

Bidders Tour
In-Town Facilities

ID-South from 7:30 to 8:00 – Check In

ID-South from 8:00 –8:30 a.m. – General Idaho Falls Overview

IDAHO FALLS FACILITIES

Approximately 2700 - 3000 (or about 40%) of the employees (DOE & various contractors) work at facilities in Idaho Falls. Buildings in the Idaho Falls (IF) Area are the newest buildings of all the site areas. The DOE & INEEL contractors typically occupy between 29 & 33 buildings in Idaho Falls (approximately 50% leased, rented at over \$4.5 million last year, & 50% DOE owned). The average age of the owned buildings is 19 years and the average age of leased facilities is 20 years.

The DOE owns the INEEL Research Center (IRC) (which consists of 13 buildings over 35 acres) and the INEEL Supercomputing Center (ISC), near the airport. The 13 IRC buildings are no more than 15 years old, are in good condition, and supports R&D for government agencies, private companies, universities, and non-profit organizations. The ISC was built in 1968 and is in good condition. All other facilities in the IF area are leased.

These facilities include the DOE Idaho Operations Office ID-South building, the Willow Creek Building, the Engineering Research Office Building, the Technical Support Annex, the INEEL Research Center, the INEEL Supercomputing Center, and several other administrative/technical support buildings.

Idaho Falls Facilities: Government Owned

<u>Structure</u>	<u>Facility</u>	<u>Address</u>
IF-601	Research Office Building	2251 N. Boulevard
IF-602	INEEL Research Center (IRC)	2351 N. Boulevard
IF-603	IRC Laboratories	2351 N. Boulevard
IF-605	Energy Storage Technology Lab	2151 N. Boulevard
IF-608	INEEL Supercomputing Center (ISC)	1155 Foote Drive
IF-610	Landlord Storage Building	N/A
IF-611	Secure Laboratories	N/A
IF-627	Systems Analysis Facility	2253 N. Boulevard
IF-635	IRC Back-up Fire Water Pump House	N/A
IF-638	IRC Physics Laboratory	2253 N. Boulevard
IF-655	Chemical Storage Facility	N/A
IF-657	INEEL Engineering Demo. Facility (IEDF)	2255 N. Boulevard
IF-658	IF-611 Greenhouse	N/A
IF-663	Records Storage Facility	2159 N. Boulevard
B60-602	SECOM	6392 East 49 th North

Idaho Falls Facilities: Leased

<u>Structure</u>	<u>Facility</u>	<u>Address</u>
IF-604A	Technical Support Annex (TSA)	1580 Sawtelle Street
IF-604B	Technical Support Building (TSB)	1580 Sawtelle Street
IF-606	DOE-ID South Building	785 DOE Place
IF-613	North Blvd. Annex	2095 N. Boulevard
IF-614	May Street North	369 May Street
IF-615	May Street South	410 May Street
IF-616	Willow Creek Building (WCB)	1955 Freemont Av.
IF-617	WCB Mechanical Building	1955 Freemont Av.
IF-618	University Place (library, reading room)	1776 Science Ctr. Dr.
IF-619	North Holmes Complex, Unit #1	1570 N. Holmes Av.
IF-631	Bus Dispatch Building	1345 Chaffin Lane
IF-639	North Holmes Laboratory	1405 Northgate Mile
IF-651	North Yellowstone Complex Lab.	1980 N. Yellowstone
IF-654	Engineering Research Office Building (EROB)	2525 Freemont Av.
IF-659	Woodruff Avenue Warehouse	1965 N. Woodruff
IF-664	Integrated Defense Systems Facility	2556 Heyrend Way
IF-672	RAP Facility Bonneville County Technology Complex	Haroldsen Dr. N. Boulevard

IDAHO FALLS BUILDING MAINTENANCE

The Idaho Falls Facility Management team oversees maintenance of the Idaho Falls buildings. In the 2003 fiscal year, over \$1 million was spent on maintenance for Idaho Falls Facilities.

CRAFTS AT LEASED & OWNED TOWN FACILITIES (Approximate representation of the average workforce): Electrician is typically the most in demand.

IRC Complex:

- 6 Full Time PACE Crafts (2 electricians, 1 fitter (Plumber), 2 HVAC mechanics, & 1 carpenter).
- Augmented with Site support for programmatic projects.
- PACE crafts work on the federal reservation.

Leased & ISC:

- Subcontract
- 7 to 12 craftsmen (not including programmatic PM's & Modification activities)
3-5 electricians, 1-2 HVAC mechanics, 1 plumber, 2-4 carpenters
- Subcontractors are professionally licensed.
- "On demand maintenance" and not paid for, when not working.

IDAHO FALLS FACILITIES AUTHORIZATION BASIS DOCUMENTS - Defines & bounds permissible Operations:

Auditable Safety Analysis – Sets the “Bounds” (Fire is the identified bounding accident for IRC).
MCP 3571 Independent Hazards Review Process (IHR) – Assures R&D is conducted within bounds. Identifies & mitigates hazards.

