

**VIA ELECTRONIC MAIL**

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Subject: Hercules Hattiesburg Facility – Hattiesburg, MS – Monthly Progress Report (May 2023)

USEPA Region IV, RCRA 3013(a) Administrative Order  
Docket # RCRA-04-2011-4251

USEPA Region IV, RCRA 3008(h) Administrative Order on Consent  
Docket # RCRA-04-2014-4201(b)

USEPA Region IV, CERCLA Administrative Settlement Agreement and Order on Consent  
Docket # 04-2023-2521

Dear Ms. Lloyd and Mr. Budeir:

This *Monthly Progress Report* summarizes the activities accomplished from May 1 through May 31, 2023, per the 2011 Resource Conservation and Recovery Act (RCRA) 3013(a) Administrative Order, the 2014 RCRA 3008(h) Administrative Order on Consent, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Administrative Settlement Agreement and Order on Consent (ASAOC) for the Remedial Investigation (RI)/Feasibility Study (FS) for the former Hercules LLC (Hercules) site in Hattiesburg, Mississippi, referred to herein as “the site.”

## **Tasks Initiated, Continued, or Completed during May 2023**

- Conducted the 2023 first semiannual monitoring event during the weeks of May 1 and May 8, 2023, including the scopes for the Restrictive Use Agreed Order (RUAO), Area #1, Area #2, Area #3, Poly Pale™ Area, Northeast Delineation, and Hattiesburg Formation monitoring programs, as agreed in the CERCLA ASAOC. In addition, the monitoring scope for Area #1 was expanded to include collection of groundwater samples

from additional monitoring wells to provide additional data in support of the vapor intrusion investigation for the residential area adjacent to the southeast portion of the site.

- Submitted the *Soil Vapor and Sewer Gas Investigation Work Plan* (SV/SGI Work Plan) on May 2, 2023, as requested by the USEPA to address concerns regarding the potential migration of vapors from groundwater along the pipe bedding of the sanitary sewer line into residences adjacent to the southeast portion of the site.
- Submitted the *2022 Second Semiannual Consolidated Monitoring Report* on May 3, 2023, summarizing the November 2022 sampling events for the RUAO, Area #1, Area #2, Area #3, Poly Pale™ Area, and Northeast Delineation monitoring programs.
- Participated in a virtual meeting with the U.S. Environmental Protection Agency (USEPA) and Mississippi Department of Environmental Quality (MDEQ) on May 5, 2023, to discuss the SV/SGI Work Plan (dated May 2, 2023) and next steps for the site investigation.
- Received a letter from USEPA on May 8, 2023, with comments on the SV/SGI Work Plan. The USEPA requested to add additional properties to the scope, along with collection of two soil gas samples and three groundwater samples from each property. As discussed during the May 5, 2023, conference call, the USEPA acknowledged that the sewer gas samples can be collected using Waterloo membrane sampler technology. The USEPA also requested additional information regarding the sewer abandonment/replacement project along Providence Street, development of a community engagement plan, inclusion of a Quality Assurance Project Plan, and screening of all constituents of potential interest for the site (e.g., volatile organic compounds, semivolatile organic compounds, metals, pesticides, polychlorinated biphenyls) against USEPA vapor intrusion screening levels.
- Arcadis provided technical information and support publications on May 8, 2023, regarding the Waterloo membrane sampler technology proposed for use for collection of the sewer gas samples.
- Submitted a *Response to Comment Letter* on May 10, 2023, to address USEPA's comments received on May 8, 2023, regarding the SV/SGI Work Plan (dated May 2, 2023).
- Submitted a *Vapor Intrusion Investigation Work Plan* (VII Work Plan) on May 15, 2023, incorporating USEPA's May 8, 2023 comments and Hercules' May 10, 2023 responses to those comments. The title of the original work plan (SV/SGI Work Plan) was modified (VII Work Plan) to reflect the changes in scope requested by the USEPA.
- Provided draft access agreement language to the USEPA for review on May 15, 2023. Subsequently, the USEPA provided an alternate draft access agreement template on May 22, 2023. The USEPA and Hercules subsequently collaborated on preparation of access agreement packages (including cover letter, access agreement and fact sheet) for the properties associated with the proposed vapor intrusion investigation.
- Received a letter from USEPA on May 20, 2023, providing comments on the VII Work Plan (dated May 15, 2023). The USEPA's comments required collection of groundwater and soil gas samples from each property in the investigation area, the inclusion of additional properties during the initial round of sampling, information on property owners to lead community engagement and procurement of access agreements, confirmation of collection of samples from sewer manholes, and submittal of a revised version of the work plan.
- Submitted the *Monthly Progress Report* for April 2023 to the USEPA and MDEQ on May 22, 2023.
- Participated in a virtual meeting with the USEPA and MDEQ on May 22, 2023, to discuss the May 15, 2023 VII Work Plan and next steps for the site investigation.
- Provided the requested property owner information to the USEPA on May 22, 2023, for community engagement and procurement of access agreements.

