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COVER SHEET

RESPONSIBLE AGENCY: U.S. DEPARTMENT OF ENERGY (DOE)

COOPERATING AGENCY: U.S. AIR FORCE

TITLE: Final Site-Wide Environmental Impact Statement for Sandia National Laboratories/New Mexico (DOE/EIS-0281)

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Abstract: The DOE proposes to continue operating the Sandia National Laboratories/New Mexico (SNL/NM) located in central New Mexico. The DOE has identified and assessed three alternatives for the operation of SNL/NM: (1) No Action, (2) Expanded Operations, and (3) Reduced Operations. The Expanded Operations Alternative is the DOE's preferred alternative (exclusive of the Microsystems and Engineering Sciences Applications Complex configuration). Under the No Action Alternative, the DOE would continue the historical mission support activities SNL/NM has conducted at planned operational levels. Under the Expanded Operations Alternative, the DOE would operate SNL/NM at the highest reasonable levels of activity currently foreseeable. Under the Reduced Operations Alternative, the DOE would operate SNL/NM at the minimum levels of activity necessary to maintain the capabilities to support the DOE mission in the near term. Under all of the alternatives, the affected environment is primarily within 50 miles (80 kilometers) of SNL/NM. Analyses indicate little difference in the environmental impacts among alternatives.

Public Comments: The Draft SWEIS was released to the public for review and comment on April 16, 1999. The comment period ended on June 15, 1999, although late comments were accepted to the extent practicable. All comments were considered in preparation of the Final SWEIS¹. The DOE will use the analysis in this Final SWEIS and prepare a Record of Decision on the level of continued operation of SNL/NM. This decision will be made no sooner than 30 days after the Notice of Availability of the Final SWEIS appears in the *Federal Register*.

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

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Comments and Responses

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Acronyms

ACRR	Annular Core Research Reactor
CEQ	Council on Environmental Quality
CRD	Comment Response Document
CSRL	Compound Semiconductor Research Laboratory
CTTF	Containment Technology Test Facility
CWL	Chemical Waste Landfill
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
EID	Environmental Information Document
EIS	Environmental Impact Statement
ER	Environmental Restoration
ERPG-2	Emergency Response Planning Guideline Level 2
EPA	U.S. Environmental Protection Agency
FSID	Facility and Safety Information Document
GIF	Gamma Irradiation Facility
HCF	Hot Cell Facility
ITRI	Inhalation Toxicology Research Institute
KAFB	Kirtland Air Force Base
KUMMSC	Kirtland Underground Munitions and Maintenance Storage Complex
LCF	latent cancer fatality
LLW	low-level waste
LLMW	low-level mixed waste
<i>MACCS2</i>	<i>MELCOR Accident Consequences Code System, Version 2</i>
MDL	Microelectronics Development Laboratory
MEI	maximally exposed individual
MESA	Microsystems and Engineering Sciences Applications
MIPP	Medical Isotopes Production Project
NAGPRA	<i>Native American Graves Protection and Repatriation Act</i>
NEPA	<i>National Environmental Policy Act</i>
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NGF	Neutron Generator Facility
NGIF	New Gamma Irradiation Facility

NMAC	<i>New Mexico Administrative Code</i>
NMSA	<i>New Mexico Statutes Annotated</i>
NPDES	National Pollutant Discharge Elimination System
PC-4	Performance Category 4
R&D	Research and Development
RCRA	<i>Resource Conservation and Recovery Act</i>
ROD	record of decision
ROI	region of influence
SNL	Sandia National Laboratories
SNL/NM	Sandia National Laboratories/New Mexico
SWEIS	Site-Wide Environmental Impact Statement
TA	technical area
TCE	trichloroethylene
TCP	traditional cultural property
TRU	transuranic
TSCA	<i>Toxic Substances Control Act</i>
UBC	Uniform Building Code
USAF	U.S. Air Force
U.S.C.	<i>United States Code</i>
USFS	U.S. Forest Service

UNIT OF MEASURE	ABBREVIATION
acre	ac
billion gallons per year	BGY
centimeters	cm
cubic feet	ft ³
cubic feet per second	ft ³ /s
cubic meters	m ³
cubic yards	yd ³
Curie	Ci
decibel	dB
degrees Celsius	°C
degrees Fahrenheit	°F
feet	ft
gallon	gal
gallons per day	gpd
gram	g
grams per second	g/sec
gravity	<i>g</i>
hectare	ha
Hertz	Hz
hour	hr
kelvin	K
kilogram	kg
kilojoule	kJ
kilometer	km
kilometer per hour	km/hr
kilovolt	kV
kilovoltampere	kVA
kilowatt	kW
kilowatt hour	kWh
liter	L
megajoule	MJ
megavolt-ampere	MVA

UNIT OF MEASURE	ABBREVIATION
megawatt	MW
megawatt hour	MWh
megawatt-electric	MWe
megawatt-thermal	MWt
meter	m
meters per second	m/sec
microcurie	μCi
microcuries per gram	μCi/g
microgram	μg
micrograms per cubic meter	μg/m ³
micrograms per kilogram	μg/kg
micrograms per liter	μg/L
micron or micrometer	μm
microohms per centimeter	μohms/cm
micropascal	mPa
mile	mi
miles per hour	mph
millicurie	mCi
millicurie per gram	mCi/g
millicurie per millimeter	mCi/ml
milligram	mg
milligram per liter	mg/L
milliliter	ml
millimeters of mercury	mmHg
million	M
million electron volts	MeV
million gallons per day	MGD
million gallons per year	MGY
millirem	mrem
millirem per year	mrem/yr
nanocurie	nCi
nanocuries per gram	nCi/g

UNIT OF MEASURE	ABBREVIATION
part per billion	ppb
part per billion by volume	ppbv
part per million	ppm
particulate matter of aerodynamic diameter less than 10 micrometers	PM ₁₀
particulate matter of aerodynamic diameter less than 25 micrometers	PM ₂₅
pascal	Pa
picocurie	pCi
picocuries per gram	pCi/g
picocuries per liter	pCi/L
pound	lb
pounds mass	lbm
pounds per square inch	psi
pounds per year	lb/yr
quart	qt
Roentgen equivalent, man	rem ^a
second	sec
square feet	ft ²
square kilometers	km ²
square meters	m ²

^a Although not used in the SWEIS, the sievert is a common unit of measure for dose and equivalent to 100 rem.

Metric Conversion Chart					
TO CONVERT FROM U.S. CUSTOMARY INTO METRIC			TO CONVERT FROM METRIC INTO U.S. CUSTOMARY		
If you know	Multiply by	To get	If you know	Multiply by	To get
Length					
inches	2.540	centimeters	centimeters	0.3937	inches
feet	30.48	centimeters	centimeters	0.03281	feet
feet	0.3048	meters	meters	3.281	feet
yards	0.9144	meters	meters	1.094	yards
miles	1.609	kilometers	kilometers	0.6214	miles
Area					
square inches	6.452	square centimeters	square centimeters	0.1550	square inches
square feet	0.09290	square meters	square meters	10.76	square feet
square yards	0.8361	square meters	square meters	1.196	square yards
acres	0.4047	hectares	hectares	2.471	acres
square miles	2.590	square kilometers	square kilometers	0.3861	square miles
Volume					
fluid ounces	29.57	milliliters	milliliters	0.03381	fluid ounces
gallons	3.785	liters	liters	0.2642	gallons
cubic feet	0.02832	cubic meters	cubic meters	35.31	cubic feet
cubic yards	0.7646	cubic meters	cubic meters	1.308	cubic yards
Weight					
ounces	28.35	grams	grams	0.03527	ounces
pounds	0.4536	kilograms	kilograms	2.205	pounds
short tons	0.9072	metric tons	metric tons	1.102	short tons
Temperature					
Fahrenheit (°F)	subtract 32, then multiply by 5/9	Celsius (°C)	Celsius (°C)	multiply by 9/5, then add 32	Fahrenheit (°F)
kelvin (°k)	subtract 273.15	Celsius (°C)	kelvin (°k)	Multiply by 9/5, then add 306.15	Fahrenheit (°F)
Note: 1 sievert = 100 rems					

Metric Prefixes

PREFIX	EXPONENT CONVERTED TO WHOLE NUMBERS	PREFIX	EXPONENT CONVERTED TO WHOLE NUMBERS
atto-	$10^{-18} = 0.000,000,000,000,000,001$	deka-	$10^1 = 10$
femto-	$10^{-15} = 0.000,000,000,000,001$	hecto-	$10^2 = 100$
pico	$10^{-12} = 0.000,000,000,001$	kilo-	$10^3 = 1,000$
nano-	$10^{-9} = 0.000,000,001$	mega-	$10^6 = 1,000,000$
micro-	$10^{-6} = 0.000,001$	giga-	$10^9 = 1,000,000,000$
milli	$10^{-3} = 0.001$	tetra-	$10^{12} = 1,000,000,000,000$
centi	$10^{-2} = 0.01$	peta-	$10^{15} = 1,000,000,000,000,000$
deci-	$10^{-1} = 0.1$	exa-	$10^{18} = 1,000,000,000,000,000,000$

Note: $10^0 = 1$

CHAPTER 1

Public Comment Process

1.1 INTRODUCTION

The U.S. Department of Energy (DOE) has prepared this Site-Wide Environmental Impact Statement (SWEIS) in accordance with the *National Environmental Policy Act of 1969* (NEPA) (42 United States Code [U.S.C.] Section 4321) to examine the environmental impacts associated with three alternatives for the continued operation of Sandia National Laboratories/ New Mexico (SNL/NM). An important part of the NEPA process is the solicitation of public comments on a draft Environmental Impact Statement (EIS) and consideration of those comments in the preparation of a final EIS. The DOE distributed copies of the Draft SWEIS to those who were known to have an interest in SNL/NM in addition to those who requested a copy.

