Entries for January 1-15, 2019

Market/Commercialization Information

COMBINED ANALYTICAL SERVICES CONTRACT REQUEST FOR INFORMATION (RFI)
U.S. Environmental Protection Agency, Washington, DC.
Federal Business Opportunities, Solicitation 68DQ0119R00031, 2019

U.S. EPA is issuing the RFI to gather industry input on the forthcoming Statements of Work (SOWs) for the Combined Analytical Services Contract (CASC) and the interest and capability of potential offers. The RFP will include two statements of work: (1) 2020 (SOW 2020) and (2021 and 2022) (SOW 2021/2022). The objective of the CASC is to increase efficiency and reduce costs for the Agency by providing analytical services in a single contract. [Note: It might be necessary to copy and paste the URL into your browser for direct access]. Responses to the questions are due by 4:00 PM ET on March 1, 2019.

DECOMMISSIONING SERVICES REQUIREMENTS IDIQ
DNHS, NHP, Office of Research Facilities/Office of Affiliates, Bethesda, MD.
Federal Business Opportunities, Solicitation NHD01519S00004, 2019

This solicitation is set aside for woman-owned small business concerns, NAICS code 521291. Primary services anticipated under the resultant IDIQs include environmental feasibility assessment, site characterization, and decommissioning. The potential Offeror must be prepared to respond to a potential requirement up to five years. The maximum contract period is 5 years with an option to extend the contract period by 2 years. The maximum per year contract award will be $25,000,000. Offerors are reminded that all Federal regulations and other governing laws and regulations at the time this solicitation is released, as well as any other relevant laws or regulations that may be identified, may be required to be followed by the Offeror in order to support the decommissioning project. Proposals are due by noon ET on March 15, 2019. There is no incumbent contractor. [Note: It might be necessary to copy and paste the URL into your browser for direct access].

HANFORD TANK CLOSURE CONTRACT (TCC) PROCUREMENT
U.S. Department of Energy, Hanford Site Operations, Richland, WA.
Federal Business Opportunities, Solicitation FHAN-19-15, 2019

This procurement is a 100% full and open competition under NAICS code 236220 (Environmental Remediation Services), small business size standard 270 employees. The TCC contractor will provide services to conduct safe, compliant, and efficient decommissioning of the high-level waste and low-level waste tanks at the Hanford Site. Critical success factors include construction of tank closure systems that provide the required environmental and safety performance. U.S. DOE’s Hanford Tank Closure Contract number HW45151901006. This procurement is anticipated to be a single-source contract. Proposals are due by 4:00 PM ET on March 18, 2019. U.S. DOE’s Hanford Tank Closure Contract number HW451514-034-R0911 (Sealeaf Environmental Services LLC) for similar services awarded in 2016, 6 months remaining: [Note: It might be necessary to copy and paste the URL into your browser for direct access].

USACE MEGA. TULSA DISTRICT RFP FOR ENVIRONMENTAL REMEDIATION SERVICES
Department of the Army, U.S. Army Corps of Engineers, Tulsa, OK.
Federal Business Opportunities, Solicitation W1688919R0032, 2019

This procurement is to be awarded on a 100% small business set-aside as part of the U.S. Army Corps of Engineers Northwest, Southwest, and South Pacific divisional Multiple Environmental Remedy Acquisition (MEAR) Plan. Release of the solicitation is anticipated around February 21, 2019, on FedBiz. The USACE Tulsa District intends to award a fixed-price, indefinite-delivery Multiple Award Task Order Contract (MA-TOC) to provide environmental remediation services to install and monitor containment systems to prevent contamination from pollutants, toxic substances, radioactive materials, hazardous materials, and explosives of concern, and munitions contaminants. Offeror due by 10:00 AM Central Time on April 8, 2019: [Note: It might be necessary to copy and paste the URL into your browser for direct access].

Cleanup News

COMBINING PERSULFATE, IN SITU FERTILIZER GENERATION AND ENHANCED BIOREMEDIATION FOR SAFER, MORE EFFECTIVE REMEDIAL ACTIONS
Proceedings of the Geothermal Resources Council, 49th Annual Meeting, 2019

Persulfate is a pro-mixed, redox-controlling sodium persulfate, liquid oxide, and buffer that can be used in aqueous samples for sensitive and selective in situ detection of the nitrate ion, with sensor functionality confirmed by detection of nitrate at concentrations below 30 ppm. This work describes the potential for combining persulfate with fertilizer generation to support microbial remediation. This approach has the potential to be a powerful enhancement of the in situ biological processes, by providing the necessary nutrients for microbial growth. Additional benefits include the potential to ensure long-term sustainability by reducing the dependency on external supplies of nutrients.

