2023 Environmental Cost Account (ECA) Budget Forecast for the Former Kerr-McGee Titanium Dioxide Beneficiation Plant Site in Mobile, Alabama

Greenfield Environmental Multistate Trust LLC,

Trustee of Multistate Environmental Response Trust (Multistate Trust)

Submittal to: Alabama Department of Environmental Management on December 5, 2022 **Date Approved: 12/19/22**

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

Exhibit I

Work completed in 2022: fulfilling all regulatory compliance requirements (NPDES, LF Permit, NWP 38 and RML) including successful completion of both semi-annual LF permit compliance evaluation inspections and extensive 3-year RML sudit with no findings of non-compliance; operation and maintenance of the WWTP (including continued WWTP repair and upgrade evaluation); operation and maintenance of the French drain system and upkeep of groundwater monitoring infrastructure; management and repairs of fencing, roads, bulkhead, culverts, and other infrastructure to provide security and safe Site conditions and address erosion control weather-related impacts; routine groundwater monitoring, eporting, and compliance activities; completion of ACOE permitting (NWP 38) and offsite wetlands mitigation using a local mitigation bank facility, LF permit modification, and NPDES permit modification to allow for installation of the low ermeability hydraulic containment wall and in-place closure of the IOX impoundments (Parcel 2); construction of over 8,000 linear feet of cement-bentonite hydraulic containment wall to an average depth of 20' below land surface urrounding the IOX impoundments (Parcel 2); installation of 19 extraction wells within the IOX impoundments to provide for long-term capture of leachate beneath the IOX impoundments and to provide inward hydraulic gradient; evaluation of hydraulic control provided by the existing French drain system and new extraction well system; associated design, construction, and oversight of an approximate 2,250-linear foot interceptor trench structure to provide upplemental hydraulic control and maintain inward gradient behind the newly installed containment wall; preparation of an updated GWMP outlining the installation of nine replacement monitoring wells and twenty piezometers into the ite groundwater monitoring program and to be incorporated into the Site NPDES permit; additional geotechnical global stability modelling and design evaluation of stormwater control features and other value-added engineering elem he existing ADEM-approved 100% design for IOX impoundment closure; procurement and contracting for impoundment closure remedial construction (capping) and related activities including Engineer of Record (EOR) and Owner's Representative (OR); completion of Site-wide investigations to characterize nature and extent of NARM and chemical impacts in the former facility area (Parcel 1) and other areas on the property; development of an ADPH-approved temediation Plan for Parcel 1 (RPP1) and amendments of the Site RML No. 1501 to allow for remediation and exemption of all Site Radiation Management Areas (RMAs); preparation of an exhaustive Phase II ESA and risk assessment, as we is a voluntary cleanup plan and uniform environmental covenant (UEC) with soil management plan (SMP) to allow for chemical remediation of Site impacts under the ADEM Voluntary Cleanup Program (VCP); routine lead agency and takeholder communication including monthly written reports of Site activity, quarterly beneficiary reviews of Site activity and planned environmental actions, contractor retention requests and financial reporting, annual ECA budget preparation and routine financial submittals, and preparation of the Multistate Trust Annual Progress Report.

Work Planned for 2023: fulfilling all regulatory compliance requirements (NPDES, LF Permit, NWP 38, and RML); operating and maintaining the WWTP (including continued WWTP repairs and upgrades); French drain/interceptor rench/extraction well system operation and other facility activities; management and repairs to address weather related impacts or unanticipated maintenance needs; routine groundwater monitoring, reporting, and compliance activities; enewal of the NPDES permit and RML No. 1501; design of long-term leachate treatment system for construction; completion of procurement and contracting for a multi year (41-month) in-place impoundment/landfill closure and remedial construction as well as pre-construction deliverables; initiate Phase I of remedial construction for in-place closure of IOX landfill/impoundments; perform VCP (chemical) related site remediation and closure activities; perform NARM impacte naterial consolidation into the IOX impoundments; and perform final status surveys and RML termination activities to sequentially close NARM areas All of the 2023 construction-related remedial implementation and landfill capping/closure activities described herein have been competitively bid through an extensive RFP and procurement processes conducted in 2022.