The DOE released the Draft SWEIS in April 1999 for review and comment by the State of New Mexico, Native American tribes, local governments, other Federal agencies, and the general public. The formal public comment period lasted 60 days, ending on June 15, 1999. Comments received by the close of the comment period were considered in the preparation of the Final SWEIS.

The DOE considered all comments received to evaluate the accuracy and adequacy of the Draft SWEIS and to determine whether text needed to be corrected, clarified, or otherwise revised. The DOE gave equal weight to spoken and written comments and to comments received at the public meetings.

Chapter 3 of this volume contains all formal comments received on the Draft SWEIS during the public comment process. Every document received was electronically scanned and reproduced on the left side of Chapter 3 pages. The public hearing transcripts were also reproduced. Comments that were identified are marked with a bar to the right of the corresponding text. Responses for identified comments were provided alongside each comment.

All public comments received were categorized by subject area, reviewed, and then considered for potential changes, additions, or deletions to the SWEIS.

1.2 PUBLIC MEETING FORMAT

A series of five public meetings was held during the public comment period in Albuquerque, New Mexico. Two meetings were held on May 19, 1999, at the University of New Mexico's Continuing Education Center. Another two meetings were held at the Manzano High School Library on May 20, 1999, and a Saturday public meeting was held at the South Broadway Cultural Center on May 22, 1999.

Oral comments made during the public meetings were recorded by a court reporter, and a verbatim transcript was produced. The public meetings held on the Draft SWEIS were conducted using an informal format with a facilitator. This format allowed for a two-way interaction between the DOE and the public. The facilitator helped to direct and clarify discussions and comments, allowing every commenter the chance to formally present comments.

1.3 ORGANIZATION OF THIS COMMENT RESPONSE DOCUMENT

This Comment Response Document (CRD) has been organized into the following sections:

- *Chapter 1*—Describes the public comment process, the CRD, and changes made to the Draft SWEIS.
- *Chapter 2*—Presents a summary of comments received on the Draft SWEIS and a summary of the responses to those comments.
- *Chapter 3*—Presents the scanned images of original comment documents received during the public comment period. These images are marked with sidebars denoting the identified comments. Responses are provided alongside that correspond to the identified comments.
- *Chapter 4*—Provides a list of references cited in the CRD.

All comments received on the Draft SWEIS were identified and categorized by issue (such as, groundwater) and assigned a unique identifying code. Table 1.3–1 lists the issue category codes, corresponding issue categories, and the pages in Chapter 3 on which

Table 1.3–1. Issue Categories and Response Locations

ISSUE CODE	ISSUE CATEGORY	PAGE NUMBERS
1	DOE Policy	CRD-17, CRD-63, CRD-88, CRD-90, CRD-104, CRD-134, CRD-136, CRD-140, CRD-146, CRD-168, CRD-254, CRD-259, CRD-262
4	Public Involvement	CRD-72, CRD-90, CRD-91, CRD-132, CRD-230, CRD-231, CRD-248, CRD-250
6	Remarks (General comments from the public)	CRD-15, CRD-34, CRD-37, CRD-71, CRD-72, CRD-73, CRD-75, CRD-102, CRD-104, CRD-105, CRD-129, CRD-144, CRD-153, CRD-170, CRD-171, CRD-172, CRD-173, CRD-174, CRD-224, CRD-231, CRD-245, CRD-253, CRD-263, CRD-266
7	Purpose and Need	CRD-13, CRD-74, CRD-75, CRD-85, CRD-107, CRD-122, CRD-152, CRD-225, CRD-243, CRD-252, CRD-269
8	Alternatives	CRD-16, CRD-38, CRD-39, CRD-40, CRD-41, CRD-55, CRD-73, CRD-74, CRD-87, CRD-88, CRD-89, CRD-173, CRD-244, CRD-245, CRD-247, CRD-249, CRD-268, CRD-275, CRD-276
13	Document Readability	CRD-52, CRD-60, CRD-61, CRD-76, CRD-93, CRD-105, CRD-106, CRD-107, CRD-108, CRD-116, CRD-122, CRD-130, CRD-132, CRD-133, CRD-134, CRD-135, CRD-136, CRD-141, CRD-144, CRD-216, CRD-221, CRD-232
14	Reference Material/Supporting Documents	CRD-88, CRD-155, CRD-257, CRD-275
15	Selected Facilities	CRD-76, CRD-108, CRD-137, CRD-138, CRD-139, CRD-144, CRD-150, CRD-216, CRD-217, CRD-218, CRD-220
16	Land Use	CRD-107, CRD-108, CRD-145
18	Infrastructure	CRD-84, CRD-116, CRD-145, CRD-221, CRD-223
20	Water Use	CRD-53, CRD-69, CRD-77, CRD-102, CRD-127, CRD-148, CRD-225, CRD-269, CRD-271, CRD-272
21	Geology and Soils	CRD-48, CRD-49, CRD-50, CRD-108, CRD-109, CRD-116, CRD-125, CRD-142, CRD-146, CRD-149
24	Groundwater	CRD-42, CRD-44, CRD-45, CRD-50, CRD-51, CRD-55, CRD-56, CRD-57, CRD-58, CRD-60, CRD-77, CRD-78, CRD-110, CRD-111, CRD-116, CRD-117, CRD-127, CRD-142, CRD-147, CRD-148, CRD-225
26	Surface Water	CRD-25, CRD-26, CRD-27, CRD-28, CRD-44, CRD-47, CRD-48, CRD-52, CRD-60, CRD-61, CRD-62, CRD-63, CRD-103, CRD-111, CRD-117, CRD-142, CRD-149
27	Air Quality	CRD-80, CRD-81, CRD-111, CRD-112, CRD-118, CRD-119, CRD-120, CRD-127, CRD-150
28	Radiological Air Quality	CRD-14, CRD-64, CRD-65, CRD-112, CRD-119, CRD-120, CRD-143, CRD-151, CRD-152
29	Biology	CRD-19, CRD-20, CRD-21, CRD-23, CRD-24, CRD-25, CRD-26, CRD-29, CRD-30, CRD-31, CRD-32, CRD-117, CRD-149
30	Cultural Resources	CRD-87, CRD-104, CRD-118, CRD-214, CRD-264

Table 1.3–1. Issue Categories and Response Locations (concluded)

ISSUE CODE	ISSUE CATEGORY	PAGE NUMBERS
31	Socioeconomics	CRD-95, CRD-115, CRD-130, CRD-131, CRD-140, CRD-191, CRD-193, CRD-246
32	Environmental Justice	CRD-82, CRD-97, CRD-98, CRD-99, CRD-115, CRD-124, CRD-194, CRD-195, CRD-197, CRD-199
33	Human Health	CRD-105, CRD-112, CRD-113, CRD-114, CRD-119, CRD-120, CRD-121, CRD-124, CRD-131
34	Waste Generation/Materials Management	CRD-66, CRD-67, CRD-68, CRD-82, CRD-102, CRD-114, CRD-121, CRD-122, CRD-123, CRD-135, CRD-138, CRD-140, CRD-143, CRD-152, CRD-226
36	Environmental Restoration	CRD-32, CRD-64, CRD-68, CRD-103
37	Accidents	CRD-92, CRD-93, CRD-94, CRD-100, CRD-124, CRD-125, CRD-153, CRD-256, CRD-257, CRD-258, CRD-260, CRD-262
38	Cumulative Impacts	CRD-13, CRD-59, CRD-85, CRD-100, CRD-101, CRD-255, CRD-256, CRD-258, CRD-260, CRD-265
39	Methodologies	CRD-18, CRD-87, CRD-267
42	Noise	CRD-20, CRD-115, CRD-124, CRD-251, CRD-252
43	Transportation	CRD-66, CRD-78, CRD-80, CRD-93, CRD-121, CRD-272, CRD-273
44	Mitigation	CRD-42, CRD-77, CRD-128

comments in those issue categories appear. Once identified and categorized, each comment was evaluated, and a response to the comment was prepared. Where appropriate, changes were made to the Draft SWEIS. If applicable, the location of the revision to the Draft SWEIS is noted in Chapter 3.

Table 1.3–2 lists the agencies, organizations, and individuals that submitted comments. Commenters are listed alphabetically by last name or organization name, along with the issue category codes identified in the comment document and the page number in the CRD on which each document begins.

1.4 CHANGES TO THE DRAFT SWEIS

The DOE revised the Draft SWEIS in response to the comments received from other Federal agencies; tribal, state, and local governments; nongovernmental organizations; the general public; and internal reviews. The text was changed to provide additional environmental baseline information, correct inaccuracies, make editorial corrections, and provide additional

discussions of technical considerations to respond to comments and clarify text. In addition, the DOE updated information due to events or decisions made in other documents since the publication of the Draft SWEIS for public comment in April 1999.

Where appropriate, the DOE corrected the Final SWEIS in response to comments.

