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October 25, 2017

Mr. Jason Wilson, Chief  
C/o Mrs. Brandi Little  
Governmental Hazardous Waste Branch Land Division  
Alabama Department of Environmental Management  
P.O. Box 301463  
Montgomery, Alabama 36130-1463

RE: Response to *ADEM Review and Comments: Corrective Measures Implementation Report, Baby Bains Gap Road Ranges, Ranges 23 and 25 East*, dated November 2016  
Fort McClellan, Calhoun County, Alabama  
Facility I.D. AL4 210 020 562

Dear Mr. Wilson:

On behalf of the McClellan Development Authority (MDA), Matrix Environmental Services, LLC (MES) is pleased to submit the Responses to ADEM's Review and Comments associated with the *Corrective Measures Implementation Report, Baby Bains Gap Road Ranges, Ranges 23 and 25 East*, dated September 2017 for your review.

Two hard copies and one electronic copy of the document have been provided to Ms. Brandi Little. Please contact me at (256) 847-0780 (Anniston) or (770) 594-0331 (Atlanta) should you have any questions or comments.

Sincerely,  
**MATRIX ENVIRONMENTAL SERVICES, LLC**

A handwritten signature in black ink that reads "Richard Satkin".

Richard Satkin, P.G  
McClellan Program Manager

CC: Mrs. Brandi Little, ADEM (two paper copies and one electronic copy)  
Mr. Robin Scott, MDA (transmittal letter only)  
Matrix Project Files

Attachment

## **Responses to ADEM Review and Comments dated September 15, 2017**

RE: Corrective Measures Implementation Report (CMIR) Baby Bains Gap Road Ranges, Ranges 23 and 25 East Fort McClellan, Alabama dated November 2016

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**Comment 1: List of Acronyms and Abbreviations.** *Please expand the list of acronyms to include and define CBMPP.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 2: Page 14, Section 2.6.** *This section states that 10% of the lead samples in Range 23 exceed the lead screening level of 400 mg/kg. However, the Corrective Measures Implementation Plan (CMIP) for this site states that 28% of the lead samples exceeded 400 mg/kg. Please clarify and revise the text accordingly.*

**Response:** Section 2.6 of the CMIP describes the analytical results presented in the Remedial Investigation (RI), Section 2.6 of the CMIR describes the actual sampling results from the remediation. The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 3: Page 15, Section 3.1.1.** *Please modify this section to include all four sediment removal locations. Also, please expand this section and Section 3.4.3 to include a discussion regarding the excavation of the sediment locations with metal exceedances.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 4: Page 18, Section 3.4.2.** *Please revise this section, as well as Sections 3.4.3, 4.5 and 4.6, to include a discussion regarding the delineation and excavation of the 50x50 foot grid located in Range 25.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 5: Page 19, Section 3.4.3.** *Please expand this section to include the order of excavation to used during soil removal (i.e. excavation performed from highest elevation to the lowest elevation and excavating from areas of high concentration to areas of low concentration).*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 6: Page 20, Section 3.4.3.** *The first sentence of this section only lists the lead screening level regarding the preliminary assessment samples. Please modify the text to also include the antimony screening level (3 mg/kg).*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

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**Comment 7:** Page 20, Section 3.4.4. *Please modify this section to state that the soil stockpiles were stabilized within their respective grids if they exceeded the toxicity characteristic for lead.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 8:** Page 24, Section 4.2.5. *Please clarify if a liner was used in the decontamination area.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 9:** Page 26, Section 4.4. *This section states that large logs were removed by others. Please clarify who removed the logs. Also, please discuss if the logs were removed from contaminated areas and how the logs were disposed.*

**Response:** Ranges 23 and 25 East were cleared under an MDA timber clearing contract prior to the commencement of remediation activities. The timber was cut as close to the ground surface as possible, the trees carried to a staging area, and transported to a mill for processing. All of the stumps were left in place until the commencement of remediation. Any stumps that were located in remediation grids were removed as part of the excavation, the soils were removed from the root ball, and the remaining stumps were either loaded out to the landfill as debris or left onsite. The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 10:** Page 28, Section 4.6. *This section states that EnviroMag Coarse at a ratio of 5% by weight was used during soil stabilization. However, Section 3.4.4 states that EnviroMag Coarse at a ratio of 3% by weight was used during stabilization. Please address.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 11:** Page 28, Section 4.6. *This section states that following treatment none of the soil cells had a toxicity characteristic leaching procedure (TCLP) leachate concentration greater than the applicable toxicity characteristic and no retreatment was required. However, MDA subsequently states that none of the stockpiles failed for any metal other than lead. Please clarify if MDA means that the stockpiles only failed for lead pre-treatment.*

**Response:** The statement in the text refers to the pre-treatment TCLP results for the four stockpiles that required treatment. The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 12:** Page 29, Section 4.7. *Please clarify if the dry decontamination soil was added to the stockpiles before or after soil stabilization and analysis.*

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**Response:** Dry decon dirt was added to adjacent stockpiles prior to characterization. The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 13: Page 30, Section 4.8.1.** *MDA states that the backfill soil analysis results were below EPA regional screening levels (RSL) for residential soil for all constituents except metals. Please expand this section to include a discussion regarding the comparison of the backfill metal lab results to the site-specific background screening levels.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 14: Page 37, Section 5.4.5.** *Please revise the table to include the initial setting for the x-ray fluorescence (XRF) readings before it was increased to 42%.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 15: Page 37, Section 6.0.** *Please revise the monitoring methods to state that confirmation samples were collected at the edges every 75 feet and that confirmation samples were collected from the bottom of the excavation every 2,500 square feet.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 16: Page 38, Section 7.0.** *MDA states that only laboratory analytical results were used to assess the final vertical and horizontal extents of the contaminated soils due to a correlation between the XRF and analytical samples. However, the CMIP specified that post-excavation vertical and horizontal extents would be analyzed using XRF screening. Please include this deviation from the CMIP in this section.*

**Response:** The text has been modified to reflect the comment. Please see attached replacement page(s).

**Comment 17: Page 38, Section 8.0.** *MDA states that land use control (LUC) requirements will include a restriction on the use of groundwater for any purpose other than environmental monitoring. However, Use Restrictions Section of environmental covenants (EC) FY17-.4.00 and FY15-01.00 for Range 23 and Range 25, respectively, do not include a groundwater use restriction. Please address.*

**Response:** The restriction of groundwater use included in Section 8.0 was included by error. The MDA does not intend to include a restriction for groundwater use on parcels that do not have contaminated groundwater. Ranges 23 and 25 East did not have any groundwater contamination. The text has been modified to reflect the comment. Please see attached replacement page(s).