Site Name: Former Kerr-McGee Titanium Dioxide Beneficiation Plant Site in Mobile, Alabama (the Site)

Date Submitted: 12/05/22

Total Site 2023

Estimated Remaining Funds (Post-2023)

Budget

Budget Year*

\$27,256,000

Total Former Kerr-McGee Titanium Dioxide Beneficiation Plant

Site in Mobile, Alabama Estimated Funding at Beginning of 2023

\$18,219,765

Site Location: Mobile, Alabama							
Multistate Trust Site Code: III							
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		
III.A	Regulatory Compliance and Site Operations/Maintenance	\$3,585,000	\$1,588,630	\$4,128,000	The 2023 budget for O&M covers ongoing and/or recurring activities including: WWTP operations and maintenance (labor, materials, supplies, equipment, utilities, chemicals, etc.); impoundment maintenance; erosion control measures; French drain and interceptor trench capture system O&M other Site O&M activities; utilities, materials/supplies, infrastructure safety improvements, security/fencing and equipment maintenance, repair and replacement; and road maintenance. The O&M budget also includes funds for non-recurring activities including: completion of permit applications and fees for minor modification of the Site's NPDES permit, NPDES permit renewal, potential SWF permit modification to support IOX impoundment closure design modifications, Voluntary Cleanup Program fees for review and recording of Uniform Environmental Covenant (UEC) with Soil Management Plan, implementation of ADEM-approved WWTP optimization upgrades (design and implementation); and large-scale maintenance and/or deferred maintenance projects (NPDES Outfall repair and improvements, clearing/grubbing areas of Site, etc.); and other O&M labor and associated direct expenses. Regulatory compliance activities include: NPDES/Landfill compliance groundwater monitoring; NPDES reporting; NARM license compliance (including Radiation Safety Officer); and Landfill permit compliance. (Note: Increased O&M costs relative to historical years are due to increased costs for WWTP chemicals (primarily caustic) and due to and anticipated increase in wastewater generation associated with landfill closure activities)		
III.C	New Environmental Actions	\$21,812,000	\$15,425,547	\$144,880,000	The 2023 budget for new environmental actions for the IOX impoundments includes completion of multi-year (41-month) landfill capping/closure activities as well as associated Engineer of Record (EOR) and Owner's Representative (OR) costs for construction project management and QA/QC. In addition, the 2023 budget for new environmental actions related to the former facility area includes: completion of site-wide remediation of NARM and chemical impacts in accordance with the ADPH-approved Remedial Plan for Parcel 1 (RPP1) and the ADEM-approved VCP cleanup plan. All of the 2023 construction-related remedial implementation and landfill capping/closure activities described herein have been competitively bid through an extensive RFP and procurement processes conducted in 2022. The 2023 budget also includes costs for RSO and consultant team activities to oversee, manage, and document remediation activities.		
III.D	Technical Team/Project Management	\$1,301,000	\$946,854	\$1,252,000	2023 ECA 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, and contract management. Budget also includes fees for preparation of Multistate Trust Annual Progress Report.		
III.E	Project Fees & Expenses	\$178,000	\$100,838	\$190,000	2023 ECA Budget includes Managing Principal time and expenses for: oversight and approval of technical strategy and Environmental Actions; beneficiary communications; support for beneficiary community involvement; key stakeholder communications; Settlement Agreement matters; budget submittals; redevelopment planning activities; and preparation of Multistate Trust Annual Progress Report.		
III.F	Regulatory Oversight	\$75,000	\$10,375	\$50,000	Placeholder estimate to reimburse ADEM for oversight costs based on historical costs incurred.		
III.G	Legal Fees and Accounting Fees	\$305,000	\$147,522	\$363,000	2023 ECA 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, work associated with deed restrictions and Site closure 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 Annual Progress Report.		
111.1	Lease & Property Use (Income & Costs)	\$0	\$0	\$0	Budget assumes no lease revenues in 2023.		

\$150,863,000

\$250,589,000

\$99,726,000

Anadarko Settlement Funds (2015 and 2016): \$271,885,808

Waterfall Distribution from Sale of Property: \$1,472,033

Initial Funding (2/14/11): \$21,587,129

Other Property Sales: \$15.025

2011 - 2021 actual and 2022 estimated investment activity and other receipts.

Total funds allocated to the Site per Consent Decree and Environmental Settlement Agreement; less 2011 - 2021 actual and 2022 estimated costs; plus