- Submitted a *Response to Comment Letter* on May 23, 2023, addressing USEPA's May 20, 2023 comments on the VII Work Plan (dated May 15, 2023), along with a revised VII Work Plan incorporating USEPA's May 20, 2023 comments and Hercules' responses to those comments.
- Received an email from USEPA with additional input for access agreements on May 24 and May 25, 2023. Subsequently, Hercules submitted a revised draft access agreement to USEPA for review on May 25, 2023, and following approval on content, access agreement packages were sent via overnight delivery to property owners for signatures during the week of May 29, 2023.
- Received an email from USEPA with additional input for the vapor intrusion investigation on May 26, 2023.
- Received a letter from USEPA on May 30, 2023, with comments on the revised VII Work Plan (dated May 23, 2023). USEPA's comments modified the scope to include collection of one soil gas sample and one groundwater sample from each property associated with the vapor intrusion investigation, asked for clarifications of field procedures and data evaluation steps to be added to the work plan, and requested submittal of a revised work plan. In addition, the agency requested to initiate field work by June 12, 2023.
- Continued with site maintenance activities (e.g., mowing, removal of vines and shrubs, coordination with the City of Hattiesburg to ensure the right-of-way outside the fence is also mowed).

## Challenges and/or Delays

- Preparation of the RI/FS Work Plan has been delayed due to the preparation of the SV/SGI and VII Work Plans, access agreement packages, and preparation for the field investigations. The development of the work plans for the vapor intrusion investigation, preparations for field work, frequent communications with the regulatory agencies, and procurement of access agreements were expedited as requested by the USEPA, with project resources dedicated to the completion of those activities.

## Tasks Planned for Next Three Months (June – August 2023)

- Obtain USEPA approval of the form of financial assurance submitted on January 6, 2023, pursuant to Section XXIV (Financial Assurance), paragraph 104, of the ASAO.
- Procure access agreements from property owners for the parcels associated with the vapor intrusion investigation within the southeast portion of the site.
- Finalize the *Vapor Intrusion Investigation Work Plan*. This submittal will incorporate the revisions and input received during review of the SV/SGI Work Plan (dated May 2, 2023), which was later modified as the VII Work Plan (dated May 15, 2023, and subsequently revised on May 23, 2023).
- Conduct the vapor intrusion investigation field work during the week of June 12, 2023, as requested by the USEPA.
- Share the results of the vapor intrusion investigation and participate in conference calls with the USEPA and MDEQ to discuss the next steps for the site.
- Initiate data evaluation and preparation of the 2023 *First Semiannual Consolidated Monitoring Report*, documenting the semiannual monitoring event conducted in May 2023, including the scopes for the RUAO, expanded Area #1 to support vapor intrusion investigation, Area #2, Area #3, Poly Pale™ Area, Northeast Delineation, and Hattiesburg Formation monitoring programs, as agreed in the CERCLA ASAO.
- Continue submission of ongoing USEPA Data Archival and ReTrieval electronic data deliverables.
- Continue preparation of the RI/FS Work Plan required in the CERCLA ASAO for submittal to the USEPA and MDEQ.

