



Chemical Analysis for Acid Producing Dredged Material

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

The Buffalo District, USACE, contacted ERDC to help understand and decide on the appropriate chemical analyses needed for acid generating potential in rock material to be dredged. Additionally, they requested any information where ERDC has provided similar expertise and advise to other USACE Districts. The major effort under this DOTS response is guiding LRB to the appropriate analyses and providing geochemical input to their planning activities for their project.

Period of Performance:

ERDC support will be in the fourth quarter of FY22, approximately 1 July through 31 August.

Benefits of the Response to the USACE Dredging/Navigation Program:

Understanding the geochemistry and potential for acid generation by dredged materials is critical to proper placement and disposal of the materials. If acid generation is indeed a problem, then this effort will detect the future problem, allowing appropriate remedial activities (e.g. addition of lime) to be determined if acid generation does occur.

Deliverable:

The primary deliverable to LRB for this effort is effective communication on the appropriate analyses, and estimated costs for their target project. Geochemical description and understanding of the source materials, processing, and required chemical analyses (either in-house or through a subcontractor) for the success of the dredging project. Any analyses that are approved by LRB for this effort will be funded as a reimbursable to ERDC and not as part of this DOTS response..).



Providing environmental and engineering technical support to the U.S. Army Corps of Engineers
Operations and Maintenance navigation and dredging missions

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DOTS ID: DOTS-22-R13