COVER SHEET

RESPONSIBLE AGENCY: **National Nuclear Security Administration (NNSA)**

TITLE: **Final Site-Wide Environmental Assessment (SWEA) for Sandia National Laboratories/California (DOE/EA-1422)**

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Abstract: The NNSA proposes to continue operating Sandia National Laboratories/California (SNL/CA) located in Livermore, California. The NNSA has identified and assessed three alternatives for the operation of SNL/CA: (1) No Action, (2) Planned Utilization and Operations, and (3) Maximum Operations. Under the No Action Alternative, the NNSA would continue the historical mission support activities SNL/CA has conducted at planned operational levels. NNSA and interagency programs and activities at SNL/CA would increase to the highest reasonable activity levels, as set forth in this SWEA, that could be supported by current facilities and their potential expansion and construction of new facilities for future actions specifically identified in the SWEA. Under the Planned Utilization and Operations Alternative, the NNSA would operate SNL/CA at the minimum levels of activity necessary to maintain the capabilities to support the NNSA mission in the near term. Under all of the alternatives, the affected environment is primarily within Livermore area. Analyses indicate little difference in the environmental impacts among alternatives.

Public Comments: The Draft SWEA was released to the public for review and comment on November 1, 2002. The comment period ended on November 30, 2000. All comments were considered in preparation of the Final SWEA[1]. The NNSA will use the analysis in this Final SWEA and determine whether to prepare an Environmental Impact Statement or make a Finding of No Significant Impact.

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[1]Changes made to this SWEA since publication of the Draft SWEA are marked with a vertical bar to the right or left of the text.

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Acronyms

ALARA ..... as low as reasonably achievable
AAQS ..... ambient air quality standards
ABAG ..... Association of Bay Area Governments
ACGIH ..... American Conference of Governmental Industrial Hygienists
AEA ..... *Atomic Energy Act*
AT&T ..... American Telephone and Telegraph
BAAQMD ..... Bay Area Air Quality Management District
BEA ..... Bureau of Economic Analysis
CAA ..... *Clean Air Act*
CARB ..... California Air Resources Board
CDC ..... Center for Disease Control
CDFG ..... California Department of Fish and Game
CDRL ..... Chemical and Radiation Detection Laboratory
CEQ ..... Council on Environmental Quality
CERCLA ..... *Comprehensive Environmental Response Compensation and Liability Act*
CESA ..... *California Endangered Species Act*
CFR ..... *Code of Federal Regulations*
CIS ..... *Chemical Information System*
CMSA ..... Consolidated Metropolitan Statistical Area
CO ..... carbon monoxide
CO_2 ..... carbon dioxide
CRADA ..... Cooperative Research and Development Agreements
CRF ..... Combustion Research Facility
CWA ..... *Clean Water Act*
CY ..... calendar year
D&D ..... decontamination and decommissioning
DISL ..... Distributed Information Systems Laboratory
DoD ..... Department of Defense
DOE ..... U.S. Department of Energy
DOI ..... U.S. Department of the Interior
DOT ..... U.S. Department of Transportation
DP ..... Defense Programs
DTSC ..... California Department of Toxic Substance Control
EDE ..... effective dose equivalent
EDS ..... Explosive Destruction System
EID ..... environmental information document
EIR ..... Environmental Information Report
EIS ..... Environmental Impact Statement
EO ..... Executive Order
EPA ..... U.S. Environmental Protection Agency
EPCRA ..... *Emergency Planning and Community Right-to-Know Act*
ER ..... Environmental Restoration
ERPG-2 ..... Emergency Response Planning Guideline Level 2
ES&H ..... environment, safety, and health
ESA ..... Explosive Storage Area
FAA ..... Federal Aviation Administration
FEMA ..... Federal Emergency Management Agency

