

# Expression of Interest Design of Sample Preparation Laboratory

## I. SCOPE

Battelle Energy Alliance, LLC (BEA), Management & Operating Contractor of the U.S. Department of Energy (DOE) owned Idaho National Laboratory (INL), is seeking an Expression of Interest (EOI) from prospective offerors to provide the preliminary and final designs of the Sample Preparation Laboratory at the INL. The designs shall be consistent with the requirements of DOE Order 413.3B, "Program and Project Management for the Acquisition of Capital Assets" and DOE-STD-1189-2008, "Integration of Safety into the Design Process."

The proposed SPL will be constructed at the Materials and Fuels Complex (MFC) on the INL Site located approximately 50 miles west of Idaho Falls, Idaho. This facility will be a Hazard Category 3 nuclear facility that will perform the following functions:

- Hot cell operations including receipt of irradiated material, sizing of the irradiated material, and preparation of metallurgical samples from the sized material.
- Mechanical testing of samples in a shielded hot cell.
- Micro-examination of samples in both shielded and non-shielded enclosures using sensitive instruments such as scanning electron microscopes and transmission electron microscopes.

SPL is envisioned to be a three story structure, providing approximately 44,000 sq. ft. of laboratory and office space. The first floor plan and a section view of the facility from the conceptual design are provided in Figures 1 and 2 below.

