Robins Air Force Base (AFB) Environmental Advisory Board (EAB) Updates

OPTIMIZED REMEDIATION CONTRACT – UPDATE

- Bhate Zapata LLC (BZJV) and Geosyntec Consultants, Inc. (Geosyntec) continue their efforts on the Optimized Remediation Contract (ORC) for Robins AFB. Highlights of select ongoing activities are provided below.

SWMU 62 (OT037)

SWMU 62 refers to a chlorinated solvent plume near the Third Street storm sewer in the central portion of Robins AFB. The definitive source for the groundwater contamination has not been identified. Previous remediation activities included the injection of permanganate, which is a chemical oxidant, primarily to address trichloroethene contamination. Under the ORC, the performance objective is to achieve remediation levels (RLs) in groundwater for the site-specific contaminants of concern (COCs). To assist in meeting this goal, BZJV is conducting a Supplemental Site Investigation (SSI) to gather information necessary to update delineation of the plume and design an optimized injection remedy to address remaining groundwater contamination. The field work associated with the SSI was completed in September 2021 with the installation of 20 temporary wells. Groundwater was sampled from each well and analyzed for permanganate in the field and volatile organic compounds (VOCs) in the laboratory. Results from the field analyses indicate that the permanganate previously injected has been consumed throughout the plume. This information will facilitate the use of alternative oxidants with the capacity to address each of the COCs for the site. Preliminary laboratory data provide useful information that define the VOC plume and the target treatment area. Once the laboratory data are validated, the results of the SSI will be used to optimize the remedy.

SWMU 28 (CG028)

SWMU 28 is associated with a release from the purge fluid recovery system at Building 45. The site was discovered when purge fluid was observed in an excavation near Building 45 in February 1990 during repairs to a fuel transfer valve. Subsequent remedial actions have been performed to remove light non-aqueous phase liquid (LNAPL) from the subsurface, which was as thick as 8 feet in some areas. While substantial reductions have been made, additional remediation are necessary to achieve RLs in groundwater. BZJV prepared an optimized Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP) detailing the proposed SSI activities, which include an extended high vacuum remediation (HVR) pilot study in areas where LNAPL exceeds 0.01 feet thick and a second pilot study to evaluate the effectiveness of Modified Fenton's Reagent (MFR) in an area where LNAPL has already been reduced to less than 0.01 feet thick. The Air Force and USACE have recently completed their review of the UFP-QAPP, and the document will be submitted to the Georgia Environmental Protection Division (GA EPD) for their review.

For more information regarding the EAB, please contact Ms. Laurel Cordell, Robins AFB EAB Manager, at (478) 327-9275 or laurel.cordell@us.af.mil or visit http://www.robinseab.org

Robins AFB EAB Updates (Cont'd…)

SWMUs 59 and 60 (CG501 and CG502)

SWMU 59 and SWMU 60 are both comprised of soil and groundwater contamination resulting from petroleum associated with two pipelines that parallel the western side of the main controlled taxiway. Source investigations in the 1990s concluded that fuel pipelines were the apparent source of fuel-related contamination; the actual release has not been positively identified at either SWMU. Remedial activities at the sites have included operation of an air sparge/soil vapor extraction (AS/SVE) system (from 2003 to 2012), followed by startup of a biosparge system in 2012. The biosparge system includes both vertical and horizontal wells, and it is currently active. Additionally, in-situ submerged oxygen curtain (iSOC®) wells are in operation to treat contamination in select areas of the site outside the zone of influence of the biosparge system.

The continued presence of COCs above RLs in the vicinity of the source areas at both SWMUs, combined with the observations from investigations in 2014 and 2018/2019, indicate that residual LNAPL remains in the source areas submerged below the groundwater table, and suggest that the observed residual LNAPL is an ongoing contributing source of COCs to the dissolved phase groundwater plumes. The AS/SVE and biosparge remedies have been effective within their zone of influence, but in the current configuration, the biosparge system is unlikely to achieve the RLs. To accelerate site remediation, a CAP Addendum was prepared recommending enhancements to the biosparge system, with biosparge system expansion to target treatment of residual LNAPL below the water table and dissolved phase COCs in the source areas adjacent to and beneath the taxiways at SWMUs 59 and 60. The expansion includes installation of two horizontal directional drilled (HDD) wells at SWMU 59 and two HDD wells at SWMU 60, each below Taxiway H, as well as eight vertical biosparge wells at each site. The CAP Addendum was approved by the GA EPD on 1 October 2021. Geosyntec is currently preparing a Remedial Design/Remedial Action Work Plan, which includes a detailed design for the system expansion.

EAB TRANSITIONS

- Ms. Debra Jones, an EAB member since February 2013, retired from her position as Executive Director of Keep Warner Robins Beautiful (KWRB) in February 2020, and she has decided to resign from the EAB. Her replacement at KWRB, Ms. Tiffany Bowen, has expressed an interest in becoming an EAB member. She completed an EAB Member Interest Form, the EAB Co-Chairs nominated her for membership, and the EAB members voted in favor of the nomination. Ms. Bowen will be introduced at a future meeting or in a future flyer.
- As a reminder, the EAB has positions available for new members. If you are aware of potential candidates who may be interested, please reach out to Ms. Laurel Cordell, EAB Manager (contact information below).

EAB MEETINGS

- The next EAB meeting is tentatively scheduled to be in-person on Thursday, 3 February 2022.

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