1.4.1 Preferred Alternative

The DOE did not present a Preferred Alternative in the Draft SNL/NM SWEIS. The DOE has now selected the Expanded Operations Alternative, exclusive of the Microsystems and Engineering Sciences Applications (MESA) Complex, as its Preferred Alternative. Under the Expanded Operations Alternative, the DOE would expand operations at SNL/NM as the need arose (until 2008), subject to the availability of congressional appropriations, to increase the level of existing operations to the highest reasonable foreseeable activity levels that are analyzed in the SWEIS. The Preferred Alternative would only implement expansion at the existing Microelectronics Development Laboratory (MDL) facility, without addition of the MESA Complex.

Table 1.3–2. Index of Commenters and Responses

DOCUMENT	COMMENTER	CATEGORY	PAGE NUMBER
<i>Federal Agencies</i>			
1	U.S. Air Force	7, 28, 38	CRD-13
2	U.S. Air Force	1, 6, 8	CRD-15
3	U.S. Department of the Interior	26, 29, 36, 39, 42	CRD-18
4	U.S. Environmental Protection Agency	6	CRD-34
<i>Tribal/Sovereign Nations</i>			
5	Navajo Nation	No comments identified	CRD-36
6	Pueblo of Isleta	6, 8, 13, 20, 21, 24, 26, 44	CRD-37
<i>State Government</i>			
7	New Mexico Environment Department	1, 8, 13, 20, 24, 26, 28, 34, 36, 38, 43	CRD-55
8	State of New Mexico Office of Cultural Affairs, Historic Preservation Division	No comments identified	CRD-70
<i>Organizations</i>			
9	Albuquerque Economic Development	6	CRD-71
10	Albuquerque Technical-Vocational Institute	4, 6	CRD-72
11	Southwest Research & Information Center	6, 7, 8, 13, 15, 18, 20, 24, 27, 32, 34, 43, 44	CRD-73
12	Southwest Research & Information Center	1, 4, 7, 8, 14, 30, 38, 39	CRD-85
<i>Citizens</i>			
13	Anonymous	13, 37, 43	CRD-92
14	Ron Faich	31, 32, 37, 38	CRD-95
15	Kim Ong	6, 20, 26, 34, 36	CRD-102
16	Diane Terry	1, 6, 13, 30, 33	CRD-104

Table 1.3–2. Index of Commenters and Responses (continued)

DOCUMENT	COMMENTER	CATEGORY	PAGE NUMBER
17	Cheryl-Lynn Walker	7, 13, 15, 16, 18, 20, 21, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 37, 42, 43, 44	CRD-106
18	Cheryl-Lynn Walker	1, 4, 6, 13, 15, 31, 33, 34	CRD-129
19	Cheryl-Lynn Walker	1, 6, 7, 13, 15, 16, 18, 20, 21, 24, 26, 27, 28, 29, 34, 37	CRD-142
20	Cheryl-Lynn Walker	14	CRD-155
Public Meeting Transcripts			
21	University of New Mexico Continuing Education Center meetings: Ron Faich, John Jekowski, Harry Kinney	1, 6, 8, 31, 32	CRD-168
22	Manzano High School Library meeting: Sue Dayton, JoAnne Ramponi, Cheryl-Lynn Walker	4, 6, 7, 13, 15, 18, 20, 24, 30, 34	CRD-214
23	South Broadway Cultural Center meeting: David Binkley, Ron Faich, Don Hancock, Charlotte Macias	1, 4, 6, 7, 8, 14, 20, 30, 31, 37, 38, 39, 42, 43	CRD-243

1.4.2 The Microsystems and Engineering Sciences Applications Complex of the Microelectronics Development Laboratory

In the Draft SWEIS, the MDL was identified as operating as a research, development, and fabrication facility. A single configuration with no new construction was presented and MDL operations were described as focusing on the fabrication of approximately 7,500 silicon-based wafers. In the Final SWEIS, the Expanded Operations Alternative has two configurations: 1) to support research and development (R&D) and production of silicon-based microelectronic devices; or 2) to support R&D and production of silicon-based microelectronic devices along with producing war reserve

microsystems-based components with specialty alloys (such as gallium arsenide and indium arsenide).

Under the first configuration, there would be no construction of new facilities for the expanded wafer production and the Compound Semiconductor Research Laboratory (CSRL) (Building 893) would remain in operation at its present location.

The second configuration (a developing proposal) would result in the construction of a new laboratory and other buildings comprising the MESA Complex.

The MESA Complex configuration (including R&D) would produce a mix of 7,500 silicon/specialty alloy wafers per year. The DOE has identified a need related to the surety improvements in weapon systems incorporating microelectronics, microoptics, and

microelectromechanical systems in these silicon/specialty alloy wafers. The estimated \$300 M project would integrate and leverage the scientific and technological capabilities existing separately at the MDL and CSRL in a new laboratory, replacing the outdated CSRL, collocated adjacent to the current MDL. The project would include retooling existing operations. Related infrastructure needs would include laboratories, offices, and gas storage. If the developing proposal for the MESA Complex configuration were to become operational (about 2003), the DOE would phase out and eventually decommission and decontaminate the existing CSRL.

For more information regarding the DOE's *National Environmental Policy Act* (NEPA) strategy, see the *Proposed Action and Alternatives* section of the Summary and Section 1.3 of the Final SNL/NM SWEIS.

1.4.3 Microsystems and Engineering Sciences Applications Complex Impacts

The Expanded Operations Alternative analysis presents impacts of constructing and operating the MESA Complex project, primarily water usage and accident scenarios, based on preliminary information from the ongoing conceptual design work.

Water use would increase from 495 M gal per year to 499 M gal per year if the MESA Complex became operational; however, the DOE and SNL/NM are committed to reducing SNL/NM-wide water use by

30 percent based on 1996 usage. Accident scenarios are discussed below.

The impacts of chemical accident and site-wide earthquake scenarios have changed, primarily due to changes in Emergency Response Planning Guideline Level 2 (ERPG)-2 guidelines and the addition of the MESA Complex into one of the configurations under the Expanded Operations Alternative. The ERPG-2 guidelines, for some chemicals, including arsine and phosphine, became more restrictive after the Draft SWEIS was published. The stricter guidelines affected which chemical accident scenarios would have the greatest impacts and increased the impacts of the site-wide earthquake chemical releases under all alternatives. Further, the addition of the proposed MESA Complex into one configuration under the Expanded Operations Alternative, which would include the relocation of CSRL as part of the MESA Complex, affected the dominant chemical accident scenarios.

1.5 NEXT STEPS

The SWEIS Record of Decision (ROD), which the DOE will publish no sooner than 30 days after the U.S. Environmental Protection Agency (EPA) issues the Notice of Availability of the Final SWEIS, will explain all factors, including environmental impacts, that the DOE considered in reaching its decision. In addition, the ROD will identify the environmentally preferred alternative or alternatives.

CHAPTER 2

Summary of Comments and Responses

This section contains an overview of comments and responses on the Draft SWEIS. Typically, the following sections discuss resource areas for which the DOE received multiple comments, often from several commenters. These sections do not capture all specific comments, but provide the reader with the essence of public concerns on the Draft SWEIS.

In addition to the comments summarized below, the DOE also received comments on other topics. A breakdown of all comments received, by issue category, is presented in Table 1.3–1.

2.1 Alternatives

Some commenters took issue with the alternatives evaluated, maintaining that there were not enough differences among alternatives or that the Reduced Operations Alternative should have gone further toward scaling back SNL/NM activities. For example, one commenter stated that the “SWEIS does not clearly distinguish between the alternatives.” Another stated that in “the majority of instances, on a project-by-project basis, there are far more similarities...than there are differences” in operations at facilities among the different alternatives. A commenter also noted that “the Draft SWEIS admits that for some facilities, ‘reduced operations’ would actually be increased operations compared with the base period activities,” and that the DOE should have considered an alternative of “returning all or part of the withdrawn Forest Service lands to public use.” Commenters also noted that the No Action Alternative is described as possibly involving increased activity, which contradicts the concept of no action.

The three alternatives represent the same mission assignments carried out at different levels. Other than the proposed expansion of the MDL to include the MESA Complex (a developing proposal that is still undergoing conceptual design but is presented under one of two configurations in the Expanded Operations Alternative, as discussed in Section 3.3.1.2 of the Final SWEIS), there would be very little construction of new facilities; and, even in those cases, construction would occur largely in previously disturbed areas. Renovations to existing buildings could also occur.

In general, implementation of any of the alternatives would use the existing physical plant. In many cases, the actual changes in levels of activities represent a very small change in relation to current levels, so the change in impacts would be relatively small. The DOE believes the Reduced Operations Alternative accurately reflects the minimal level of operation possible at SNL/NM to maintain the capabilities identified in the Stockpile Stewardship and Management Programmatic Environmental Impact Statement (DOE 1996a). Some facilities in the Withdrawn Area are unique to the DOE nuclear weapons complex, such as the Lurance Canyon Burn Site and the Aerial Cable Facility. Because of the uniqueness and necessity of the facilities located in the Withdrawn Area, the DOE does not anticipate moving these facilities or suspending activities at them within the time frame analyzed in the SWEIS. For this reason, the DOE does not believe it is reasonable to return all or part of the Withdrawn Area to the public and, therefore, did not analyze it in the SWEIS. The rationale for not considering return of withdrawn lands to public use has been added to the Final SWEIS as Section 3.5.3.