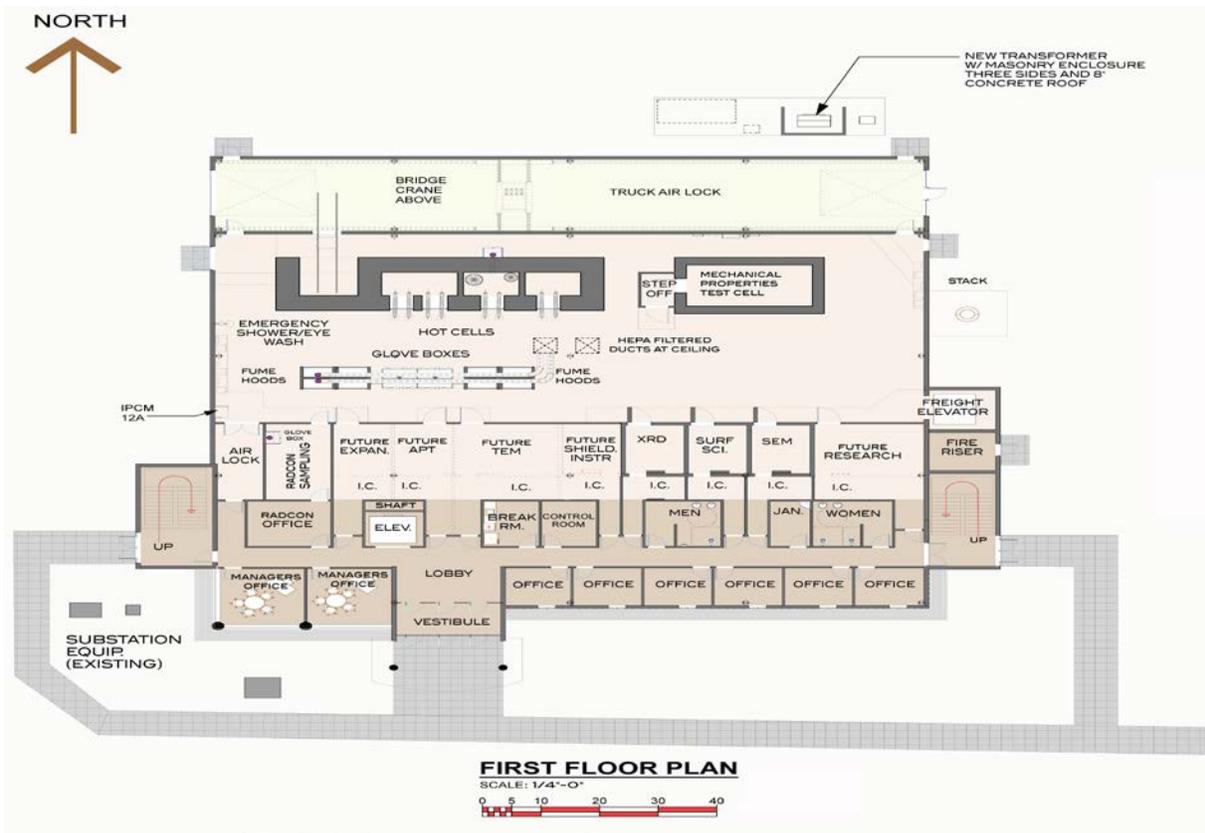


Figure 1. SPL First Floor Plan

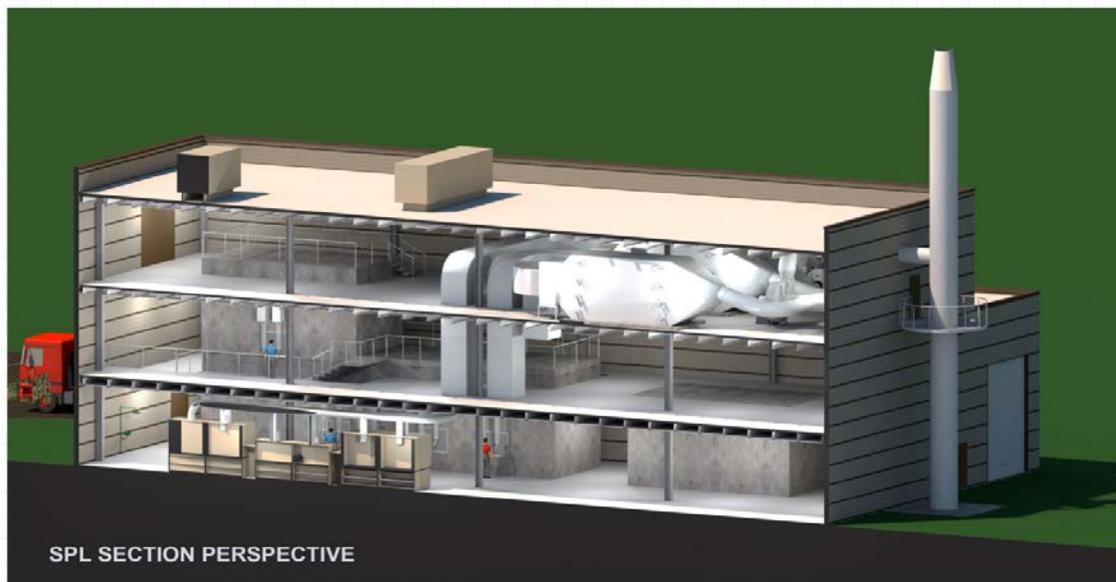


Figure 2, Section of SPL looking north

## II. RELEVANT CONSIDERATIONS

In response to this EOI, interested firms shall submit a qualifications package demonstrating compliance to the following criteria:

1. Experience and expertise in the design of DOE non-reactor nuclear facilities within the last five years.
2. Experience and expertise in the design of high-radiation hot cells in which complex operations are performed within the last five years.
3. Experience and expertise in the design of laboratory facilities within the last five years.
4. Licensed or capable of becoming licensed to perform design engineering services in the state of Idaho.
5. Established Quality Assurance Program meeting the requirements of American Society of Mechanical Engineers (ASME) NQA-1-2008/1a-2009 addenda.
6. Capability to provide and report to a detailed schedule with a schedule of values in accordance with the BEA control account schedules. (BEA will manage the project utilizing an ANSI/EIA-748-A, "Earned Value Management System" - Compliant Earned Value Management System.)
7. Capacity to support the project schedule. (A formal Request for Proposal (RFP) is anticipated to be issued in October 2016 following Critical Decision (CD)-1 approval by the DOE. Final design must be completed no later than December 4, 2017.)

## III. SUBMITTAL

Interested firms shall submit a qualifications package via email to Elise Miller, Contract Specialist, by close-of business on September 15, 2016. Included must be sufficient written information confirming the responder's qualifications as a potential offeror under the RFP. Note that qualification packages must be no more than twenty (20) pages in length. Only potentially qualified offerors will receive the RFP for the SPL design.

Questions and/or comments regarding the EOI should be addressed to Elise Miller, Contract Specialist, at (208) 526-2196 or email [elise.miller@inl.gov](mailto:elise.miller@inl.gov). Please note that technical/scope related questions must be submitted in writing via email.