

### VERSATILE TEST REACTOR ENVIRONMENTAL IMPACT STATEMENT

# **Idaho National Laboratory**

The INL Site is being considered as a location for the VTR and reactor fuel production activities.

Under the **INL VTR Alternative** (described in Chapter 2, Section 2.4, of the Draft VTR EIS), the VTR would be constructed and operated at the INL Site adjacent to the Materials and Fuels Complex.

#### **New structures would include:**

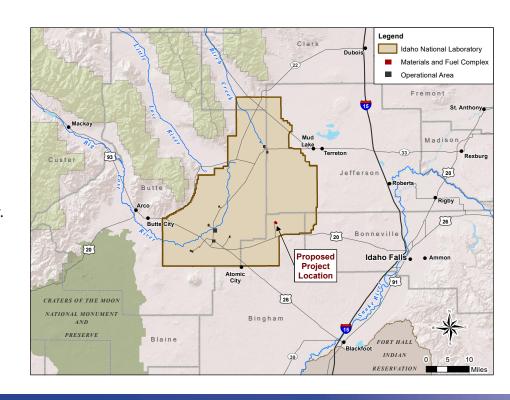
- The reactor building,
- An operational support facility (offices and radiologically clean work areas),
- · Sodium to air heat exchangers,
- · An electrical switchyard, and
- A spent fuel pad.

#### Existing structures would be modified or used as is to perform post-irradiation examination:

- Primarily the Hot Fuels Examination Facility, but also
- The Irradiated Materials
   Characterization Laboratory and other analytical laboratories.

## An existing structure would be modified to perform spent fuel treatment:

• The Fuel Conditioning Facility. Impacts from implementing the INL VTR Alternative can be found in Table S-1 of the Summary and Chapter 4 of the Draft VTR EIS.



Under the **INL Reactor Fuel Production Option** (described in Chapter 2, Section 2.6.2, of the Draft VTR EIS), no new facilities would be constructed.

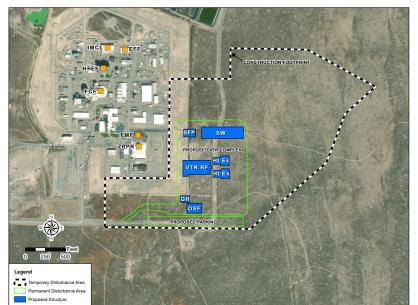
The Fuel Conditioning Facility would be modified for feedstock preparation (plutonium polishing and conversion to metal).

The Fuels Manufacturing Facility and Zero Power Physics Reactor would be modified for fuel fabrication (making fuel pins and assemblies).

The Experimental Fuels Facility and the Fuel Conditioning Facility would also be used to support fuel fabrication.

Impacts of the INL Reactor Fuel Production Option can be found in Table S-2 of the Summary and Chapter 4 of the Draft VTR EIS.

Impacts of the combined INL VTR Alternative and INL Reactor Fuel Production Option can be found in Table S-3 of the Summary and Chapter 4 of the Draft VTR EIS.



EFF = Experimental Fuels Facility

FCF = Fuel Conditioning Facility

FMF = Fuel Manufacturing Facility

GH = Security Gate House

HFEF = Hot Fuels Examination Facility

Ht Ex = Sodium to Air Heat Exchangers

IMCL = Irradiated Materials Characterization Laboratory

OSF = Operations Support Facility

SFP = Spent Fuel Pad

SW = Electrical Switchyard

VTR RF = VTR Reactor Facility

ZPPR = Zero Power Physics Reactor



