioactive contamination prior to reuse and leaving the site."

The procedure for decontaminating the drilling equipment is confusing. The drilling equipment should be radiological surveyed and a visual or olfactory evidence of contamination determination made for chemical contamination prior to any application of decontamination fluids. These measurements/ observations will then dictate what can happen to the decontamination fluids. If the soil on the drilling equipment is contaminated, obviously the decontamination fluids can not be allowed back to the ground surface.

Response: The text has been modified to reflect that equipment will be surveyed for radiological and chemical contamination first. If any radiological contamination is identified, dry decontamination techniques will be utilized prior to any wet decontamination. Should dry decontamination techniques prove unsuccessful and wet decontamination is needed, decontamination fluids will be collected and analyzed in order to determine acceptable means of release or disposal.

Comment: On page 3-3, the first paragraph concludes with the sentence, "Radiological screening will be conducted in accordance with procedures detailed in the Site-Specific HASP and QAPjP." Appendix A, which contains the Quality Assurance Project Plan in part, only contains a document incorporated by reference along with a description of the gamma spectroscopy counting system and X-Ray fluorescence (XRF) methods. The Health and Safety Plan does not contain any useful information for this application. Physical surveying of equipment for radiological contamination is usually done with a hand held instrument with an attached pancake probe. Please insert into this document how MACTEC Engineering and Consulting, Inc intends to screen this equipment for radiological contamination and what limits will used.

Response: Surveys for radiological contamination will be performed with typical radiation survey instrumentation (GM pancake probe, 100 cm²

scintillation probe, alpha/beta scaler, etc.). The procedure for performing radiological surveys will be included as part of Appendix A. Release limits for this investigation will be two times the average background value. While two times background is not a recognized regulatory limit, it is commonly used as a qualitative indicator for the presence of elevated radioactivity and is considered to be conservative.

Comment: The second paragraph of page 3-3 entitled Investigation Derived Wastes, states, "Radiological contaminated materials will be labeled in accordance with regulation and referred to the USACE for disposition." The USACE has not agreed to perform any work at this site yet and to presume that they will take over any investigation-derived wastes from this remedial investigation is inappropriate. The contractor should make arrangements for proper disposal of all IDW.

Response: Radiologically contaminated materials will be collected during the investigation. Once the investigation is complete, these materials will be characterized and quantified and arrangements for proper disposal will be made.

Comment: Also on page 3-3, in the section entitled, Disposable Sampling Equipment it is stated, "Disposable equipment will also be screened for radiological contamination. If no radiological contamination above background is noted . . ." Physical surveying of equipment for radiological contamination is usually done directly with a hand held instrument with an attached pancake probe or taking wipe samples and using the pancake probe to identify elevated count rates. Please describe what radiological instrumentation will be used to screen for radiological contamination. Also, please describe how a background value will be obtained.

Response: Surveys for radiological contamination will be performed with typical radiation survey instrumentation (GM pancake probe, 100 cm² scintillation probe, alpha/beta scaler, etc.). Background values for radiation survey instrumentation will be obtained inside the field trailer as part of operational checks on the instruments. These values will be compared to those obtained in the field and surveys for release will be performed in low background areas.

Comment: On page 3-4 in the section entitled Well Purge Water, it is stated, "Containers will be screened for radiological contamination and elevated volatile organic contamination." Since the Department's Division of Solid & Hazardous Materials will have their contracted radiological laboratory perform the radiological analysis on the well water samples, we will inform MACTEC Engineering and Consulting, Inc. as to the disposition of the purge water from the radiological perspective. Well purge water must be held in the respective containers until that determination is made.

Response: The text has been modified to indicate that well purge water will be stored until results from NYSDEC Bureau of Radiation are available and appropriate means of release or disposal will be taken.

Comment: *On page 3-4, in the section entitled Well Purge Water, it is again stated, "Radiological contaminated materials will be labeled in accordance with regulation and referred to the USACE for disposition." As stated in the above comment, the USACE has not agreed to perform any work at this site yet and to presume that they will take over any well purge water from this remedial investigation is inappropriate.*

Response: The text has been modified to indicate that well purge water will be stored until results from NYSDEC Bureau of Radiation are available and appropriate means of release or disposal will be taken.

Comment: *On page 3-4 in the section entitled Drill Cuttings, it is stated, "In addition, soils will be screened for radiological contamination and will also be analyzed on-site using gamma spectroscopy." This paragraph should include a description of what radiological instrument will be used to screen this material. Also, please explain what values will be used to constitute radiologically contaminated soil.*

Response: The text has been modified to indicate that soils will be screened in the field for radiological contamination with typical radiation survey instrumentation (i.e., GM pancake probe, 100 cm² scintillation probe) as an indicator of gross levels of radiation. Volumetric soil samples will be counted using on-site gamma spectroscopy and will be compared to background volumetric soil sample concentrations. Background soil samples will be collected from non-impacted areas on the Guterl site or off-site.

