

# Environment, Health, & Safety \_ **Training Program**

# EHS0431 ~ Contamination / High Radiation Area Controls at Bldg 88

#### **Course Syllabus**

Subject Category: **Radiation Protection** 

Course Length: **Delivery Mode:** Class Schedule: As Needed Location/Time: Bldg 88

Course Prerequisite: EHS0400 2.5 Hours Medical Approval: NO

Course Purpose: To provide training commensurate with a job assignment that requires an employee to work in a posted Contamination or High Radiation Area at Building-88. This course is designed to inform employees of the proper work practices and requirements needed for work in a Contamination or High Radiation Area, and to enable them to work safely within such areas. This course is mandatory prior to commencing work in a Contamination or High Radiation Area at Building-88 under any Radiation Work Authorizations (RWAs) or Radiation Work Permits (RWPs).

Other radiation protection courses may also be required and will be specified in the RWA, or RWP covering the work.

# Course Objectives: EHS0431 covers the following topics:

- Basic radiological fundamentals and radiation protection concepts
- Describes the differences between fixed, removable, and airborne contamination.
- Contamination Area, High Contamination Area, Airborne Contamination Area, and High Radiation Area will be defined.
- Describes sources of radioactive contamination.
- Describe the methods of minimizing radiation exposure such as time, distance, and shielding.
- Describes the various controls used to minimize and control radioactive contamination, such as engineering controls, personnel protective measures, administrative controls and decontamination.
- Describes the proper actions to take in an emergency.
- The proper technique for donning and doffing protective clothing will be identified.
- Describes the requirements for entering, working in, and exiting a Contamination or High Radiation Area.
- The proper use of personnel contamination and radiation monitors will be demonstrated.
- Describes the methods used to perform personnel decontamination.

### **Course Instructional Materials:**

- Beta-Gamma Contamination Survey Meter
- Alpha Contamination Survey Meter
- Gamma-Xray Radiation Survey Meter
- Neutron Radiation Survey Meter
- Radiation safety postings and signs
- Power Point Presentation

**Instructors**: Jeffrey Bramble (x6242)

Training Compliance Requirements: This course is designed to meet, in part, the requirements of 10CFR835 section 901. Other training, such as EHS0432 or 439 may also be required depending on the work assignment.

#### **Course Handouts:**

• Copy of power point presentation.

Participant Evaluation: Written evaluations regarding the effectiveness of the training, and the visual aids.

Written Exam: A written exam must be completed with a minimum score of 80%

**Practical Exam:** Proper donning/doffing of personnel protective equipment (PPE) and proper use of survey instruments must be demonstrated.

Retraining/Recertification: No. Changes are covered during RWA renewal training (EH&S 401).

**WEB Resource:** EH&S Training Program website: www.lbl.gov/ehs/training/index.shtml