The No Action Alternative in the SWEIS considers SNL/NM activities at currently planned levels of operations. This includes some activities or projects that have been planned and approved, but are not yet operational. This is intended to present a realistic picture of the continuing activity at the current congressionally approved level. If these planned operations are implemented in the future, they could result in increased activity above present levels.

2.2 Water Use

A number of comments dealt with reducing the quantity of water used by SNL/NM. One commenter focused on water conservation, stating “I hope that [SNL/NM]... actually implements this 30 percent conservation reduction that is mentioned more than once in the document,” and that SNL/NM “should join the rest of us in significant [water] conservation efforts over the next few years.” Another commenter asked “can SNL/NM justify expending critical water resources for programs such as those conducted at the Microelectronics Development Laboratory?”

Based on 1996 usage, SNL/NM's goal is to reduce annual water use from 440 million gallons to 308 million gallons by 2004. This goal will be achieved through a variety of conservation efforts, especially at higher water use facilities such as the MDL. The MDL provides custom and radiation-hardened microelectronics—a critical capability to the nuclear weapons stockpile maintenance program. Due in part to SNL/NM's signing of the water conservation memorandum of understanding with the city of Albuquerque and Kirtland Air Force Base (KAFB), the MDL began to implement a series of steps to reduce water use. In 1996, work began on improving the MDL's reverse osmosis water treatment system. The MDL is currently researching a water-recycling project to further reduce water consumption by 70 percent to 80 percent. This project uses sophisticated sensors to monitor the quality of water before it enters the recycling loop, preventing the introduction of contaminants into the recycled water system. Another project originally designed in 1996 would take some of the process wastewater at the MDL and pump it for reuse in an adjacent cooling tower, resulting in savings of approximately 12 million gallons per year.

2.3 Groundwater

A number of comments addressed the issue of groundwater quality at SNL/NM, particularly groundwater contamination at the Chemical Waste Landfill (CWL) and other locations around KAFB. Several commenters took issue with the SWEIS characterization of areas of groundwater contamination, which indicated the CWL was the only location of groundwater contamination definitely attributable to SNL/NM activities. For example, one commenter stated that he “believes that sufficient data have been developed to support the attribution to known SNL/NM activities [in] other tech areas in addition to [Technical Area (TA)]-III as sources of ground water contamination.” Another commenter inquired about concentrations of potassium-40 that have “recently been over the DOE guideline in four wells.”

The SWEIS presents data from four other locations of known or suspected groundwater contamination, in addition to the CWL, where SNL/NM activities were the possible cause of contamination. Based on groundwater monitoring data published in 1999, the SWEIS has been revised to state that nitrate contamination at TA-V and petroleum hydrocarbon component contamination at the Lurance Canyon Burn

Site are the result of SNL/NM activities. The source of trichloroethene (TCE) contamination at “Sandia North” is still unknown. Concentrations of metals and radioisotopes exceeding groundwater standards, such as potassium-40, have been noted at other locations around KAFB; however, these are naturally occurring elements that appear to be unrelated to human activities.

2.4 Surface Water

Several comments focused on the adequacy of surface water sampling and analyses that SNL/NM has performed, the methodology used in the surface water impacts analysis, and exceedance of permit limits in runoff from TAs-I, -II, and -IV. One commenter questioned the conclusions of the analysis, stating that “[t]he two important areas, III and V, have no routine surface water monitoring or surface water monitoring stations,” and that “[t]aking occasional surface water samples at the CWL does not provide the same level of assurance as provided by continuous monitoring.” Another commenter stated “[i]t is...unclear whether relevant analyses were conducted on surface waters (priority pollutants, organic compounds, tritium, gross alpha) in order to determine if water quality concentrations exceeded those known to be toxic or that are protective.” One commenter criticized the comparison of surface water sample analyses to New Mexico Water Quality Control Commission standards, stating the “analysis of impacts to surface water quality was unnecessarily restricted to regulatory limits.” Several commenters took issue with the SWEIS statement that there was no evidence of contamination of runoff from SNL/NM activities. One commenter asserted that this “statement is directly contradicted by SNL/NM own report...The analytical results...show that iron and zinc exceeded permit limits...by a large margin.”

The DOE believes that the sampling program discussed in the SWEIS provides the best available data and methods for determining the contribution of contaminants from SNL/NM facilities. The surface water quality analysis was not restricted to regulatory limits. In addition to regulated constituents, surface water sampling data used in the analysis included 12 metals, 7 anions, 11 explosives, and 7 radionuclides for which there are no regulatory limits. These data provide no evidence of contamination from SNL/NM facilities. As to exceedance of permit limits in runoff from TAs-I, -II, and -IV, low flow at these monitoring stations requires placement of the sample intake tube on the bottom of the drainage channel. This has caused the

introduction of a greater amount of suspended solids than is representative of the runoff. During the laboratory analysis of these samples, minerals naturally occurring in the suspended solids, such as zinc and iron, can appear at higher concentrations as well. There are no known SNL/NM activities or discharges to surface water in the areas monitored by these stations that would cause permit exceedances of zinc and iron.

2.5 Biology

A number of commenters requested that the SWEIS include more quantitative information about biological resources onsite and the potential impact to these resources and further support of statements made in the SWEIS about beneficial biological impacts of SNL/NM activities. One commenter stated, “[t]he amount of improvement in grassland quality, vegetative productivity, and beneficial changes to the grassland community was not quantified or is without citation.” Another commenter asked “[i]s the quality of grasslands, the reintroduction of the gramma grass cactus, the siting of a raptor, and the absence of contaminant loads of radionuclides in rodents ample enough evidence to apply such a broad sweeping statement to the 60-odd species of plants and animals mentioned in the study?”

Studies and reports used in arriving at the conclusion that “beneficial impacts to biological and ecological resources would occur under all alternatives” were prepared by several entities, including the DOE, SNL/NM, the U.S. Air Force (USAF), and the U.S. Forest Service (USFS). These studies and reports are cited in the SWEIS.

2.6 Socioeconomics

Socioeconomic comments centered primarily on the definition of the region of influence (ROI). One commenter stated, “[d]efining the SNL/NM socioeconomic [ROI] as Bernalillo, Sandoval, Torrance and Valencia counties overstates, in my view, the socioeconomic impact of SNL/NM in central New Mexico. For example, the northwestern portion of Sandoval county includes the eastern extent of Navajo Indian trust lands and the southernmost part of the Jicarilla Apache Indian Reservation. The socioeconomics of this area are not impacted in the least by SNL/NM’s operations, as would also be the case for most of Torrance county more than a few miles south of the I-40 corridor.” Further, he stated, “by not including the southernmost part of Santa Fe county along I-40 in the ROI, the SWEIS excludes from consideration the

burgeoning community of Edgewood, which certainly is home to many SNL/NM employees.”

The current four-county ROI is a reasonable basis for assessing SNL/NM-related socioeconomic impacts because 97.5 percent of SNL/NM employees reside in the four-county area. The analysis performed in the SWEIS mirrors annual studies prepared by New Mexico State University, which are publicly available (*The Economic Impact of Sandia National Laboratories on Central New Mexico and the State of New Mexico: Fiscal Year 1996* [DOE 1997b]; *The Economic Impact of Sandia National Laboratories on Central New Mexico and the State of New Mexico: Fiscal Year 1997* [DOE 1998]). These studies provide an excellent basis for comparing economic activity, income, and employment changes resulting from the three alternatives within the four-county area. In addition, refining the analysis to add or subtract parts of other counties would not visibly change the results of the four-county analysis nor the conclusions of this analysis.

2.7 Environmental Justice

Comments on environmental justice criticized two aspects of the methodology: the use of a high threshold in defining a minority area, and the logic of stating that there can be no significant environmental justice issues within a particular resource analysis because no significant environmental impacts were identified. One commenter stated “[a] 25 percent minority population threshold was utilized in the [environmental justice] analyses of both the Pantex and Los Alamos National Laboratory SWEIS’, so why is this more sensitive standard not used in the SNL/NM SWEIS? The treatment of Environmental Justice in the Draft SWEIS is nothing more than a whitewash, literally and figuratively, in my opinion.” This commenter further states “[w]ith only a few exceptions mainly in the northeast part of Albuquerque, nearly every 1990 Census tract within the 50-mile radius circle has a population which is at least 25 percent minority, thus warranting scrutiny from an Environmental Justice perspective.” Questioning the logic of the environmental justice analysis, the commenter states “[t]he flow of the arguments is as follows: there are no adverse impacts in the ROI as a whole (for each resource area), so therefore, there can be no disproportionate and adverse impacts for any minority or low income subarea of the ROI...Not true, as minimal knowledge of the history of the Environmental Justice movement would reveal in case after case historically, a large area around, say, an oil

refinery appeared environmentally sound, but in neighborhoods immediately adjacent to the refinery, a low income minority population was devastated by contaminants from the facility.”

In determining the threshold for identifying minority populations, the analysis considered the guidance contained in *The Environmental Justice Guidance Under the National Environmental Policy Act* (CEQ 1997). This document suggests identifying areas where “...the minority population of the affected area exceeds 50 percent.” *Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analyses* (EPA 1998) also recommends identifying areas where minority populations exceed 50 percent. The DOE recognizes there are different approaches for analyzing environmental justice impacts. However, because the 1990 Census reported New Mexico’s minority population at 49 percent, it was determined that 49 percent should be the threshold. All resources were analyzed on an individual basis for environmental justice impacts and, in addition, five were evaluated in detail (water resources, cultural resources, air quality, human health, and transportation). Only one resource area, water resources, was determined to have adverse impacts, and the impacts affect all communities equally. No

disproportionately high and adverse impacts were identified for any of the alternatives.