Comment: *On page 3-4 in the section entitled Drill Cuttings, it is stated, "Radiological contaminated materials will be labeled in accordance with regulation and referred to the USACE for disposition." As stated earlier, the USACE has not agreed to perform any work at this site yet and to presume that they will take over any investigation-derived wastes from this remedial investigation is inappropriate.*

The USACE will not be responsible for any radioactive IDW. MACTEC should make adjustments in the work plan and budget to procure the services of a contractor licensed to characterize and dispose of all radioactive IDW, this would also include any source material found during the investigation.

Response: The text has been modified to indicate that drill cuttings will be stored until results from NYSDEC Bureau of Radiation are available and appropriate means of release or disposal will be taken.

Comments from the United States Army Corp of Engineers

General Comments:

Comment: *Regarding their plan to screen all phase 1 samples with an on-site gamma spectroscopy lab, specifically information in Appendix A (QAPP):*

a. Is NYSDEC attempting to determine the percent enrichment of uranium with on-site gamma spectroscopy? Note that this may be difficult (I) due to high detection limits for U-235, and that (ii) the U-235 concentrations may be over-reported via gamma spectroscopy due to interference from Ra-226. (A better, more definitive way to determine uranium enrichment may be to do isotopic uranium analysis followed by alpha spectroscopy, and compare U-234 and U-238 ratios.)

Response: No, on-site gamma spectroscopy is only being used to determine if samples are acceptable for an off-site laboratory that does not have a radioactive materials license for chemical analyses.

Comment: *b. Why are Co-60 and Cs-137 included in the results to be reported by the on-site gamma spectroscopy?*

Response: Numerous radionuclides will be evaluated by gamma spectroscopy, all for the purpose of releasing samples to an off-site laboratory that does not have a radioactive materials license for chemical analyses. This is not a radiological investigation and the results of the on-site gamma spectroscopy analyses will not be reported. NYSDEC Bureau of Radiation will be collecting samples from groundwater and soil sample locations with elevated radiation levels for off-site radiochemical analyses.

Comment: *c. What about Th-232, will any attempt to measure this important site-related radionuclide be made with the on-site gamma spectroscopy?*

Response: Th-232 will be evaluated by on-site gamma spectroscopy but only for the purpose of releasing samples to an off-site laboratory that does not have a radioactive materials license for chemical analyses. This is not a radiological investigation and the results of the on-site gamma spectroscopy analyses will not be reported. NYSDEC Bureau of Radiation will be collecting samples from groundwater and soil sample locations with elevated radiation levels for off-site radiochemical analyses.

Comment: *d. For water, the gamma spectroscopy detection limits may be too high to use as a screening tool for water samples. Could NYSDEC consider doing gross alpha and gross beta as a screen for radioactivity in water?*

Response: NYSDEC Bureau of Radiation will be collecting split samples

from groundwater for off-site radiochemical analyses.

Section 2.0:

Comment: *Page 1-19: Third paragraph - Line should read: " PCB (Aroclor 1248) was detected in that sample at 8.8 µg/l. "*

Response: The text has been modified to correct the misspelling.

Comment: *Page 1-21: Summary - Text states that the interiors of the Excise Area buildings need to be evaluated. MACTEC should inquire as to whether of "as built" drawings exist for the Excise Area buildings in question.*

Response: MACTEC has inquired as to the existence of "as built" drawings for the Excised Area buildings with little success. If the USACE has such drawings, MACTEC and NYSDEC would appreciate the opportunity to copy or review them.

Section 3.0:

Comment: *Section 3.4, Task 5, FS, media to be addressed: Will NYSDEC be addressing contamination on building surfaces?*

Response: No, this investigation is only evaluating soil and groundwater.

Tables :

Comment: *Table 3.1 - Surface soil samples need to be taken to a depth of two inches below ground surface excluding vegetative cover, for use in evaluating public health exposure. Surface soils samples need to be taken to a depth of six inches below ground surface for a fish and wildlife resources impact analysis. This would apply to the samples taken at both the landfill and excise areas.*

Response: MACTEC understands that NYSDOH typically advocates the collection of surface soil samples from 0-2" for the purpose of assessing potential impacts to human health. Further, for the purposes of remedial alternative analysis and design, soil samples collected from 0-6" provide a good basis for assessment of costs related to soil removal or treatment. MACTEC intends to collect 25% of surface soils from 0-2" and 75% from 0-6" to meet the various goals of the investigation. The text and tables have been modified to reflect this intent.