

2023 Environmental Cost Account (ECA) Budget Forecast for the Former Tronox/Kerr-McGee Chemical Facility in Madison, Illinois

Date Submitted: 12/21/22

Greenfield Environmental Multistate Trust LLC,

Trustee of Multistate Environmental Response Trust (Multistate Trust)

Exhibit I

Date Approved: 01/18/23

Submittal to: Illinois Environmental Protection Agency on December 21, 2022

Summary of Site Work Completed in 2022 and Planned for 2023:

Work Completed in 2022: Performed all planning, groundwater sampling and reporting (i.e., 2H 2021 Groundwater Monitoring Report, Annual CAE Report and the 1H 2022 Groundwater Monitoring Report) in accordance with the Hazardous Waste Management RCRA Post Closure Permit (RCRA Permit). Performed compliance monitoring and reporting for the Wastewater Discharge Permit. Performed O&M of the GRS, including cleanout of the biological aeration tank and blower replacement, mowing and site security, and HWMU PCC inspection. Completed the well survey in compliance with the RCRA Permit pursuant to Conditions IV.1.9 (i.e., site well elevations are to be surveyed at the top of the well casings, referenced to mean sea level, every 5 years). Completed field investigations associated with the implementation of the SWMU-5 Work Plan and submitted the SWMU-5 Investigation Report to Illinois EPA on June 24, 2022. Participated in calls with Illinois EPA to discuss next steps considering limited remaining ECA funds and utilized subject matter experts to provide on-call technical services to: (i) support evaluation of a biosparge curtain as a possible remedy, (ii) identify initial vapor intrusion mitigation systems (VIMS)-related steps (VIMS work plan, building surveys and diagnostic testing, VIMS design and associated costs), and (iii) based on identification of a potential new source area (i.e., potential former boiler house) at the property boundary, considerations for additional off-Facility investigations. Created an environmental database to support the development of a 3-D conceptual site model (CSM) to support work planning for a biosparge pilot test and future remedial alternatives analysis. Evaluated the existing groundwater ordinances for the City of Madison and the City of Venice and engaged in conversations with the County of Madison to implement a groundwater ordinance for the unincorporated portion of Madison County that is near the Facility. Prepared a draft Biosparge Treatability Study Work Plan and preliminary 3-D CSM using EVS. Supported preparation of Chapter 3.G (specific to the Site) of the Multistate Trust 2021 Annual Progress Report. Participated in strategic discussions the Illinois EPA and the United States to remove the Site from the "Critical Sites List".

Work Planned for 2023: Perform all planning, groundwater sampling and reporting (i.e., 2H 2022 Groundwater Monitoring Report, Annual CAE Report and the 1H 2023 Groundwater Monitoring Report) in accordance with the RCRA Permit. Perform compliance monitoring and reporting for the Wastewater Discharge Permit. Perform O&M of the GRS, mowing and site security, and perform the PCC inspections for the HWMU. Provide annual railroad training to staff as required to access groundwater monitoring wells located on railroad property and procure annual RPL insurance and flagging services necessary to complete the annual groundwater sampling. Prepare "permit" deconstruction matrix for the RCRA Post Closure Permit and complete final review the Sampling and Analysis Plan as part of the transition activities from the former Multistate Trust third-party contractor to the current contractor. Complete a boundary survey to resolve the discrepancy as related to the total acres owned by the Multistate Trust and to determine whether the additional property should be incorporated into the RCRA Permit. The budget includes costs to: (i) to respond to Illinois EPA comments, if any, on (1) the SWMU-5 Investigation Report and (2) Temporary and Permanent Groundwater Monitoring Well Installation, Sampling and Results Technical Memorandum; (ii) finalize the Biosparge Treatability Study Work Plan and submit to Illinois EPA for review and approval; (iii) respond to Illinois EPA comments, if any, on the Biosparge Treatability Study Work Plan and resubmit as necessary; (iv) prepare a cost estimate to implement the Biosparge Treatability Study based on the final approved work plan; (v) implement the Biosparge Treatability Study, including installation of wells, baseline sampling, pilot testing and associated reporting; (vi) prepare a VIMS Work Plan to evaluate the need for VIMS in up to fifteen homes; (vii) perform VIMS building surveys and diagnostic testing to evaluate building construction of up to fifteen homes; (viii) prepare a standard VIMS construction design for use at fifteen homes; and (ix) prepare a Biosparge Interim Remedial Action Plan (IRAP), including biosparge treatment design, construction drawings, description of remedial activities, schedule and design, and a plan for monitoring performance of the biosparge remedy. The budget also includes costs to (i) expand and update the 3D-CSM to incorporate an understanding of Site lithology and observations that have been documented through previous investigations and the biosparge treatability study; (ii) prepare a Class 2 cost estimate to implement biosparging as a remedy upon approval of the Biosparge IRAP; (iii) perform a property boundary survey (\$26,000 placeholder allowance [costs are split between the Administrative Account and the ECA]); (iv) provide subject matter expertise technical support to respond to questions that Illinois EPA may have regarding the RCRA Permit Renewal Application and/or other environmental actions (\$25,000 placeholder allowance); (v) prepare an updated sampling and analysis plan (\$50,000 placeholder allowance) to meet the requirements of the RCRA Permit; (vi) provide on-call technical support services, as needed, to support the Biosparge Treatability Study and Biosparge IRAP; and (vii) support attainment of groundwater ordinances. Support preparation of the Multistate Trust's 2022 Annual Progress Report (portion specific to the Site). Budget includes costs for ongoing discussions with the Illinois EPA and United States regarding the strategy to remove the Site from the "Critical Sites List".