FFCA ..... *Federal Facility Compliance Act*
FONSI ..... Finding of No Significant Impact
FOS ..... fuel oil spill
FSID ..... *Facilities and Safety Information Document*
FY ..... fiscal year
GWPMPP ..... groundwater protection management program plan
HSWA ..... *Hazardous and Solid Waste Amendments of 1984*
I ..... Interstate
IMTL ..... Integrated Manufacturing Technology Laboratory
ISMS ..... Integrated Safety Management System
JIT ..... "just-in-time"
LANL ..... Los Alamos National Laboratory
lcf ..... latent cancer fatalities
LDRD ..... Laboratory Directed Research and Development
LECS ..... Liquid Effluent Control System
LIGA ..... Lithographie Galvanoformung and Abformung
LLMW ..... low-level mixed waste
LLNL ..... Lawrence Livermore National Laboratory
LLW ..... low-level waste
LTF ..... LIGA Technologies Facility
LVJUSD ..... Livermore Valley Joint Unified School District
LWC ..... lost work day case
LWRP ..... Livermore Wastewater Reclamation Plant
M&O ..... management and operating
MANTL ..... Micro and Nano Technologies Laboratory
MCL ..... maximum contaminant level
MEI ..... maximally exposed individual
MTRU ..... mixed transuranic waste
MWMA ..... *Medical Waste Management Act*
NA ..... not applicable/not available
NAAQS ..... National Ambient Air Quality Standards
NASA ..... National Aeronautics and Space Administration
NCA ..... *Noise Control Act*
NCCP ..... Natural Community Conservation Planning
NEPA ..... *National Environmental Policy Act*
NESHAP ..... National Emission Standards for Hazardous Air Pollutants
NMED ..... New Mexico Environment Department
NMFS ..... National Marine Fisheries Service
NNSA ..... National Nuclear Security Administration
NO_2 ..... nitrogen dioxide
NOI ..... Notice of Intent
NO_x ..... oxides of nitrogen
NPDES ..... National Pollutant Discharge Elimination System
NPS ..... National Park Service
NR ..... National Register
NR ..... not reported
NRC ..... U.S. Nuclear Regulatory Commission
NRHP ..... National Register of Historic Places

O_3 ..... ozone
ORPS ..... Occurrence Reporting and Processing System
OSHA ..... *Occupational Safety and Health Act* of 1970
Pb ..... lead
PCB ..... polychlorinated biphenyl
PDD ..... Presidential Decision Directive
PEIS ..... Programmatic Environmental Impact Statement
PG&E ..... Pacific Gas and Electric Company
PHS ..... preliminary hazard screening
PMSA ..... Primary Metropolitan Statistical Area
R&D ..... research and development
RCRA ..... *Resource Conservation and Recovery Act*
RMMA ..... Radioactive Materials Management Areas
ROD ..... Record of Decision
RPM ..... Risk Management Plan
RPPM ..... Radiological Protection Procedures Manual
RWQCBs ..... Regional Water Quality Control Boards
SAAQS ..... State Ambient Air Quality Standards
SARA ..... *Superfund Amendments and Reauthorization Act, Title III*
SDWA ..... *Safe Drinking Water Act*
SHPO ..... State Historic Preservation Officer
SIP ..... state implementation plan
SNL ..... Sandia National Laboratories
SNL/CA ..... Sandia National Laboratories/California
SNL/NM ..... Sandia National Laboratories/New Mexico
SO_2 ..... sulfur dioxide
SSM ..... Stockpile Stewardship and Management
SSO ..... Sandia Site Office
START ..... Strategic Arms Reduction Treaty
SWEA ..... Site-Wide Environmental Assessment
SWEIS ..... Site-Wide Environmental Impact Statement
SWPPP ..... Storm Water Pollution Prevention Plan
TAC ..... toxic air contaminant
TLV ..... threshold limit value
TNT ..... trinitrotoluene
TPH ..... total petroleum hydrocarbons
TRC ..... total reportable case
TRU ..... transuranic waste
TSCA ..... *Toxic Substances Control Act*
U.S.C. . ..... *United States Code*
USFWS ..... U.S. Fish and Wildlife Service
UST ..... underground storage tanks
VOC ..... volatile organic compound
WFO ..... work for others
WM PEIS ..... Waste Management Programmatic Environmental Impact Statement
WMSF ..... Waste Management Storage Facilities

Units of Measure

% ..... percent
< ..... less than
> ..... greater than
cfs ..... cubic ft per second
cy ..... cubic yards
dB ..... decibel
dBA ..... decibel, A-weighted sound levels
F ..... Fahrenheit
ft/sec ..... feet per second
ft^3 ..... cubic feet
FY ..... fiscal year
g ..... gram
gsf ..... gross square feet
kg ..... kilograms
kg/year ..... kilograms per year
km ..... kilometers
kV ..... kilovolt
lbs ..... pounds
lbs/hour peak ..... pounds per hour peak
L_d ..... day noise level
L_{dn} ..... average day to night noise level
L_n ..... night noise level
M ft^3 ..... million cubic feet per year
M gal ..... millions of gallons
m ..... meters
M ..... million
m^3 ..... cubic meters
MGY ..... million gallons per year
mi ..... mile/miles
mrem ..... millirem
mrem/yr ..... millirem per year
MSL ..... mean sea level
MW ..... megawatt
MWh ..... megawatt hour
nCi/g ..... nanocuries per gram
pH ..... relative acidity
PM_{10} ..... particulate matter less than 10 microns in diameter
ppmv ..... parts per million by volume
psi ..... pounds per square inch
rem ..... Roentgen equivalent, man
sq ft ..... square feet/foot
sq mi ..... square mile