

MEMORANDUM

TO: Richard Elliott
FROM: Carol Northern/Mary Sorensen
DATE: July 8, 2020
SUBJECT: Draft PDS and Sediment Sampling Work Plan Addendum – OU3
Kerr-McGee Chemical Corp – Navassa Superfund Site

This addendum to the Draft Passive Diffusion and Sediment Sampling Work Plan – Operable Unit 3 (OU3) dated May 2020 presents the approach for obtaining thermal imaging data from OU3 at the Kerr-McGee Chemical Corp – Navassa Superfund Site (the Site) in Navassa, North Carolina. The objective of the survey is to collect thermal imagery to evaluate the presence or absence of temperature anomalies associated with groundwater upwelling. This imagery will be used to select additional PDS sampling locations.

The survey will be conducted by Ramboll US Corporation (Ramboll) using a small unmanned aerial system (uSAS) and Ramboll will analyze the data for the presence or absence of temperature anomalies potentially associated with groundwater intrusion. A Federal Aviation Administration (FAA)-certified remote pilot will conduct the survey. Prior to flight operations, Ramboll will ensure compliance with FAA guidelines (FAA; 14 CFR part 107). Ramboll will also complete any required additional notifications or authorizations to abide by airspace regulations and guidelines. The thermal mapping in OU3 will be conducted at nighttime and during low tide to reduce error in thermal measurements and analysis will be completed and communicated to the project team in a timely manner. The infrared data will be used to prepare a map of OU3 identifying areas of potential groundwater upwelling, if observed.

Field work will commence the week of July 13th, 2020 with a conclusion of field work by Friday, July 17th, and delivery of results to relevant parties by Friday, July 24th, 2020. The field activities will be conducted over a two-day period assuming favorable weather conditions. The field activities may be delayed if rain or strong winds are anticipated for this week. The thermal imaging map showing areas of groundwater upwelling will be available within approximately 10 business days from the date of collection.

Figure 1 shows the area of OU3 that will be the focus of the study. This includes the southern marsh area east of Navassa Road. There is also a small area west of Navassa Road that will be included in the drone survey as well.

Ramboll will conduct the work in accordance with company policies pertaining to COVID-19 and the site Health and Safety Plan. In addition, Ramboll will conduct a risk evaluation of the remotely

piloted flight prior to conducting operations according to Ramboll standard operation procedures for remote piloted flights.

References

EarthCon, 2020. Draft Passive Diffusion and Sediment Sampling Work Plan - Operable Unit 3, Kerr-McGee Chemical Corporation – Navassa Superfund Site, EarthCon Consultants of North Carolina, P.C., May 2020.

Figure 1: OU3 Proposed Thermal Imagery Flight Area