## Personnel and/or Project Changes

- None.

## Community Involvement

- None.

## USEPA/MDEQ Support Needed

- Review the *Final Dense Non-Aqueous Phase Liquid Supplemental Investigation Report* submitted on July 29, 2020, incorporating new data and addressing USEPA comments on the draft version.
- Review the *Supplemental Groundwater Investigation Report* submitted on September 25, 2020, summarizing the assessment data for groundwater quality delineation along property boundaries.
- Review the *Impoundment Basin and ET-10 Decommissioning Completion Report* submitted on April 28, 2021, summarizing the decommissioning activities completed in accordance with the *Revised Interim Measures Work Plan* (dated November 7, 2014) and the *Final Interim Measures Design Report* (dated March 17, 2015).
- Review the *Draft 1,4-Dioxane Treatment – Propane Biosparge Pilot Test Work Plan* submitted on May 27, 2021, describing the proposed methodology to assess an in-situ approach as a viable technology for treatment of 1,4-dioxane at the site.
- Review the *Remedial Design Work Plan – Sludge Pits* submitted on September 28, 2021, describing the selected remedy and associated data that will be used to inform remedial action for the sludge pit area.
- Review the *Poly Pale™ Area Pilot Test Completion Report* submitted on October 29, 2021, summarizing the results of the air sparge/soil vapor extraction pilot study and proposing the next steps for the Poly Pale™ Area.
- Review the *Response to Comments Letter* submitted on January 31, 2022, addressing the review comments provided by the USEPA on November 4, 2021, regarding the *Long-Term Groundwater Monitoring Optimization Plan* (dated April 28, 2021).
- Review the *2021 First Semiannual Consolidated Monitoring Report* submitted on March 11, 2022, summarizing the May 2021 sampling events for the RUAO, Area #1, Area #2, Poly Pale™ Area, Hattiesburg Formation, and Northeast Delineation (first quarterly event) monitoring programs and the September 2021 second quarterly event for the Northeast Delineation monitoring program.
- Review the *Response to Comments Letter* submitted on September 9, 2022, addressing the comments by the USEPA on the *Draft Baseline Risk Assessment Report*.
- Review the *Consolidated Monitoring Report* submitted on November 30, 2022, summarizing the November 2021 sampling events for the RUAO, Area #1, Area #2, Poly Pale™ Area, and Northeast Delineation (third quarterly sampling) monitoring programs. The document also summarizes the fourth quarterly sampling event completed in February 2022 for the Northeast Delineation monitoring program as well as the May 2022 sampling events for the RUAO, Area #1, Area #2, Poly Pale™ Area, Northeast Delineation, and Hattiesburg Formation monitoring programs. Furthermore, the document includes a summary of confirmatory sampling activities conducted in May 2022 to evaluate Delnav® (in the form of total dioxathion) concentrations in soil, sediment, and surface water at select locations.
- Review the *Previous Investigation Summary Report* and the *Conceptual Site Model Report* submitted on February 10, 2023. In accordance with the CERCLA ASAOC, review and approval of these documents from

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the USEPA and MDEQ is needed to develop the strategic approach for the preparation of the RI/FS Work Plan, incorporate the results of previous investigations into the objectives of the RI/FS activities, and outline the project specific requirements.

- Review the *Response to Request for Expedited Work Plan* submitted on March 28, 2023, in response to the request by the USEPA on March 21, 2023, to submit an Expedited Work Plan by April 4, 2023, to delineate the potential migration of constituents of interest in groundwater into the surrounding community from the southeast portion of the site.
- Participate in conference calls and/or meetings to continue discussions about next steps for the project.

The Hercules team appreciates your support with this project. If there are any questions concerning this submittal, please contact the Project Coordinator, Mr. Timothy Hassett, at 302-995-3456 or Mr. Corey Averill with Arcadis at 315-671-9224.

Sincerely,

Arcadis U.S., Inc.



Corey Averill  
Certified Project Manager

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