

MEMORANDUM

TO: Richard Elliott/Austin Hofmeister
FROM: Carol Northern/Mary Ann Brookshire
DATE: October 28, 2020
SUBJECT: Monitoring Well Abandonment and Replacement Work Plan Addendum
Kerr-McGee Chemical Corp – Navassa Superfund Site

The Monitoring Well Abandonment and Replacement Work Plan dated August 2020 (the Work Plan) presents the technical approach for abandonment and reinstallation of groundwater monitoring wells at the Kerr-McGee Chemical Corp – Navassa Superfund Site (the Site) in Navassa, North Carolina. The Work Plan was approved by the Beneficiaries on August 20, 2020.

Replacement monitoring well MW-09R was drilled and installed the week of October 12, 2020. As described in the approved Work Plan, a sample of the shallow clay layer was collected and submitted to the geotechnical laboratory for grain size analysis using ASTM D422-63(2007) on October 15, 2020. The sample was collected from a dense clay layer which was observed at a depth of approximately 12 to 13 feet below ground surface (bgs). The soil sample from 10 to 12 feet was a clayey sand to sandy clay and the soils greater than 13 feet became gradually more sandy with depth.

The purpose of the originally proposed grain size analysis was to obtain information regarding the permeability of the clay layer to use in evaluating remedial technologies. However, based on visual observations of the field geologist, we do not believe that we can obtain/infer that information from a grain size analysis alone. Therefore, we recommend the following analyses be conducted:

- Sieve Analysis ASTM D1140 & D422
- Atterberg Limits ASTM 4318
- Moisture Content ASTM D2216
- Permeability ASTM D508
- Proctor

These additional tests can be conducted using the sample currently at the geotechnical laboratory.

References

EarthCon, 2020. Monitoring Well Abandonment and Replacement Work Plan, Kerr-McGee Chemical Corporation – Navassa Superfund Site, EarthCon Consultants of North Carolina, P.C., August 2020.