
Preface

The *Environmental Report 1997* is prepared for the U.S. Department of Energy (DOE), as required by DOE Order 5400.1 and DOE Order 231.1, by the Environmental Protection Department (EPD) at the Lawrence Livermore National Laboratory (LLNL). The results of LLNL's environmental monitoring and compliance effort and an assessment of the impact of LLNL operations on the environment and the public are presented in this publication.

To produce a more readable and useful document for our diverse readership—including regulators, scientists and engineers, educators, the media, public interest groups, and interested citizens—we have, as in the past two years, divided this report into two volumes: a main volume and a Data Supplement.

The main volume describes LLNL's environmental impact and compliance activities and features descriptive and explanatory text, summary data tables, and plots showing data trends. The summary data include measures of the center of data, their spread or variability, and their extreme values. The main volume contains the Executive Summary and the Compliance Summary; it features individual chapters on monitoring of air, sewage, surface water, ground water, soil and sediment, vegetation and foodstuff, and environmental radiation; and it contains chapters on site overview, environmental program information, radiological dose assessment, and quality assurance. Information on both the Livermore site and Site 300 is presented in each chapter.

The Data Supplement (previously referred to as Volume 2) provides individual data points, where applicable, some summary data, and more detailed accounts of sample collection and analytical methods.

The main volume, which can be read without access to the Data Supplement, contains all information of interest to most of our readers. The main volume will be distributed as usual, but the Data Supplement will be sent only upon request; a card for this purpose is included on the last page of this volume. Both the main volume and the Data Supplement are available on the Internet at <http://www.llnl.gov/saer>.

As in our previous annual reports, data are presented in Système International (SI) units. In particular, the primary units we use for radiological results are becquerels and sieverts for activity and dose, respectively, with curies and rem used secondarily (1 Bq = 2.7×10^{-11} Ci; 1 Sv = 100 rem). Units are discussed in Supplement 12-1 of Chapter 12, Radiological Dose Assessment, in the main volume.

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