PERF Proposal
PFAS and NAPL Considerations for Oil and Gas

Stephanie Fiorenza, Jacobs and Mitch Olson, Colorado State University

- **Strategic Fit:** NAPL is commonly found at oil and gas facilities. Its interaction with PFAS are complex and can impact existing remediation processes.

- **Program Goal:** Identify fate and transport of PFAS in NAPL-impacted soil in columns simulating two remediation processes.

- **Value Proposition:** Minimize liability and improve decision-making by understanding the potential of NAPL to store PFAS, how PFAS might impact NSZD and for remediation systems such as air sparging might affect its fate.

- **Brief Program Description and Expected Deliverables :** Column studies using petroleum NAPL-impacted materials from sponsor sites will be conducted. PFAS will be applied to the columns (either an idealized mixture of PFAS or actual AFFF) containing unsaturated and saturated zones. Remediation treatments will be compared through periodic collection of effluent and destructive analysis of the soil upon conclusion of the experiment.

- **Deliverable(s)**: Regular online presentation(s) to project team to document progress and obtain input; final report; publishable paper ideally

- **Total estimated budget**: it will depend on number of replicate columns, treatments, analyses selected and frequency of sampling decided upon by project team. It could range from $35K to$ 60K or greater and can be developed during scoping discussions.