SUCCESSFUL CLOSURE OF A DNAPL SITE: LESSONS LEARNED
Cox, C.

A successful closure of a DNAPL site is a benchmark industrial practice that can help remediate complex problems, including groundwater contamination. This presentation highlights key lessons learned from the remediation of a DNAPL site in California. The site was remediated using a combination of in situ thermal technologies to mitigate source zone impacts. The key takeaway is to ensure that thermal injection is properly managed and monitored to ensure that the desired outcomes are achieved. This presentation is intended for professionals involved in the remediation of complex problems.

COASTAL ENVIRONMENTAL PROJECTS PRGiCE PROGRESS REPORT, TRAPPEPORT ATLANTIC, SPARRING POINTS, MARYLAND
Maryland Department of the Environment, Baltimore, MD.

Operational information and monitoring data collected over the full year of 2017 are presented for interim measures (IM) initiated to address active hydrocarbons in the former Cake Oven (CO) coastal area from pre-1965. The work was completed within the timeframe initially anticipated. The site is located near the base of the Patuxent River in Maryland. The CO is an aesthetic value extension of the Potomac estuary. The goal is to provide clean and contaminant-free water to support human uses and the Potomac Estuary. This presentation will provide an overview of the project's progress and highlight the challenges and lessons learned. [Note: It might be necessary to copy and paste the URL into your browser for direct access].

PERFORMANCE MONITORING IN CLAY TILL THREE YEARS AFTER FULL-SCALE ZVI TREATMENT WITH DPT JET INJECTION
5th International Conference on Superfund Remediation, May 2018

This study presents the results of a three-year performance monitoring study following full-scale ZVI treatment with DPT jet injection at the R Waiting Site in France. The study evaluated the effectiveness of ZVI treatment in a clay till formation and provided valuable insights into the treatment's performance over time. The results highlighted the importance of continuous monitoring to assess the treatment's long-term efficacy. [Note: It might be necessary to copy and paste the URL into your browser for direct access].

GAS THERMAL REMEDIATION OF AN ORGANIC CONTAMINATED SITE: FIELD TRIAL
Zhao, T., J. Wang, Y. Cai, X. Zhang, and H. Cao.
Biosciences and Health Research, 2018

This study presents the results of a field trial evaluating the effectiveness of gas thermal remediation to remediate an organic contaminated site. The study investigated the performance of the gas thermal remediation system and provided valuable insights into its effectiveness in real-world conditions. The results highlighted the importance of continuous monitoring to assess the treatment’s performance over time. The results also provided valuable information on the treatment’s potential for real-world applications. [Note: It might be necessary to copy and paste the URL into your browser for direct access].

DEMONSTRATION OF RECENT ADVANCEMENTS IN THE USE OF NANOFLUIDS IN BIOREMEDIATION
Koerner, C.A.
Presented at the 4th International Conference on Innovative Remediation Technologies, June 2018

This presentation highlights recent advancements in the use of nanofluids in bioremediation. The study evaluated the effectiveness of using nanofluids to enhance bioremediation processes. The results highlighted the importance of continuous monitoring to assess the treatment’s performance over time. The results also provided valuable information on the treatment’s potential for real-world applications. [Note: It might be necessary to copy and paste the URL into your browser for direct access].

DEMONSTRATIONS / FEASIBILITY STUDIES

A PILOT-SCALE FIELD STUDY: IN SITU TREATMENT OF PCB-IMPACTED SEDIMENTS WITH BIOAMENDED ACTIVATED CARBON
Environmental Science & Technology [publication online 30 Jan 2019 prior to print]

A pilot-scale demonstration for carbon remediation over 40 days on PCB-impacted sediments in four 400-m² plots located in a saltmarsh ecosystem pond. Treatments with activated carbon (AC) bioremediated with PCB-dechlorinating and oxidizing bacteria reduced the PCB concentration by 80% within 40 days. The results demonstrate the potential for AC bioremediation to be an effective and environmentally friendly method for the remediation of PCB-impacted sediments.

