## How to Apply

Applicants are encouraged to register electronically. A course description, news on future sessions, registration form and additional details are available at:

#### http://www.dd.anl.gov/ddtraining

Training Course Registrar Judy Benigno Argonne National Laboratory Communications & Public Affairs/Conference Services 9700 South Cass Avenue, Bldg. 201 Argonne, IL 60439 630-252-5586 (phone) 630-252-5533 (fax) jbenigno@anl.gov

Training Course Director **Lawrence E. Boing** Argonne National Laboratory Nuclear Engineering Division/Decommissioning Program 9700 South Cass Avenue, Building 208 Argonne, IL 60439 630-252-6729 (phone) 630-252-7577 (fax)

The training course registration fee can be paid by check or most major credit cards. Checks should be made payable to Argonne National Laboratory and sent to the registrar at the address above. The registration fee or proof of forthcoming payment must be received prior to the course. Discount rates are available. For additional payment options, please contact the registrar.

For more information, visit www.dd.anl.gov/ddtraining

# Training the world decommissioning community

Check our website for detailed information on upcoming training courses



## Why Argonne National Laboratory?

Over the last 40 years, the Decommissioning Program of Argonne National Laboratory has successfully decommissioned numerous nuclear and radiological facilities including:

- 4 research reactors (a 100 MW BWR prototype, a 5 MW heavy water reactor, a smaller 250 kW biological irradiation facility and a small 10 kW research reactor)
- A suite of 61 plutonium glove boxes located in nine research labs
- A 60" cyclotron facility
- A fuels fabrication facility
- A hot cell facility
- Several smaller non-reactor (waste management) radiological facilities

Argonne National Laboratory conducted extensive decontamination work on five hot cells formerly used in the U.S. Navy Proof-of-Breeding program. The CP-5 research reactor facility at Argonne was selected to serve as a DOE test bed for the evaluation of select technologies to ascertain their value in performing future decommissioning projects. Also, the staff at Argonne lends support to other DOE and NRC regulated sites in decommissioning. Argonne National Laboratory is actively involved in international decommissioning activities.



Argonne National Laboratory is a U.S. Department of Energy laboratory managed by UChicago Argonne, LLC.



#### A Training Course on

## Facility Decommissioning



Organized by:

## **Argonne National Laboratory**

#### www.dd.anl.gov/ddtraining



Argonne National Laboratory is offering its popular *Facility Decommissioning Training Course*.

A registration fee is required to attend and participate in the training course. Background information, a course description and registration form are available at <u>www.dd.anl.gov/ddtraining</u>. Applicants are highly encouraged to register electronically. Early registration is recommended due to the limited class size.

#### Purpose of the Course

The purpose of the course is to:

1) Provide information on the basic steps in the decommissioning process,

2) Impart lessons learned from past experience in decommissioning.

Elements included in the D&D training course will assist in decision making and planning, and implementation associated with decommissioning. A major objective of this training course is to demonstrate the need for early and thorough project planning to achieve safe and cost effective decommissioning.

### **Target Audience**

The target audience for the D&D Training Course is personnel responsible for decommissioning nuclear facilities. Staff from utility companies, universities, reactor and other operational facility management, waste management staff, procurement officials, regulators, decommissioning technology developers and providers, oversight groups, DOE & DoD staff, radioisotope and radio-pharmaceutical research facilities/production facilities, and consulting and engineering firms. The material is directly relevant to the decommissioning of any type or size facility.

### Instructors

Argonne Decommissioning Program experts are joined by other decommissioning subject matter experts. The seasoned decommissioning professionals are real decommissioning 'doers' including: management of decommissioning firms, subject matter experts, professional engineers, certified health physicists, D&D program managers, D&D project managers, staff members and technologists.

## **Course Outline**

Background information

- Objectives and overview of the course
- U.S. experiences in decommissioning

#### Regulatory aspects of decommissioning

- Safety and radiation protection criteria in decommissioning
- Use of a graded approach for smaller facilities
- · Regulatory requirements and expectations

Responsibilities and functions of the parties involved

- Licensee
- Regulatory body
- Other involved parties

#### Planning a decommissioning project

- · Facility shutdown/surveillance and maintenance
- Facility characterization
- Assessment of alternative strategies
- Preliminary and detailed planning

#### Waste Management

- Assessment of amounts and characteristics of decommissioning waste
- Procedures for conditioning, packaging, storage, transport and disposal
- Compliance with radioactive waste management
- Standards and disposal site requirements
- Recycling/reuse of decommissioning materials
- Waste minimization/pollution prevention

Decontamination

- Need for and extent of decontamination
- Chemical and non-chemical decontamination techniques

Dismantling

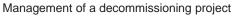
- Metal cutting techniques
- Concrete removal
- Intact removal of large components
- Remotely-controlled operations
- Selection of optimal technique

Financial planning

- · Elements of decommissioning costs
- Cost estimating guidelines
- Financing approaches

Environment safety and health issues

- · Environment safety and health
- Unexpected occurrences
- Environmental issues
- Security



- Organization and staffing
- Training
- Quality assurance/quality control
- Record keeping and reporting

Completion of a decommissioning project

- · Post-decommissioning survey final reports
- License termination

#### Decommissioning of nuclear labs & other facilities

- Case studies on decommissioning
- Evolving technologies for decommissioning
- Technical visit to a facility undergoing decommissioning (as available)

Each participant will receive copies of valuable resources for use in understanding the decommissioning process and will be given a select reading list of other information sources.

### Vendor/Poster Exhibit Area

During the training course, an area adjacent to the lecture room will be available for exhibits and the display of material from decommissioning vendors. A poster exhibit area will be designated for stand-alone displays from other organizations. Vendors will be charged a fee to cover overhead and set up expenses. All shipping costs are the responsibility of the individual vendor.

Samples of decommissioning and related technical publications will be available in the display area. Items include material from various technical and topical publications and membership and subscription materials from professional societies.

#### Decommissioning Certificate Program

A new certification program is being offered jointly by Argonne National Laboratory and Oak Ridge Associated Universities (ORAU). The purpose of this Decommissioning Certificate Program is to provide a formal means to document that an individual has achieved a baseline level of training in the subject of facility/site decommissioning. Participants are not required to pre-register to participate in the program..