Site Name: Former Tronox/Kerr-McGee Chemical Facility in Madison, Illinois (the Site)

Site Location: Madison, Illinois

Multistate Trust Site Code: VIII

Cost Center	Cost Center Description	Total 2022 Approved Budget	Project Costs incurred in 2022 (as of 9/30/2022)	2023 Budget	2023 Scope of Work
VIII.A	Regulatory Compliance and Site Operations/Maintenance	\$540,000	\$377,683	\$548,000	Budget includes costs to (i) perform all planning, groundwater sampling and reporting (i.e., 2H 2022 Groundwater Monitoring Report, Annual CAE Report and the 1H 2023 Groundwater Monitoring Report) in accordance with the RCRA Permit; (ii) perform compliance monitoring and reporting for the Wastewater Discharge Permit; (iii) O&M of the groundwater remediation system (GRS), mowing and site security, and perform the PCC inspections for the HWMU; (iv) provide annual railroad training to staff as required to access groundwater monitoring wells located on railroad property; (v) procure annual RPL insurance and flagging services required to complete the annual groundwater sampling; (vi) prepare "permit" deconstruction matrix for the RCRA Post Closure Permit; and (vii) complete final review the Sampling and Analysis Plan as part of the transition activities from the former Multistate Trust third-party contractor to the current contractor. Budget includes a placeholder allowance of \$50,000 for unplanned or emergency events. Utilities, laboratory charges and other routine O&M budgets have been estimated to account for potential rate adjustments due to inflation. The Multistate Trust will monitor actual costs incurred and impacts to the 2023 ECA budget and if necessary, submit a budget amendment.
VIII.C	New Environmental Actions	\$646,000	\$193,585	\$845,000	Budget includes costs to: (i) to respond to Illinois EPA comments, if any, on (1) the SWMU-5 Investigation Report and (2) Temporary and Permanent Groundwater Monitoring Well Installation, Sampling and Results Technical Memorandum; (ii) finalize the Biosparge Treatability Study Work Plan and submit to Illinois EPA for review and approval; (iii) respond to Illinois EPA comments, if any, on the Biosparge Treatability Study Work Plan, and resubmit as necessary; (iv) prepare a cost estimate to implement the Biosparge Treatability Study based on the final approved work plan; (v) implement the Biosparge Treatability Study, including installation of wells, baseline sampling, pilot testing and associated reporting; (vi) prepare a VIMS Work Plan to evaluate the need for VIMS in up to fifteen homes; (vii) perform VIMS building surveys and diagnostic testing to evaluate building construction of up to fifteen homes; (viii) prepare a standard VIMS construction design for use at fifteen homes; and (ix) prepare a Biosparge Interim Remedial Action Plan (IRAP), including biosparge treatment design, construction drawings, description of remedial activities, schedule and design, and a plan for monitoring performance of the biosparge remedy. The budget also includes costs to (i) expand and update the 3D-CSM to incorporate an understanding of site lithology and observations that have been documented through previous investigations and the biosparge treatability study; (ii) prepare a Class 2 cost estimate to implement biosparging as a remedy upon approval of the Biosparge IRAP; (iii) perform a property boundary survey (\$26,000 placeholder allowance [costs are split between the Administrative Account and the ECA]); (iv) provide SME technical support to respond to questions that Illinois EPA may have regarding the RCRA Permit Renewal Application and/or other environmental actions (\$25,000 placeholder allowance); (v) prepare an updated sampling and analysis plan (\$50,000 placeholder allowance) to meet the requirements of the RCRA Permit; (vi) provide on-call technical support services, as needed, to support the Biosparge Treatability Study and Biosparge IRAP; and (vii) support attainment of groundwater ordinances.
VIII.D	Technical Team/Project Management	\$142,000	\$79,191	\$196,000	Budget includes fees and expenses for providing project direction and oversight of technical elements of on-going and new Environmental Actions including Site strategy, technical oversight of environmental contractors, project controls, project communications, financial management, beneficiary communications, community involvement, quality assurance/quality control, contract management, and facilitation of future reuse and integration of the cleanup plans. Budget also includes fees for preparation of Multistate Trust 2022 Annual Progress Report. Budget also includes fees and expenses for developing the strategy to remove the site from the "Critical Sites List" and for participating in discussions with the Lead Agency and United States. ¹
VIII.E	Project Fees & Expenses	\$15,000	\$1,969	\$14,000	Budget includes Managing Principal time and expenses for: oversight and approval of technical strategy and Environmental Actions; beneficiary communications; support for beneficiary and community involvement; key stakeholder communications; policy matters; Settlement and Trust Agreement matters; redevelopment planning activities; and preparation of Multistate Trust 2022 Annual Progress Report. Budget also includes fees and expenses for developing the strategy to remove the site from the "Critical Sites List" and for participating in discussions with the Lead Agency and United States. ¹
VIII.F	Regulator Oversight Costs	\$0	\$0	\$0	Regulatory oversight costs for lead agency.
VIII.G	Legal Fees and Accounting Fees	\$39,000	\$17,742	\$50,000	Budget includes fees and expenses for in-house legal services required to support Environmental Actions, including the preparation and execution of contracts, SOWs, access agreements, and other legal affairs. Budget includes costs for financial services, including accounting, bookkeeping, financial reporting, invoice processing, budget preparation, and budget tracking. Budget also includes costs for legal and financial affairs support in preparation of Multistate Trust 2022 Annual Progress Report. Budget also includes fees and expenses for developing the strategy to remove the site from the "Critical Sites List" and for participating in discussions with the Lead Agency and United States. ¹
VIII.I	Lease & Property Use (Income & Costs)	\$0	\$0	\$0	Budget assumes no lease revenues in 2023.
VIII	Total Site 2023 Budget	\$1,382,000	\$670,170	\$1,653,000	
Total Former Tronox/Kerr-McGee Chemical Facility in Madison, Illinois Estimated Funding at Beginning of 2023 Budget Year*			\$3,643,000		Total funds allocated to the Site per Consent Decree and Environmental Settlement Agreement; less 2011 - 2021 actual and 2022 estimated costs; plus 2011 - 2021 actual and 2022 estimated investment activity and other receipts.
Estimated Remaining Funds (Post-2023)			\$1,990,000		Initial Funding (2/14/11): \$1,294,468 Anadarko Settlement Funds (2015 and 2016): \$6,797,145 Waterfall Distribution from Sale of Property: \$36,801