EXPOSURE OF DRUGS AND TOXIC CHEMICALS TO INHABITANTS OF A CARIBBEAN FISHING VILLAGE
Environmental Science & Technology [publication online 6 Jan 2019 prior to print]

The exposure of drugs and toxic chemicals to inhabitants of a Caribbean fishing village was investigated. The study evaluated the potential health risks associated with exposure to these chemicals and provided valuable insights into the importance of monitoring such exposure to protect public health.

EXPOSING THE FUTURE GENERATION TO ENVIRONMENTAL TOXICS: A REVIEW OF THE AIR-INDOOR CONNECTION
Marr, J.
Journal of Exposure Science & Environmental Epidemiology [publication online 6 Jan 2019 prior to print]

This review presents an overview of the exposure of the future generation to environmental toxins. The study evaluated the potential health risks associated with exposure to these chemicals and provided valuable insights into the importance of monitoring such exposure to protect future generations.

Research

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PER- AND POLYFLUOROALKYL SUBSTANCES IN SOURCE AND TREATED DRINKING WATERS OF THE UNITED STATES

Scientists from the United States Geological Survey and collaborating researchers studied the occurrence of per- and polyfluoroalkyl substances (PFAS) in drinking water across the United States. PFAS were quantitatively detected in all 50 samples, with summed concentrations of the 17 PFAS ranging from 0.34 to 1,310 ng/L.

UNMANNED LIDAR FOR LEGACY MANAGEMENT

Scientists from the U.S. Environmental Protection Agency (EPA) used unmanned aerial systems (UAS) to survey a site of legacy management activities in Colorado. The UAS were used to create high-resolution digital elevation models and orthophotos to support site characterization and environmental monitoring.

EVALUATING GROUNDWATER AND CONTAMINANT FLUX USING PASSIVE FLUX METERS

Researchers from the U.S. Environmental Protection Agency (EPA) evaluated the use of passive flux meters (PFMs) to measure contaminant flux in groundwater environments. The study found that PFMs can effectively measure flux rates and provide valuable information for site characterization and remediation planning.

DEVELOPMENT OF A PASSIVE FLUX METER APPROACH TO QUANTIFYING 1,4-DIOXANE MASS FLUX

A new approach to quantify 1,4-dioxane mass flux was developed using passive flux meters. The study found that the approach can provide a rapid and cost-effective method for quantifying 1,4-dioxane flux in groundwater environments.

DATA REVIEW AND VALIDATION GUIDELINES FOR PERFLUOROALKYL SUBSTANCES (PFAS) ANALYZED USING EPA METHOD 537

Scientists from the EPA developed guidelines for the review and validation of analytical data generated for perfluoroalkyl substances (PFAS) using EPA Method 537. The guidelines provide recommendations for data review and validation to ensure the quality and accuracy of PFAS analytical data.

ENGINEERING TOOLS FOR ENVIRONMENTAL RISK MANAGEMENT: 4. RISK REDUCTION TECHNOLOGIES AND CASE STUDIES

This chapter discusses risk reduction technologies and case studies in environmental risk management. It covers topics such as remediation technologies, risk assessment, and case studies from various industries and regions.

The 34th ANNUAL INTERNATIONAL CONFERENCE ON SOILS, SEDIMENTS, WATER, AND ENERGY, 15-18 OCTOBER 2018, UNIVERSITY OF MASSACHUSETTS AT AMHERST: ABSTRACT BOOK

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clu-in.org/newsletters
Over the past 23 years this conference has evolved from a meeting about underground storage tanks into one of the premier environmental conferences in the United States, attended annually by 600-800 individuals from a wide variety of disciplines, including state and federal agencies, military, industry, utilities, environmental consulting, and academia. International participation has continued to expand. Topics encompass emerging contaminants, remediation case studies, health risks, vapor intrusion, issues in environmental security, sediments, brownfields, sustainable remediation, and decision support tools.


The Technology Innovation News Survey welcomes your comments and suggestions, as well as information about errors for correction. Please contact Michael Adam of the U.S. EPA Office of Superfund Remediation and Technology Innovation at adam.michael@epa.gov or (703) 603-9915 with any comments, suggestions, or corrections.

Mention of non-EPA documents, presentations, or papers does not constitute a U.S. EPA endorsement of their contents, only an acknowledgment that they exist and may be relevant to the Technology Innovation News Survey audience.