2.8 Cumulative Effects

Many of the comments on cumulative effects centered on questions about accidents. One commenter asked if there was even a remote possibility, “that an airplane crash into [TA-V] could trigger nuclear reactions” at a nearby KAFB munitions storage facility. The commenter further asks “could a severe earthquake in the area result in a similar sequence of events?” Another commenter wanted more specific information on accidents involving large military aircraft at KAFB, particularly accounting for fuel load and cargo capacity, to better understand the potential risks.

A USAF-prepared environmental assessment (USAF 1986) for the munitions storage facility states that the innovative physical design of the facility “all but eliminates” the possibility of a falling aircraft penetrating such a below-ground structure. The aircraft accident analysis did not have to include the impact of aircraft fuel or cargo, because it assumed that the impact of any aircraft, regardless of fuel load or cargo, would create worst-case conditions that would affect all of a building’s hazardous material at risk.

CHAPTER 3

Comment Documents and Responses

3.1 INTRODUCTION

This chapter presents the 20 comment documents submitted to the DOE during the public comment period on the draft SNL/NM SWEIS and the transcripts of three public meetings held on the Draft SWEIS.

Comment documents are reproduced in this chapter as reduced-scale facsimiles of the originals with the exceptions of Document 13 (summary of oral comments); the attachments to Documents 17, 18, and 19 (reproductions of comments received electronically); Documents 9 and 16 (reproductions of faxes); and the public meeting transcripts (reproductions of electronic files). Document 12, received during the scoping process in 1997 and incorporated as comments by request of the commenter, is also reproduced from a fax.

The DOE reviewed each document and transcript and identified the public comments provided. Each comment identified is marked in the margin with a bar and the

document number (Table 1.3–2), the number of the comment identified in that document, and the issue category (Table 1.3–1) to which that comment was assigned. For example, comment 6-8-24 is from the sixth comment document (6), is the eighth comment identified in that document (8), and falls under the issue category of groundwater (24).

After categorization, the DOE responded individually to each identified comment. In most instances, the response is on the same page as the corresponding comment. However, if many comments were identified on a single page, the responses to some comments might appear on following pages. Responses to comments that are identical or similar in nature refer the reader to a previous appropriate response. Chapter 1 of this CRD provides tables to assist the reader in locating specific documents, comments, and responses.

Within the responses, all references to the text of the SWEIS are in Volume I, unless otherwise noted.

No comments identified.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

07 JUL 889



HQ USAF/ILEVP
1260 Air Force Pentagon
Washington, DC 20330-1260

Ms. Julianne Levings
NEPA Document Manager
U.S. Department of Energy
Albuquerque Operations Office
PO Box 5400
Albuquerque, New Mexico 87185

Dear Ms. Levings:

Attached are Air Force comments on the *Sandia National Laboratories/New Mexico Draft Site-Wide Environmental Impact Statement*. They should be reviewed as those of a cooperating agency. Please feel free to respond to the Air Force per your procedures.

If you have any further questions on our comments, please contact Mr. Lee Schoenecker of the Air Force's headquarters environmental division, environmental planning branch. His telephone number is: (703) 604-0552; his e-mail is: lee.schoenecker@pentagon.af.mil.

Sincerely

LYNN A. ENGELMAN
Acting Chief, Environmental Planning Branch
DCS/Installations & Logistics

Attachments:

1. Consolidated Comments of Several AF Offices
2. Comments of AF Secretariat Legal Staff

7 July 99

AIR FORCE COMMENTS

- Recommend the no action alternative be clarified to explain the year for which the current activities are programmed. We believe these activities are addressing programmed levels through 20008, but we are not sure. See page 3-9 of DEIS.

1-1-7
- Under page 6-14, section 6.3.0, recommend this section state the proposed Navajo petroleum pipeline route is also incompatible with the operations of KAFB.

1-2-38
- Under the operations of KAFB, page 6-10, recommend this section briefly address the proposed beddown of the CV-22 for the 58th SOW.

1-3-38
- There is no discussion in the summary booklet of Air Force flying missions at Kirtland Air Force Base (KAFB), even though on page S-8 there is a section “USAF Activities on KAFB.” In the main DEIS, section 6.2.8, there is a correct but limited description of such activities. There are two military wings on KAFB, an active special operations wing and a New Mexico Air National Guard Wing. In the summary booklet, we recommend a summary description of the basic Air Force and Air National Guard flying activities at KAFB. In the DEIS, we recommend a somewhat more detailed description of these same flying activities.

1-4-38
- There is no reference to KAFB airlift support of Department of Energy (DOE) operations in support of Sandia Laboratories. While such support is limited, as the Air Force is the cooperating agency for this EIS, a statement should be made as to the number and types of Air Force cargo flights which support Sandia, New Mexico payloads or missions.

1-5-38
- We would suggest that you use the System International units of Sieverts instead of the millirem of units. Sieverts are recognized as the current dose equivalent unit and have replaced the millirem unit. One Sievert equals 100,000 millirem or one millirem equals 10 microsieverts. In the text, this applies to pages: S-11, 5-6, 5-50, 5-51, 5-57, 5-121, 5-124, 5-164-66, and 5-168-69.

1-6-28

*Comment 1-1-7**Location of SWEIS Revision(s): Sections 3.2 and 3.4*

Response: The three alternatives represent the range of operating levels that could be reasonably implemented in the 10-year time frame of the SWEIS analysis (1998 to 2008). Changes were made in Sections 3.2 and 3.4 to identify the 10-year period (1998 to 2008).

*Comment 1-2-38**Location of SWEIS Revision(s): Section 6.3*

Response: Section 6.3 has been revised to indicate that the U.S. Department of Defense (DoD) determined that the proposed route would impact current USAF activities and would be incompatible with current KAFB operation.

*Comment 1-3-38**Location of SWEIS Revision(s): Section 6.2.8*

Response: Section 6.2.8 has been revised to include this mission. A bullet on the replacement of the Air Force’s MH-535 Pave Low Helicopter by the CV-22 Osprey has been added to the list in this section.

*Comment 1-4-38**Location of SWEIS Revision(s): Summary (USAF Activities on KAFB)*

Response: The Summary subsection “USAF Activities on KAFB” has been expanded to identify the active special operations training wing and the New Mexico Air National Guard fighter wing. The DOE believes that the level of detail in the existing description of flying missions in Section 6.2.8 is consistent with the objective of the cumulative impacts analysis.

*Comment 1-5-38**Location of SWEIS Revision(s): None*

Response: The DOE does not use KAFB airlift support for SNL/NM. The DOE and SNL/NM use Ross Aviation (a DOE contractor) for cargo flight

support (see Section 6.2.5). The DOE and SNL/NM material suppliers use commercial aircraft. The Medical Isotopes Production Project (MIPP) would use commercial aircraft support (see Appendix G of Volume II).

Comment 1-6-28

Location of SWEIS Revision(s): Various

Response: Though Sievert is an international unit to express dose equivalent data, the most commonly used and well understood unit is millirem or rem. It has been the DOE's practice to present the data in those units. However, a Sievert unit has been added to the metric conversion tables near the beginning of the Summary and Volumes I, II, and III to enable the reader to make the conversion.



Office of the General Counsel

DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC

13 May 1999

MEMORANDUM FOR AF/ILEVP (Lee Schoenecker)

FROM: SAF/GCN

SUBJECT: Draft Site-Wide EIS for Sandia National Laboratories at Kirtland AFB, NM

The Department of Energy (DOE) has prepared a Draft Site-Wide EIS (DSWEIS) for continuation of activities at its Sandia National Laboratories (SNL) located at Kirtland AFB, NM. The Air Force is noted in the DSWEIS as a cooperating agency because of Air Force involvement in planning certain activities with DOE at SNL. However, there are no Air Force decisions to be made with respect to the proposed action or any of the alternatives as described in this document. Therefore, there is no need for the Air Force to sign either a separate or a "joint" Record of Decision (ROD). See AFI 32-7061, ¶2.6.1.¹

When the Air Force is a cooperating agency, AFI 32-7061, ¶2.6.1, requires the Air Force to review and approve principal NEPA documents as if they were prepared by the Air Force. That is complicated a bit in this situation, because the Air Force does not normally develop an EIS for ongoing activities. See AFI 32-7061, Atch 2, ¶A2.3.7. The National Environmental Policy Act (NEPA), 42 U.S.C. §4321, *et seq.*, and the implementing regulations of the President's Council on Environmental Quality (CEQ), 40 CFR Part 1500, do not require NEPA analyses of ongoing activities, and as a rule, courts have not imposed such requirements. See *e.g.*, *Upper Snake River Chapter of Trout Unlimited v. Hodel*, 921 F.2d 232 (5th Cir. 1990); see also, *Sabine River Authority v. U. S. Dept. of Interior*, 951 F.2d 669 (5th Cir. 1992), *cert. denied*, 113 S.Ct. 75 (1992). Thus, if this document were to be reviewed and approved as if it were prepared by the Air Force, the conclusion might well be that the document should not have been prepared. However, you have advised that DOE's regulations require such site-wide EISs to be developed every five years for DOE installations. Given the fact that this document is unique in that it would not have been prepared by the Air Force due to the nature of the proposed action, the comments in this review should be regarded as the comments of a cooperating agency pursuant to 40 CFR §§1503.1(a)1, and 1503.2.