*This is a projection based on estimates and is subject to change once final costs have been received. Actual balances are presented in the quarterly distributed financial statements.

This Single Page Document Constitutes the Annual Budget Submitted to the Lead Agency under Section 3.2.4 of the Multistate Environmental Response Trust Agreement. Supplemental Worksheets, if any, Do Not Comprise a Portion of the Annual Budget.

Notes:

¹Subject to further consultation with its Lead Agencies and the United States, the Multistate Trust currently defines an Owned Funded Site (OFS) as a "Critical Site" if the OFS lacks sufficient Environmental Cost Account (ECA) funds to address one or more of the following criteria or conditions: (i) Known, uncontrolled, unacceptable or potentially unacceptable exposure of human and/or ecological receptors to OFS site contaminants; (ii) Uncontrolled migration of OFS contaminants off-site at concentrations that exceed applicable risk-based criteria; (iii) Unable to characterize the nature and extent of contamination to determine whether there is an unacceptable exposure of human health and the environment to OFS contamination, and to implement protective remedies; and (iv) Potential impacts to drinking water supplies, actual or likely direct human contact and sensitive socioeconomic impacts, including Environmental Justice communities and populations at risk, because the Multistate Trust endeavors to prioritize such OFSs.

Critical Sites need an infusion of funds sufficient to address the above criteria so that an OFSs is no longer classified as a Critical Site. Additional funds will likely be necessary to achieve regulatory closure. While many OFSs may lack sufficient funds to achieve final regulatory closure (including long-term stewardship), funding shortfalls in those cases can potentially be addressed by funding receipts from waterfalloff funds under the Settlement Agreement and Multistate Trust Agreement, interest income, the sale of property and/or the transfer of such responsibility to a successor to the Multistate Trust.