Department of Energy
National Nuclear Security Administration
1301 Clay Street
Oakland, California 94612-5208

JAN 0 9 2002

Subject: *Draft* Environmental Assessment (EA) for the Cleanup and Closure of the Energy Technology Engineering Center (ETEC), Simi Valley, California.

Dear Stakeholder,

On January 9, 2002, the U.S. Department of Energy (DOE) officially released the enclosed *draft* EA for the Cleanup and Closure of ETEC, Simi Valley, California. The public comment period for the EA will be ***January 9, 2002 through February 11, 2002.*** During this time, you or your organization may submit formal comments about the EA, which will be considered by DOE in the preparation of a final EA.

DOE has prepared this *draft* EA to evaluate the potential impacts of implementing *additional* cleanup and closure activities at ETEC. Three cleanup actions are described, a preferred action and two alternative proposals. An analysis of potential impacts on human health and the environment are presented as a part of each of these three proposals.

The EA document will be available for public review at three local informational repositories:

Simi Valley Library
2969 Tapo Canyon Road
Simi Valley, CA
(805) 526-1735

California State University, Northridge
Urban Archives Center
Oviatt Library, Basement, Room 4
18111 Nordhoff Street
Northridge, CA
(818) 885-2832

Platt Branch Library
23600 Victory Boulevard
Woodland Hills, CA
(818) 340-9386

Copies of the EA document are available by:

- Contacting the **Energy Information Center at** (510) 637-1762
- Sending an **email request to** etec.ea@oak.doe.gov.
- Downloading a copy at the **DOE/OAK website,** http://www.oak.doe.gov/etec_ea.html

The EA can be referenced by its Document Release No: DOE/EA-1345.

On January 24, 2002, two public meetings will take place (2pm-4pm and 7pm-9pm) at the Grande Vista Hotel (999 Enchanted Way, Simi Valley), during which, public officials and community leaders will be available to answer questions about the EA.

Sincerely,

for James T. Davis
Assistant Manager
for Environment and
Nuclear Energy

Enclosure

DOE/EA-1345

ENVIRONMENTAL ASSESSMENT FOR CLEANUP AND CLOSURE OF THE ENERGY TECHNOLOGY ENGINEERING CENTER

DRAFT

January 2002

U.S. Department of Energy
Oakland Operations Office
Oakland, CA

DOE/EA-1345

ENVIRONMENTAL ASSESSMENT FOR CLEANUP AND CLOSURE OF THE ENERGY TECHNOLOGY ENGINEERING CENTER

DRAFT

January 2002

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ACRONYMS

ALARA	as low as reasonably achievable
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
EA	environmental assessment
EPA	U.S. Environmental Protection Agency
ETEC	Energy Technology Engineering Center
LLW	low-level radioactive waste
MLLW	mixed low-level waste
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NPDES	National Pollutant Discharge Elimination System
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
RMHF	Radioactive Materials Handling Facility
WIPP SEIS-II	*Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement*
SNAP	Space Nuclear Auxiliary Power
SPTF	Sodium Pump Test Facility
SSFL	Santa Susana Field Laboratory
TCE	trichloroethylene
TRU	transuranic
WIPP	Waste Isolation Pilot Plant
U.S.C.	United States Code

GLOSSARY

Additional theoretical lifetime cancer risk

The potential risk to an individual of developing cancer that could result from that individual's exposure to radiological contaminants over and above the existing risk from exposure to naturally occurring (background) levels of radiation. The lifetime risk of incurring cancer from all causes is 0.23, according to the U.S. National Center for Health Statistics (1998).

Background radiation

Radiation from naturally occurring radioactive materials as they exist in nature (such as radon) and cosmic rays from space filtered through the Earth's atmosphere. Other sources of background radiation include medical procedures (x-rays), air travel, consumer and industrial products, and fallout from prior nuclear weapons testing. Background radiation in the United States averages 300 millirem per year.

Berm

A sloped wall or embankment (typically constructed of earth, hay bales, or timber framing) used to prevent inflow or outflow of material into/from an area.

Contamination

The deposition of unwanted radioactive or hazardous material on the surfaces of structures, areas, objects, or people.

Decommissioning

The process of removing from service a facility that is no longer needed for its original purpose. For facilities in which nuclear materials were handled, it usually involves decontaminating the facility so that it may be dismantled or dedicated to other purposes.

Decontamination

The actions taken to reduce or remove substances that pose a substantial present or potential hazard to human health or the environment, such as radioactive contamination from facilities, soil, or equipment by washing, chemical action, mechanical cleaning, or other techniques.

Fast breeder reactor

A nuclear reactor with fertile material loaded around the core, to be converted into fissile material through neutron capture, which generates more fissile material than is consumed.

Latent cancer fatality

A fatality resulting from a cancer that was originally induced by radiation but which may occur years after the exposure. Small doses of radiation result in fractional latent cancer fatalities, or only a probability that a latent cancer fatality may be incurred. The lower the fractional latent cancer fatality, the lower the probability that a latent cancer fatality will be incurred. For example, 1×10^{-4} latent cancer fatalities means 1 chance in 10,000 of incurring a latent cancer fatality; 1×10^{-6} latent cancer fatalities means 1 chance in 1 million of incurring a latent cancer fatality.

Maximally exposed individual

A hypothetical individual whose location and habits result in the highest possible total radiological or chemical exposure (and thus dose) from a particular source for all exposure routes (for example, inhalation, ingestion, direct exposure). For purposes of analyzing the impacts of decontamination, decommissioning, and demolition activities at ETEC, the maximally exposed individual was assumed to be an individual living off the site in a residence 2,867 meters (9,406 feet) northwest of the Radioactive Materials Handling Facility. For purposes of analyzing the risk of residual contamination on the site following remediation, the maximally exposed individual was assumed to be an individual living on the site for 40 years.

National Environmental Policy Act of 1969 (NEPA)

A federal act designed to promote inclusion of environmental concerns in federal decision-making. The Act is implemented by procedures issued by the Council on Environmental Quality and DOE.

Millirem (mrem)

One-thousandth of a rem (0.001 rem); *see* "Rem."

Rem (Roentgen Equivalent in Man)

The unit of a dose equivalent from ionizing radiation to the human body that is used to measure the amount of radiation to which a person has been exposed.

Remediation

Action taken to permanently remedy a release or threatened release of a hazardous substance to the environment, instead of or in addition to removal.

Scientific notation

A system of expressing very large or very small numbers based on the use of positive and negative powers of 10. A number written in scientific notation is expressed as the product of a number between 1 and 10 and a positive or negative power of 10.

Examples:
5,000 would be written as 5×10^{3}
0.005 would be written as 5×10^{-3}

Scoping

An early and open process for determining the range of issues to be addressed in an environmental impact statement or environmental assessment (EA) and for identifying the significant issues related to a proposed action.

Waste characterization

The identification of waste composition and properties by reviewing process knowledge, nondestructive examination, nondestructive assay, or sampling and analysis. Characterization provides the basis for determining appropriate storage, treatment, handling, transportation, and disposal requirements.