Job Safety Analyses (JSAs) work in support of IHR process.

Chemical Hygiene Plan work in support of IHR process.

Facility Hazard List – Facility Hazards listed by area. IHR populates List.

Standard 101/MCP-3562 for Maintenance.

Environmental Assessment – establishes Radiological Limits for “unsealed” Radiation Sources.

Waste Water Permit – Per agreement with City of Idaho Falls.

Title V Air Quality Permit/NESHAPS – More of a factor at the Site than in-town.

CURRENT INEEL, LAB ORGANIZATIONS:

Communications

Tech Outreach

Physical Assets Maintenance & Operations (PAMO) - Site Wide Maintenance

Associate Lab Director (ALD) Nuclear Energy

ALD for Energy & Engineering Technologies

ALD for Energy & Environmental Sciences

ALD for National Security

ALD for TRA – Located at Site

ALD for SMC – Located at Site

Business Management

Facilities & Operations Services – Includes site wide Information Resource Management (IRM) (e.g. computers, communication, etc.), Training, Document Control, Engineering, Site & Town Non-programmatic Facility & Land Management (roads, buses, utilities, etc.). Support Programs as requested.

ESH&QA

Security & Emergency Services

CORE CAPABILITIES & INEEL SUPPORT

Energy

Nuclear R&D

Geosciences

Biotechnology

Materials Apps. & Dev.

Microtechnology

Sensor Application

Communications/Wireless

Ecology/Environmental

Robotics

Human/System Integration

Chemistry & Physics

Support:

Training

Administrative

Technical

Computer Service

Maintenance
Non-Destructive Evaluation
Analytical Services

ID-South Tour from 8:30 – 8:55 a.m.

In-Town Facilities: IF buildings provide space for training, administrative, technical, computer, and laboratory functions.

1 **ENGINEERING RESEARCH OFFICE BUILDING (EROB)**
EROB Tour from 9:00 – 9:30:

IF-654 provides office space for approximately eight hundred tenants including the engineers, scientists, and technicians performing engineering design and research for the INEEL. EROB also houses the BBWI senior management team and the main INEEL mailroom. EROB has three computer rooms (with raised floors) that support the various scientific programs and engineering functions. INEEL Communications and public affairs offices are located in EROB, as well as, the company document control center and a large print shop that supports tenant activities. Conference room 159 is the central location for public relation meetings and is open for public use. EROB was honored with the Energy Star Award for excellence in energy conservation. The EROB parking area supports the park-n-ride program, which provides employees that work at the site a place to park and catch site buses. EROB is the newest of all the in-town facilities.

Description of the EROB Facility

The building has approximately 244,800 total square feet of floor space. Each floor is approximately 452 feet by 175 feet for a single story area of 79,100 square feet. Two penthouse are located on the roof each penthouse is 75 feet by 50 feet for a total area of 7,500 square feet.

Facility condition – excellent

2 **WILLOW CREEK BUILDING (WCB)**
WCB Tour from 9:35 – 10:05

IF-616 is a leased building that provides office space for approximately 800 of the engineers, scientists, and administrative support personnel for the INEEL and houses DOE-ID on the third floor. There is a print shop, photo lab, and video lab located on the west side of the First floor. There is a medical area, conference rooms, & offices on the first floor south wing.

Facility condition - Excellent

The original building was built in 1979. This building is a three-story building of approximately 274,218 square feet

There is a support building, IF 617 Willow Creek Mechanical Building that houses heating, backup power and switchgear for IF-616.

3 INEEL RESEARCH CENTER (IRC)
IRC Tour from 10:15 – 12:45 (includes lunch)
Walkthrough of IRC 603 1015- 10:35

(Note: the information, directly below, will be discussed during the 8:10 a.m. presentation. The IRC-603 tour will begin at 10:15)

The IRC houses more than 350 researchers working in 66 different laboratories. The complex, located on a 35-acre site in Idaho Falls, was built to consolidate research activities previously located at various sites at the INEEL (602 & 603 built between 1982 and 1984). Researchers at the IRC conduct fundamental and applied Research and Development (R&D) in science and engineering areas, which include: science and technology, environmental quality, energy resources, and national security. This research underpins the leadership and technical infrastructure for the INEEL R&D programs & initiatives, supports the DOE Environmental Management and Office of Science programs, and provides applied science support to other INEEL Research and Development (R&D) organizations. Multi-discipline teams of scientists and engineers at the IRC work on a wide variety of advanced scientific research and development projects. Some of these projects are designed to produce new technologies that can be transferred to the private sector.

The IRC facility supports R&D for government agencies, private companies, universities, and non-profit organizations. Since 1995, 12 IRC research projects have won the prestigious R&D 100 Award. This year, two INEEL technologies earned prestigious Department of Energy awards. They were the “lithium battery solid electrolyte” and the “rapid solidification process tooling”. Both of which received the Energy @23 Category award.

