# Lawrence Berkeley National Laboratory Work Group Report

Advisory Board on Radiation and Worker Health Oakland, California February 28, 2012

# Work Group Members and Staff

#### BOARD

- Dr. Paul Ziemer, Chair
- Dr. David Richardson
- Dr. Richard Lemen

#### NIOSH/DCAS

Dr. Laura Hughes

#### SC&A

Joseph Fitzgerald

## LBNL Site History

- 1931: LBNL founded on Berkeley Campus
- 1941: E.O. Lawrence started defense contract with National Defense Research Committee
- August 13, 1942: Start of Manhattan Engineer District (MED) and covered period for LBNL
- 1945: LBNL started to migrate operations to Hill east of Berkeley campus
- Numerous buildings on campus and on "the Hill" involved in LBNL and MED/Atomic Energy Commission (AEC) sponsored research activities
- LBNL is still operating today

### LBNL Site Operations

- Particle accelerator development for radioisotope generation:
  - Cyclotons, 4-inch to 184-inch
  - 300 MeV Synchrotron
  - Van de Graaff generator
  - Bevatron
  - Heavy Ion Linear Accelerator (HILAC)
- Radiochemistry and isolation of new elements
  - Pu and many more

## LBNL Site Operations (continued)

- Study of fundamental particles
- Uranium enrichment research
  - Calutron technology used at Y-12
- Radiation operations took place in all laboratories and buildings affiliated with LBNL (campus and "the Hill")

### **Existing SEC Class for LBNL**

- SEC Petition 00160 approval recommended by NIOSH January 5, 2010
- Board accepted NIOSH recommendation on March 5, 2010
- On April 5, 2010, the Secretary of HHS designated the SEC Class for the period 1942 – 1961 primarily based on inability to reconstruct internal doses with sufficient accuracy

#### Definition of SEC Class at LBNL

 All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked at the Lawrence Berkeley National Laboratory in Berkeley, California, from August 13, 1942 through December 31, 1961, for a number of work days aggregating at least 250 work days, occurring either solely under this employment or in combination with work days within the parameters established for one or more other classes of employees included in the Special Exposure Cohort.

### Current focus of Work Group

- Reviewed findings of SC&A on initial Site
  Profile and on revision (May 10, 2010 version)
  - Summary of findings to be presented by Joseph Fitzgerald of SC&A
- Reviewed initial responses to findings provided by NIOSH
- Next meeting planned for mid-September.
  Will follow up on all issues in the findings matrix.