2-1-6

¹ This should be distinguished from a situation in which a federal agency other than the Air Force seeks to use Air Force property for a new proposed action. In that case, the Air Force may have one or more decisions to make, not the least of which would be whether to allow the use of Air Force property for the proposed action. In this case, the SNL has been operating on Kirtland AFB, NM, for quite some time. Even the "no action" alternative is a continuation of status quo activities. Thus, there is no decision for the Air Force to make.

Response to Comments by the United States Air Force

*Comment 2-1-6**Location of SWEIS Revision(s): None*

Response: Comment noted.

Since the Air Force has no decision to make with regard to this document, and is merely serving as a cooperating agency due to its "ownership" of Kirtland AFB on which SNL is located and its involvement in planning some activities at SNL,² I have no objections or recommendations for change *vis a vis* the Air Force involvement or responsibility. However, I offer the following comments with regard to the sufficiency of the document, in general.

This EIS, in essence, analyzes a proposed action described as ongoing activities at SNL, with the alternatives as expanded, reduced and status quo ("no action") activities. THE DSWEIS does not clearly distinguish between the alternatives, however, particularly since the document notes that ultimately the decision may be to select any one of the alternatives, or a combination of them – including "no action". Further, the "no action" alternative is described as possibly involving increased activity. The CEQ regulations require the discussion of alternatives in an EIS to sharply define the issues and provide a clear basis for choice among options for the decisionmaker and the public. See 40 CFR §1502.14. This document does not do that.

The DSWEIS makes absolutely no mention of classified activities. Certainly, as an unclassified document, it cannot disclose classified information. However, to satisfy NEPA, if there are classified actions being conducted at SNL at Kirtland AFB, those actions must be analyzed as well, but any classified aspects may be withheld from the public. See *Weinberger v. Catholic Action of Hawaii*, 454 U.S. 139 (1981). If classified activities are being conducted at SNL, this document, by apparently totally ignoring such matters, may not fully analyze all impacts involved. The CEQ NEPA regulations provide for the handling of classified matters in NEPA documents. See 40 CFR §1507.3(c).

As this is a DOE, rather than an Air Force document, and the Air Force need not sign a ROD for this proposed action, these comments are offered as observations to assist the drafters as they may see fit. If you have any questions with regard to matters stated herein, please don't hesitate to call me at (703) 693-7315.

E. David Hoard
Office of the General Counsel

² *i.e.*, "jurisdiction by law with respect to any environmental impact involved in a proposal or a reasonable alternative." See 40 CFR §1508.5.

Comment 2-2-8

Location of SWEIS Revision(s): None

Response: The three alternatives analyzed in the SWEIS, Expanded Operations, Reduced Operations, and No Action, were formulated in consultation with representatives of the USAF, a cooperating agency in this SWEIS.

These three alternatives comprise the range of the reasonably possible alternatives for future operations at SNL/NM. Each alternative is thoroughly described and distinguished in Chapter 3, which sets forth how much and what kinds of activity are envisioned for each of the selected facilities and facility groups for the three levels of operation and compares them to each other. See specifically Section 3.1 (an overview of the alternatives), 3.2 (the No Action Alternative), 3.3 (the Expanded Operations Alternative), and 3.4 (the Reduced Operations Alternative). See also Tables 3.6–1, 3.6–2, and 3.6–3, which compare activity levels and environmental impacts for the selected facilities under each of the alternatives. Chapter 5 describes the analysis and any environmental impacts expected from each alternative.

The fact that the DOE stated in the Draft SWEIS that it might ultimately select a combination of activity levels for various facilities does not render the alternatives any less clear. Where the DOE has analyzed the environmental impacts at selected facilities for the three levels of operations that comprise the three alternatives, the DOE may choose different activity levels for each of the selected facilities and facility groups in its Record of Decision. The NEPA process is satisfied as long as the department has bounded the environmental impacts for the selected level of operations of each facility. Here, all of the selected activity levels are analyzed in the SWEIS, and any combination of activities between the Reduced and Expanded Operations Alternatives will similarly be bounded by the SWEIS.

The commenter has correctly observed that the SWEIS stated that the "no action" alternative could result in activity greater than the present levels at SNL/NM. The No Action Alternative in the SWEIS considers SNL/NM activities at currently planned levels of operations. This includes some activities or projects that have been planned and approved, but are not yet operational. This is intended to present a realistic picture of the continuing

2-2-8

2-3-1

activity at the current congressionally approved level. If these planned operations are implemented in the future, they could result in increased activity above present levels. Thus, the No Action Alternative projects over 10 years, the level of activity for facility operations that would implement current management plans for assigned programs.

A situation like this was anticipated by the CEQ in its guidance on the No Action Alternative, Question 3, in *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations* (46 FR 18026) The CEQ describes a situation that “might involve an action such as updating a land management plan where ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed. In these cases ‘no action’ is ‘no change’ from current management direction or level of management intensity.” The DOE believes that the continuation of SNL/NM programs is a similar situation.

Comment 2-3-1

Location of SWEIS Revision(s): None

Response: The SWEIS takes a comprehensive look at the environmental impacts of SNL/NM activities. All operations are accounted for in the analysis. Although some activities at SNL/NM might be classified, the environmental aspects of these operations are considered within the environmental analyses in a way that does not require them to explicitly be identified.

The DOE made every effort during development of the SWEIS to describe activities and present analyses in such a way that a classified appendix would not be necessary.



IN REPLY REFER TO:

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Post Office Box 649
Albuquerque, New Mexico 87103

June 1, 1999

ER 99/325

Julianne Levings
NEPA Document Manager
U.S. Department of Energy
Albuquerque Operations Office
PO Box 5400
Albuquerque, New Mexico 87185

Dear Ms. Levings:

The U.S. Department of the Interior has reviewed the Sandia National Laboratories, New Mexico, Draft Site-Wide Environmental Impact Statement (DEIS), April 1999 (DOE/EIS-0281). In this regard, the following comments are provided for your consideration during development of subsequent environmental documentation.

The Sandia National Laboratory (SNL) is one of several National laboratories that support the Department of Energy's statutory obligations for nuclear weapons research and design, development of other energy technologies, and basic scientific research. Properties located at the SNL have been used since World War II for weapons research, energetic physical testing of weapons components and, to a limited extent, for the disposal of waste chemicals. Vegetation types in the vicinity of SNL consist of desert grasslands, woodland transition in the eastern portions of Kirtland Air Force Base (KAFB), riparian scrubland, several small wetlands, and altered habitat areas significantly disturbed by human activity. Surface waters include springs, seeps, artificial ponds, wildlife watering devices, and intermittent flows in arroyos. The largest wetland is Coyote Springs in Arroyo del Coyote. Coyote Springs supports approximately one acre of wetlands and cottonwoods and has been developed as a picnic area. The Rio Grande, the nearest perennial river, is approximately four miles from the western boundary of KAFB.

The "No Action" Alternative and Quantifying Cumulative Effects

One purpose of the National Environmental Policy Act is to assist public officials in making decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment. The SNL is evaluating its operations geographically, that is, on a "site wide" basis, which offers an opportunity for quantifying

3-1-39

Response to Comments by the United States Department of the Interior

Comment 3-1-39

Location of SWEIS Revision(s): None

Response: The DOE has presented environmental impact analyses quantitatively where data were available. In some cases, where quantifiable information was not available at the time of the analysis, the DOE has presented qualitative environmental impact analyses. The methodologies used in the analyses are presented in Section 5.2.

cumulative effects geographically. However, under the "No Action" alternative, many effects are evaluated only qualitatively (i.e., not quantified), thus an understanding of the environmental consequences is impeded.

For example, beneficial impacts were identified for biological and ecological resources (e.g., grassland quality has improved with the absence of livestock grazing). The amount of improvement in grassland quality, vegetative productivity, and beneficial changes to the grassland community was not quantified or is without citation. The Future Use, Logistics, and Support Working Group (DEIS, page 5-18) only identified future land uses of recreational or industrial uses and did not identify future land uses that would specifically benefit grassland wildlife. The DEIS should clearly identify and describe SNL or KAFB land uses that will conserve and protect wildlife habitat so that the benefits of improved grasslands can be identified and quantified for each alternative and for future decisions.

As another example, under the "No Action" alternative, noise levels are expected to increase 35 percent from a baseline range of 50 to 70 decibels. It is unclear whether this 35 percent increase translates into an increased decibel range site-wide or if the increase is in the number of impulse noise events. As stated (DEIS, page 5-32), "from observation, wildlife appears to have become accustomed to the noise and activities that currently exist. Data from raptor surveys at KAFB support this observation, because some raptor species at KAFB return to the same nest sites each year." It is unclear if this statement supports the 35 percent increase in noise levels under the "No Action" alternative. A description of how these potential effects were monitored should be provided. Raptors may be less sensitive to noise in some situations; however, it would not be scientifically valid to suggest that these limited observations be extrapolated to all wildlife species and effects. Notably, a golden eagle nest near Lurance Canyon has been recently abandoned. Were noise levels at the Lurance Burn site greater than those reported? All species sensitivities and site-specific locations should be factored into the effects analysis of the "No Action" alternative in sufficient detail to quantify the indirect and cumulative effects of noise and other disturbances. Particularly, all significant stressors (noise, other disturbance activity, vehicular traffic, light, smoke plumes, contamination, accidents, nearby land use changes, recreation, etc.) should be accounted for in the cumulative effects analysis for wildlife and their habitats.

