Dear Interested Parties:

**EXPRESSION OF INTEREST FOR BLANKET MASTER AGREEMENT**

“Human Health & Environmental Risk Assessment & Modeling”

**INTRODUCTION:**
Washington River Protection Solutions, LLC (WRPS) as a prime contractor to the U.S. Department of Energy (DOE) is issuing this request for Expression of Interest (EOI) as a means of conducting market research to identify parties having an interest in and the resources to demonstrate capability to perform human health and environmental risk assessment and performance assessment modeling and documentation.

**BACKGROUND:**
The Hanford Tank Farms include 149 single-shell tanks (SST) and the ancillary equipment associated with these tanks. Waste is currently being removed from individual SSTs. Once waste removal is complete, closure of the SSTs will occur. The removed waste will be processed into final waste forms, some of which will be disposed of on the Hanford site. Human health and environmental risk assessments/performance assessments (PAs) are required to support evaluation of the long-term impact of closed facilities, including tank farms and waste disposal facilities.

**SCOPE:**
WRPS is responsible for developing the PAs for closure of tank farm waste management areas, as well as the PA for the Integrated Disposal Facility. Hanford Federal Facilities Agreement and Consent Order (HFFACO, also known as the Tri-Party Agreement) Appendix I summarizes the role of a PA to meet Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requirements for tank farm closure. DOE Order 435.1 requires a PA for the development of disposal authorizations, closure plans and other decision documents. A PA will be required for the RCRA permit modification to operate the Integrated Disposal Facility (IDF).

Development of a PA includes compilation of technical input data, development of conceptual models describing a site or facility, development of numeric models that represent the conceptual, and operation of the numeric models. The output of the PA can be used to estimate the future impacts of various facility closure configurations on the environment, and potential for future exposure.

**TIMEFRAME:**
WRPS anticipates the duration of the work scope above to begin on October 1, 2020 and run through Fiscal Year 2021 with four option years (FY22, FY23, FY24, and FY25)

**Subcontract Type:** Time and Materials
PROCESS DESCRIPTION:
The scope of work will include four components:

1. **Data Packages and PA Input**
   Support the development of data packages that provide the inputs, assumptions and approaches associated with PAs for tank farm waste management area closure. These tasks may include:
   - Compiling and documenting input data, developing technical papers and presentations, attending workshops with regulators and stakeholders, & addressing technical questions
   - Processing and depicting environmental data using industry-standard, informative, systematic, & reproducible techniques
   - Interpreting data to define vadose zone and groundwater hydraulic and transport modeling parameters

2. **PA Modeling**
   Perform numeric modeling required for PAs for tank farm waste management area closure and for the IDF. A portion of the modeling will be performed using the Subsurface Transport over Multiple Phases (STOMP) software that is currently configuration managed by DOE prime contractor CH2M HILL Plateau Remediation Company. Other software may be obtained, qualified to meet the governing quality assurance requirements, and used as appropriate. Modeling may include performing vadose zone and groundwater contaminant fate and transport analyses, performing risk analyses (human health, ecological, and groundwater protection), developing system models using GoldSim or other appropriate software, and conducting model sensitivity, calibration, and uncertainty analyses. The modeling activities include performing configuration management of the models and model applications.

3. **PA Documentation**
   Provide documentation of the PA modeling activities. These tasks may include writing sections of PA documents as required by the HFFACO or DOE Order 435.1, reviewing sections written by others, integrating technical documentation from several sources, developing summary documentation and presentations on PA model runs and results. Documentation includes preparation of graphics, figures, tables, and other data presentation forms. Documentation includes presentation and reporting products to describe the data, methods, and techniques used to perform the technical analyses. The documentation activities include performing configuration management of all documentation covered in the contract tasks.

4. **PA Technical Support**
   Provide technical support to specific PA modeling related activities, including review of material, communication support, and resolution of comments. Other tasks may include the following:
   - Develop tools and visualization products for environmental measurements, solid models, & numerical models
   - Provide training and knowledge transfer on application of the calculation methods and codes and on the use of the models

Page 2 of 5
TECHNICAL CRITERIA:
This is a project will have work performed under a Blanket Master Agreement (BMA) with separate Subcontract Releases being issued for specific work. The Releases would have specific information on the services to be performed. The following technical areas of “personnel and qualifications,” “NAICS code,” “quality assurance,” and “expression of interest submittals” provide more information on the scope of work.