There are many diverse research projects in the IRC laboratories. These projects include research in subsurface science and environmental engineering, biotechnology, physical systems modeling, systems engineering, intelligent automation and remote systems, applied engineering, nuclear science, materials processing, chemical separations and processing, and sensing and diagnostics.

Facilities that Comprise IRC:

IF-601, a single-story structure includes mainly offices with a small electronic support laboratory. All lighting was upgraded, and the data/network system has been updated to a higher transmission rate.

IF-602, a three-story office building, houses most research technical and support personnel. A small amount of space is used for light laboratories, including equipment used to monitor seismic activity in southeast Idaho.

IF-603 is the primary laboratory facility in the IRC complex, and also contains office space and mechanical support areas.

The 20 laboratories on the east corridor are wet-laboratory modules. They contain fume hoods, sinks and other equipment, and house such activities as chemical analysis, materials research, geochemistry, biotechnology, and other small-scale projects. The west corridor contains 20 modules for heavy-duty experiments with larger power requirements. Included are laboratories for welding research, instrumentation and engineering development, ceramics research, thermal fluids experiments, lasers and electric vehicle testing. There are 18 general-purpose modules on the central corridor for electronics design, optics, lasers or materials testing, and nondestructive examination research and development. There is also a biotechnology laboratory/greenhouse on the east side for research with microorganisms.

IF-605, the Energy Storage Technologies Lab, houses research and testing facilities for electric vehicle and other applications of high performance batteries and capacitors

IF-611 and IF-627, the Systems Analysis Facility, houses classified projects dealing with material science and sensor technologies. A new 2,900 square foot addition was added to IF-611 in 1996.

IF-638, the Physics Building includes physics and radiation measurements lab space, a high performance computing support function, and office space. There have been three recent modifications to this building: a new energy efficient transformer was installed, all lighting was upgraded, and the data/network system has been updated to a higher transmission rate.

IF 655, the IRC Chemical Storage Facility provides centralized chemical storage capability in an H and lower class facility. It also houses a small IH support facility.

IF-657, The INEEL Engineering Demonstration Facility, houses several prototypical-scale R&D projects in alternative energy, waste treatment technologies, subsurface investigation, advance flow characterization and material science, and includes the world's largest Matched Index of Refraction flow test loop using optical measurement technologies.

Auto thermal Diesel Reformer at IF 657: The Navy will use this technology to reform NATO F76 Logistic Fuel to power fuel cells that provide for onboard surface ship non-propulsion electrical needs.

Walkthrough of IF 657 & IRC 603 from 1015- 11:00 – Tour script for 603 & 657 is above (in bold).

LEAD LABORATORY FOR NUCLEAR ENERGY RESEARCH & DEVELOPMENT
IRC from 11:00 – 11:30

TECHNOLOGY AND ENGINEERING FOR NATIONAL SECURITY
IRC From 11:30 – 11:50

Lunch with presentations from 11:50 to 12:45 at IRC

MOBILE MUNITIONS ASSESSMENT SYSTEM (Parking Lot Display)
IRC from 11:50 – 12:15

APPLICATION OF ENGINEERING & TECHNOLOGY TO ENVIRONMENTAL ISSUES
- Enhanced Insitu Bio remediation (Test Area North Work)
- Subsurface Geophysics Lab/Subsurface Science Initiative, Probe Displays and Discussion.

IRC from 12:15 to 12:45

May Street Facilities from 1:00 to 1:45 p.m.

MAY STREET NORTH INEEL

May St. North Laboratory

The INEEL May St. North (MSN) Laboratory was established in 1989 with the objective of providing an in-town resource for the performance of small-scale experiments in heat transfer, fluid mechanics, thermal hydraulics, and related areas. Work at the laboratory includes heat transfer and fluid flow measurements, two-phase flow and boiling heat transfer, nuclear reactor thermal hydraulics, aerosol measurement and transport, data acquisition and instrument control, spray diagnostics, infra-red imaging, high temperature heating and measurement techniques, heat pipes, and other areas.

MAY STREET SOUTH

IF-615 houses research facilities to support work in spray forming, hot rolling and other form technologies. It also contains a machine shop that is used to make experimental metal spray-forming devices. Minor rehabilitation is also necessary in this leased building.

2:00 – 2:05 Drive By of TSA & TSB

TECHNICAL SUPPORT ANNEX

IF-604A is the primary training center for all of the INEEL and houses the DOE-ID IG and some secured programs.

TECHNICAL SUPPORT BUILDING

IF-604B provides office space for the engineers, scientists, and technicians performing environmental restoration projects at the INEEL.

2:05 – 3:35 p.m. - Tour ISC

3:50 – 4:35 - SMC presentation at ID-South