Without a quantitative cumulative effects analysis, it is difficult to reconcile such qualitative statements (DEIS, page 5-32) such as, "[b]iological resources could be influenced by construction activities or outdoor operations that result in noise, projectiles, off-road vehicular traffic, unintended fires, and plumes of smoke. Radionuclides or chemicals could also be released from potential accidents or normal operations;" with statements that downplay potential effects such as "[i]mplementation of the "No Action" alternative would cause minimal impacts to biological and ecological resources." It is important to quantify all effects included in the "No Action" alternative rather than relying on a qualitative assessment of (DEIS, page 5-32) "programs and activities will continue at currently planned levels" as the basis for action.

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3-4-42

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Comment 3-2-29

Location of SWEIS Revision(s): Section 4.7.3.2

Response: Although not discussed in detail in the SWEIS, KAFB performed a study of grassland biodiversity in 1995 (Parmenter & Chavez 1995). The purpose of the study was to measure the characteristics of plant and small mammal biodiversity following long-term exclusion of livestock from grasslands in the Rio Grande valley. This study quantitatively evaluated the vegetation species composition, plant percentage cover, plant biomass, and rodent species and densities on both KAFB and the adjacent Pueblo of Isleta, which still uses its land for cattle grazing. Total plant cover in the fall of 1992 was comparable on KAFB and on Pueblo of Isleta land (61.3 percent on KAFB versus 55.5 percent on Pueblo land). However, the black grama grass (the major native perennial grass species) was considerably more abundant on KAFB (48 percent cover) compared to the Pueblo of Isleta (16 percent cover). In addition, tumbleweed, a nonnative invader weed species that takes advantage of disturbed sites, was far more abundant on the Pueblo of Isleta land (13.3 percent cover) than on KAFB (1.1 percent cover). There were no significant differences in the rodent species composition or density between KAFB and the Pueblo of Isleta land. More detail on this study has been added to Section 4.7.3.2.

Comment 3-3-29

Location of SWEIS Revision(s): Sections 4.7.3.2 and 4.7.3.5

Response: The commenter is correct in that the Future Use, Logistics, and Support Working Group only identified limited future land uses. However, the DOE, in cooperation with the USAF, the USFS, the EPA, and the New Mexico Environment Department, has published a *Handbook: Baseline for Future Use Options* (Keystone 1995). This document discusses, in limited detail, the ecology of KAFB, including its plant communities. It includes a generalized vegetation map for KAFB. Language has been added to the text of the Final SWEIS that provides additional detail about future land uses. The SWEIS concisely discusses land use practices and plans at KAFB to conserve and protect wildlife. Section 4.7.3.2 discusses the fact that the exclusion of livestock for the past 50 years on KAFB appears to have had a beneficial effect on the vegetation. (The wording in the SWEIS has been

modified to more closely reflect the actual wording in the study report.) This exclusion practice is a fundamental part of KAFB's land use management practice, and is equally beneficial under all three of the alternatives. Section 4.7.3.5 discusses the management plans employed by KAFB and the Cibola National Forest that integrate the principles of ecosystem management into their assigned missions. In addition, two additional plans implemented by KAFB, *1997 Raptor Survey and Management Strategies* (USAF 1997b) and *Fish and Wildlife Plan* (USAF 1996) have been added and are discussed in Section 4.7.3.5.

Comment 3-4-42

Location of SWEIS Revision(s): Section 5.3.11.1

Response: The third paragraph of Section 5.3.11.1 has been revised to clarify its meaning. The original sentence stated that there would be an increase in noise-producing activities. This would be the number of individual events that would occur. The noise levels of these events would not increase, just the frequency.

Comment 3-5-29

Location of SWEIS Revision(s): None

Response: As discussed in the response to comment 3-4-42, there would be an increase in the number of test activities and not in noise levels produced by these events. This increase in the number of events is not likely to change wildlife responses to these impulse noise events. The DOE is investigating the effects of impulse noise on listed species as part of its ongoing approach to managing Los Alamos National Laboratory for the productive coexistence of programmatic activities with sensitive wildlife. Information gained from these investigations will be applied to ongoing operations at SNL/NM.

Comment 3-6-29

Location of SWEIS Revision(s): Section 5.3.5

Response: The DOE concurs that "it would not be scientifically valid to suggest that these limited observations be extrapolated to all wildlife species

and effects.” Species sensitivity to noise levels undoubtedly varies, because of a multitude of factors such as activity, age, reproductive status, previous exposure and effects, and duration of exposure to noise source. Many wildlife species, even those with high disturbance sensitivity, can and do become habituated to various sound and activity levels, if suitable habitat is available and their safety is not threatened. Such habituation, habitat, and security appear to be present at KAFB. As stated in the response to comment 3-5-29, ongoing studies at Los Alamos National Laboratory of the effects of impulse noise on listed species would assist in assessing any impacts. The subject discussion (fifth paragraph in Section 5.3.5) has been qualified to state that from observation, many wildlife species appear to have become accustomed to the sounds and activities that currently exist. This habituation was factored into the direct, indirect, and cumulative effects analysis of sound and other disturbances that could result from the No Action Alternative.

The former golden eagle nest near the Lurance Canyon Burn site is discussed in the KAFB *1997 Raptor Survey and Management Strategies* (USAF 1997b). This report concluded that the large nest was probably that of a golden eagle. This conclusion was supported by the discovery of a large pellet in the vicinity. The report also states that the nest had not been used in “recent years” and was not in use during the 1997 survey. In the summer of 1996 and in the spring of 1997, adult golden eagles were observed a number of times several miles south of the nest site on Isleta Pueblo. The author hypothesized that the eagles moved south when the High Energy Radiation Test Facility was constructed. Abandonment of the nest probably was not a result of testing activities. Noise levels at the Lurance Canyon Burn Site were the same as reported.

Comment 3-7-29

Location of SWEIS Revision(s): Section 4.7.3.5

Response: The DOE believes that the methodology used (see Section 5.2) in the cumulative effects assessment is appropriate. The first SWEIS statement quoted by the commenter indicates biological resources “could be influenced” by SNL/NM activities, and the second quoted statement indicates that the No Action Alternative would cause “minimal impacts to biological and ecological resources.” These statements are not in

contradiction. The characterization of biological resources and ecological processes and assessment of effects for the three alternatives in the Draft SWEIS was based on numerous biological studies and surveys accomplished on KAFB, in the Withdrawn Area, and on contiguous lands. These studies and surveys were cited in the Draft SWEIS under Ecosystem Management (Section 4.7.3.5). In addition, management plans that are being implemented by both the Cibola National Forest and KAFB to restore, sustain, and promote ecosystem health and integrity were discussed in the Draft SWEIS; two additional management plans (the Kirtland Air Force Base Fish & Wildlife Plan and the Kirtland Air Force Base 1997 Raptor Survey and Management Strategies) have been included and are discussed in the Final SWEIS in Section 4.7.3.5. The information in these surveys, reports, and management plans (much of it qualitative) formed the basis for the effects analysis. Thus, the cumulative effects analysis is both quantitative and qualitative, with professional judgment used where there are no definitive studies. As stated in Section 6.1, the cumulative effects analysis was based on data from the Expanded Operations Alternatives. In keeping with the objectives of conciseness and general readability, a balance between the use of plain language and accurately portraying technical data was employed. The citations given provide the reader with the opportunity to gain further insight into the resources and the basis for the impacts assessment. Additional quantitative information has been added to the Final SWEIS where new issues have been introduced and where the added information will contribute to enhanced understanding.

The "site wide" cumulative effects analysis is impaired by lack of quantification of effects in the "No Action" alternative and should be revisited during preparation of the final EIS, record of decision, and any mitigation action plans. Management of natural resources on KAFB, by KAFB, SNL, and the U.S. Forest Service could protect plants, animals and their habitats and surrounding ecosystems; however, adequate information was lacking on potential effects and management plans in the DEIS.

Endangered, Threatened, and Proposed Species

As stated in the document (DEIS, page 4-48), the only federally-listed species that may occur on KAFB is the endangered American peregrine falcon (*Falco peregrinus anatum*). It is our opinion that the Manzanita Mountain canyons (Madera, Lurance, Sol se Mete) and Tijeras Canyon contain suitable foraging habitat for the American peregrine falcon. The DEIS states that no nesting activity has been observed, but a survey conducted in 1994 observed migrants. We encourage the DOE/SNL, KAFB, and Forest Service to manage these canyons for the protection, benefit, and recovery of the peregrine falcon and other migratory birds.

The mountain plover (*Charadrius montanus*) has recently been designated as a proposed threatened species (Federal Register 64: 7587-7601, 2/16/99) without critical habitat. Mountain plovers are known to occur in Bernalillo County and may nest statewide, from April through July, on sites with short vegetation and bare ground. Habitat for the mountain plover has been described as expansive dry short-grass prairie or semidesert tablelands having a high proportion of bare ground for nesting. Typical associated plants include blue grama, buffalo grass, scattered cacti or forbs and may include cholla and yucca. The mountain plover nest is associated with prairie dog towns, open grass plains, mesas, and dry playas (lake bed flats). Within the State, migrating mountain plovers can also be found on grass/turf farms and other agricultural fields. As the East Mesa of KAFB likely contains native grassland habitat suitable for the mountain plover, inhabited and potential habitat should be identified, and measures should be taken for the protection of the species and its habitat. Under the Endangered Species Act, Federal agencies are required to "conference" with the U.S. Fish and Wildlife Service (FWS) on any action likely to jeopardize proposed species.