Personnel and Qualifications:

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Scientist or Lead Engineer</td>
<td>• Must have an Bachelors in an Engineering or Science field</td>
</tr>
<tr>
<td></td>
<td>• Must have had a minimum of 10 years of experience personally performing or leading teams of individuals in risk assessment and PA modeling</td>
</tr>
<tr>
<td></td>
<td>• Experience working with regulators, including the Washington State Department of Ecology, is required</td>
</tr>
<tr>
<td>Responsibility: Lead on a task</td>
<td></td>
</tr>
<tr>
<td>Technical Project Manager</td>
<td>• Must have a degree in an appropriate discipline</td>
</tr>
<tr>
<td></td>
<td>(such as environmental science, geology / hydrogeology, geochemistry, engineering, and related disciplines) or the equivalent combination of education and experience</td>
</tr>
<tr>
<td>Responsibility: Organizing and Implementing each task</td>
<td>• Must have had a minimum of 10 years of experience personally managing multi-disciplinary teams of individuals in analysis of complex waste sites in arid environments</td>
</tr>
<tr>
<td>Technical Support Staff</td>
<td>• An established record for working with regulators, including the Washington State Department of Ecology, is required</td>
</tr>
<tr>
<td>Note: Quality assurance and configuration management expertise will be required for many tasks</td>
<td></td>
</tr>
<tr>
<td>Additional Technical and Support Staff</td>
<td>• Must have appropriate degree and expertise</td>
</tr>
<tr>
<td></td>
<td>○ For example: environmental science, geology/hydrogeology, geochemistry, engineering and related disciplines</td>
</tr>
<tr>
<td></td>
<td>• Excellent verbal and written communication skills are necessary</td>
</tr>
</tbody>
</table>
NAICS Code:
North American Industry Classification System (NAICS) Code applicable to this work:
- 541620 – *Environmental Consulting Services*, standard size classification for determining if potential offeror is a small business is $16.5 million

Quality Assurance:
The following ASME NQA-1 requirements apply to this scope of work:
- NQA-1 Part 1
  1. **Requirement 1: Organization** (100 Basic, 200 Structure and Responsibly, 300 Interface Control)
  2. **Requirement 2: Quality Assurance Program** (100 Basic, 200 Indoctrination and Training, 300 Qualification Requirements, and 500 records)
  3. **Requirement 3: Design Control** (100 Basic, 200 Design Input, 500 Design Verification, 600 Change Control, 900 Documentation and Records)
  4. **Requirement 5: Instruction Procedures and Drawings** (100 Basic)
  5. **Requirement 6: Document Control** (100 Basic, 200 Document Control, 300 Document Changes)
    - **Requirement 11: Test Control** (400 Computer Program Test Procedures, 500 Test Results, and 600 Test Records)
    - **Requirement 16: Corrective Action** (100 Basic)
    - **Requirement 17: Quality Assurance Records** (100 Basic, 200 Generation of Records, 500 Receipt Control of Records, 700 Retention)
    - **Requirement 18: Audits** (100 Basic)
- NQA-1 Part 2 (Subparts)

*Note:* The supplier Quality Assurance program is not required to be compliant to NQA-1 and can be based on another nationally recognized standard as long as it adequately addresses the following requirements drawn from NQA-1, 2008 + 1a 2009 addenda:
- Requirement 1, All
- Requirement 2, 100 a & b, 200, 300 (except: 301 - "UT, ET, NR, AE", 303, 304, and 305), & 500 (except last sentence)
- Requirement 3, 100, 200, 500 (except "501c" and 501.3), 600 (except all 601), & 900
- Requirement 5, All
- Requirement 6, All
- Part II, Subpart 2.7, All (except 300 (exclude 402, 601))
Expression of Interest Submittals:
Interested firms are invited to submit an expression of interest letter to include a response to the following:

1. Statement of company’s interest to participate
2. General description of capability and experience to perform human health and environmental risk assessment and performance assessment modeling and documentation
3. Company point of contact with email address, phone number, and company mailing address
4. Potential offeror chosen to participate in the bidding process will be evaluated at a minimum to the quality assurance requirements identified in above Quality Assurance section.
   a. Please provide statement of what quality assurance program your company follows
   b. Please provide the table of contents from your company’s Quality Assurance Program
5. Acknowledgement that at the time of proposal key personnel will be identified and evidence of competency, related experience, availability, and pertinent education will be provided through resumes and other documentation.
6. Acknowledgement that training records are maintained and can be submitted

Potential offeror will need to be current registration within the federal System for Award Management (SAM) with current representations and certifications information. In addition, potential offeror will need to be registered with WRPS through its vendor registration website and have obtained a vendor identification number and form number (password). If assistance is required, please contact WRPS Contract Support at WRPS_Procurement@rl.gov.

REQUEST
Response to this EOI is required to be considered for any forthcoming procurements related to this EOI. WRPS reserves the right to use information submitted by, or obtained from, a potential offeror in a manner WRPS determines is appropriate including, but not limited to, the creation of a competitive solicitation based on submitted responses. WRPS may choose to open discussion with one or more companies submitting an EOI. WRPS will use these responses to identify viable suppliers to work with on this project.

Technical questions must be received via email to krisheena_d_stajduhar@rl.gov no later than June 30, 2020 by 1:00pm (PST).

This is not a request for proposal but a request for expression of interest. WRPS will not award a contract(s) based on this expression of interest nor pay of information solicited. Expression of interest letters must be received via email to krisheena_d_stajduhar@rl.gov no later than July 14, 2020 by 4:00pm (PST).