DOE FINDS NO SIGNIFICANT ENVIRONMENTAL IMPACTS REGARDING THE PROPOSED BERKELEY LAB LASER ACCELERATOR (BELLA) ACQUISITION, INSTALLATION AND USE FOR RESEARCH AND DEVELOPMENT

BERKELEY, CA - The U.S. Department of Energy has completed its environmental review of the proposed Berkeley Lab Laser Accelerator (BELLA) Acquisition, Installation and Use for Research and Development at Lawrence Berkeley National Laboratory. Based on the analysis in the Environmental Assessment for the proposed project, the U.S. Department of Energy has determined that no significant environmental impacts are expected. The Final Environmental Assessment and the accompanying Finding of No Significant Impact are available to interested citizens.

As proposed, BELLA would be a U.S. Department of Energy-funded experimental facility for further advancing the development of laser-driven, plasma-based, particle beam accelerators. An existing approximately 7,000 square-foot accelerator laboratory area inside Building 71 at Lawrence Berkeley National Laboratory would be modified to accommodate the new facility. A utility room and stairwell would be placed in an approximately 2,000 square-foot area of the Building 71 roof. The Berkeley Laboratory Laser Accelerator (BELLA) laser, laser plasma accelerator, ancillary equipment, and radiation shielding would be installed. The laser and laser plasma accelerator would be operated for research and development that would focus the laser system’s laser beam pulses on the entry to a meter-long plasma channel (inside the laser plasma accelerator) to produce and accelerate an electron beam pulse to an energy level on the order of 10 giga electron volts (GeV) within the meter length of the channel. The action’s unique attribute would be the comparatively short distance over which the laser plasma accelerator generates a 10 GeV electron beam. The ultimate goal of this undertaking is to support the U.S. Department of Energy’s need to substantially reduce the size, cost, energy usage, and environmental impacts associated with future electron or positron accelerators.

A Draft Environmental Assessment was made available for public comment during a 31-day comment period beginning June 17, 2009 and ending July 18, 2009. The Draft Environmental Assessment was revised based on public comments, and completed September 4, 2009.

The public comments and the U.S. Department of Energy responses to those comments are presented in Appendix C of the Final Environmental Assessment. The Final Environmental Assessment (DOE/EA-1655) and Finding of No Significant Impact may be reviewed and copies of the documents obtained from the following locations:

- U.S. Department of Energy, Berkeley Site Office, Lawrence Berkeley National Laboratory, 1 Cyclotron Road, MS 90-1023, Berkeley, CA  94720, (510) 486-4353

The Final Environmental Assessment and Finding of No Significant Impact may also be reviewed at the Central Branch of the Berkeley Public Library, located at 2090 Kittredge, Berkeley, CA 94704.