Additionally, habitat suitable for the endangered southwestern willow flycatcher (*Empidonax traillii eximus*) may occur on KAFB. FWS-approved surveys apparently have not been completed. Further, the endangered southwestern willow flycatcher, endangered Rio Grande silvery minnow (*Hybognathus amarus*), and proposed critical habitat for the Rio Grande silvery minnow all occur downstream of the Tijeras Arroyo; thus polluted discharges from SNL could affect these species or their habitat. The DEIS evaluation of impacts to biological resources included communities, biodiversity, habitat, and ecological processes. The ecological risk assessment process designed to guide the remediation of contaminated sites seeks to only protect wildlife populations from predictable effects. However, due to the danger of extinction, species listed as endangered or threatened require protection at the

Comment 3-8-29

Location of SWEIS Revision(s): Section 4.7.3.3

3-7-29,
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Response: The DOE concurs that Tijeras Canyon and canyons in the Manzanita Mountains could provide foraging habitat for peregrine falcons, which use a wide variety of land, plant, and water features as foraging habitat, including areas within metropolitan Albuquerque. As stated in the SWEIS, no peregrine falcon nesting is known to occur in the greater KAFB complex, but a probable sighting of a likely migrating peregrine was recorded in the Mt. Washington area of the Withdrawn Area in a 1995 survey for threatened and endangered species. A 1997 raptor survey by KAFB (USAF 1997b) did not observe any listed raptor species (the results of this survey have been added to the threatened, endangered, and sensitive species discussion in Section 4.7.3.3, of the Final SWEIS). This raptor survey stated that "There is a potential for listed species to occur on KAFB, especially during migration; however, habitat specific to listed raptor species is lacking on the base." The cliffs and rock outcroppings that are present primarily in the Withdrawn Area are not tall enough for high cliff nesters such as the peregrine falcon. Listed species and habitat are absent in the area of influence for SNL/NM activities.

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As discussed in Section 4.7.3.5 of the Draft SWEIS, both the Cibola National Forest and KAFB actively manage natural resources under their administration, integrating the principles of ecosystem management into their assigned missions. The long-term management goal of the *Integrated Natural Resource Management Plan, Kirtland Air Force Base, New Mexico* (USAF 1995a) is to consolidate and integrate all management activities in a manner that will restore, sustain, and promote ecosystem health and integrity at KAFB. A key component in the *Integrated Natural Resource Management Plan* is the management of fish and wildlife resources on KAFB, including threatened, endangered, and other special status species, and the habitat essential to these species. As a supplement to the *Integrated Natural Resource Management Plan*, a *Fish and Wildlife Plan* (USAF 1996) was prepared in 1996. This plan presents field survey data gathered during 1996 and outlines desirable management practices for wildlife and wildlife habitat. The field survey includes wetland surveys, and project-specific surveys for proposed military activities (reference to the *Fish and Wildlife Plan* has been included in the ecosystems management discussion in Section 4.7.3.5, of the Final SWEIS).

A stated goal of the Cibola National Forest for the Withdrawn Area is to “Maintain, protect, or improve wildlife diversity and population viability through structural and nonstructural habitat improvements... .”

The DOE, as an integral member of the KAFB complex, supports and assists with these management actions.

Comment 3-9-29

Location of SWEIS Revision(s): Section 4.7.3.3

Response: The DOE agrees that the general KAFB area could contain potential habitat for the mountain plover. However, numerous avian surveys of the Withdrawn Area and KAFB in general have not documented its presence. The long-term absence of grazing, which has promoted taller and denser stands of grass, is a possible reason that the mountain plover might not use KAFB (Parmenter & Chavez 1995). Light grazing promotes a short grass cover interspersed with taller grasses—a condition mountain plovers have been documented as using for nesting. Ongoing monitoring by KAFB and the USFS of breeding and migratory birds would identify any future use of KAFB. The recent designation of the mountain plover as a proposed threatened species has been included in Section 4.7.3.3 of the Final SWEIS. The DOE believes the absence of the plover and effects of considered alternatives would not require “conferencing” with the U.S. Fish and Wildlife Service at this time.

Comment 3-10-29

Location of SWEIS Revision(s): None

Response: The suitability of riparian and wetland vegetation as habitat for the southwestern willow flycatcher on KAFB is considered to be very marginal. For this reason, specific surveys for the flycatcher have not been performed by either the DOE or KAFB; however, several surveys of breeding birds have been performed by KAFB and the Cibola National Forest.

*Comment 3-11-26**Location of SWEIS Revision(s): None*

Response: While the DOE agrees that polluted discharges could affect the habitat of the species mentioned, such discharges from SNL/NM have not been detected. The DOE evaluated surface water quality in the SWEIS (Section 5.3.4.3), and concluded through this evaluation that no contamination was attributable to SNL/NM facilities. Further, concentrations of contaminants of concern were within New Mexico Water Quality Control Commission limits at the farthest downstream sampling point, approximately 1 mile east of the western KAFB boundary.

*Comment 3-12-29**Location of SWEIS Revision(s): None*

Response: The DOE agrees that species listed as threatened or endangered require protection on an individual level, including protection from sublethal effects. As described in Section 4.7.3.3 and in the responses to comments 3-8-29, 3-9-29, and 3-10-29, above, listed species and habitat are absent in the area of influence for SNL/NM activities. The DOE believes that the operation of SNL/NM under any of the alternatives analyzed would not affect listed species even if they were present. SNL/NM strives to use management practices that are protective of the environment.

individual level, including protection from sublethal effects by all federal agencies. The DEIS⁴ evaluation of effects should include direct, indirect, and cumulative effects, as well as interrelated and interdependent actions affecting individual federally-listed or proposed species.

Canyons, Riparian Areas, and Associated Wildlife

It is our understanding that the survey of wetlands by the U.S. Army Corps of Engineers was only of known wetland locations. A complete wetland survey of SNL and KAFB lands should be conducted to determine the presence of all wetlands, seeps, springs, and riparian areas. Aquatic and semi-aquatic communities, including hyporheic and subterranean species, for these springs, seeps, wetlands, and arroyos should be inventoried so that effects to these resources can be identified and the impacts quantified for each SNL DEIS alternative. The DEIS should include a description of the distribution of amphibian and aquatic invertebrates and quantify the cumulative effects to these species under each alternative. We recommend that adequate species-specific surveys be conducted during the appropriate season(s) and within suitable habitat to better manage these resources.

The analysis of impacts to surface water quality was unnecessarily restricted to regulatory limits. The Federal Water Pollution Control Act states that it is the National goal that "water quality provides for the protection of fish, shellfish and wildlife" and that "discharge of toxic pollutants in toxic amounts be prohibited." It is unclear why outdated regulations (New Mexico Water Quality Control Commission 1994) were used as the DEIS screening tool for water quality impacts. In 1995, the NM Water Quality Control Commission identified ephemeral watercourses such as Tijeras Arroyo, as well as seeps and springs, as providing wildlife habitat and livestock and wildlife watering opportunities. This needs to be discussed in the DEIS. It is important that priority pollutant scans of water quality conducted on Tijeras Arroyo storm water samples or from any other spring or wetland. Toxicity tests should be conducted on storm water discharges and toxic pollutant emissions from the open burning of JP-8 fuel at the Lurance Canyon Burn Site. Toxicity should also be analyzed in the nearby spring water to determine exposure and impacts. It is also unclear whether relevant analyses were conducted on surface waters (priority pollutants, organic compounds, tritium, gross alpha) in order to determine if water quality concentrations exceeded those known to be toxic or that are protective (e.g., aquatic life criteria developed by the U.S. Environmental Protection Agency) for the DEIS impact analysis.

Seeps, springs, and wetlands likely contain aquatic life, some of which may be unique to New Mexico. The DEIS evaluation used regulatory limits that may not adequately address potential impacts from SNL operations to surface waters of the United States, including wetlands, springs, and seeps. By using only regulatory limits, the DEIS evaluation may fail to meet the objectives and narrative prohibitions found in federal, state, and tribal water quality protection statutes. The environmental fate of persistent bioaccumulative or carcinogenic chemicals should also be evaluated in runoff, seeps, and springs, so as to protect the downstream Isleta Pueblo's water quality. It is also unclear whether the resulting exposure to downstream receptors cause any indirect or cumulative environmental effects. Surveys for

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Comment 3-13-29

Location of SWEIS Revision(s): None

Response: Field surveys at KAFB, including the Withdrawn Area, have identified all wetlands, seeps, springs, and riparian areas, and have inventoried and characterized plant communities (USFS 1985, Parmenter and Chavez 1995, USAF 1997b, SNL/NM 1997u). In addition, the presence or probability for occurrence of reptiles and amphibians and habitat that they would normally occupy is known through surveys and literature research. However, there have been no surveys for aquatic or semiaquatic invertebrates. The limited size of the wetland areas, including the seasonal absence of water in some, correspondingly limits habitat for aquatic life and their presence and development. As stated in the *Fish and Wildlife Plan* (USAF 1996) for KAFB, "Because the wetlands comprise such a small area and are in such close proximity to riparian habitat, they do not contain a wildlife community that is distinct from that of the riparian habitat, but they are attractive to wildlife as water sources and areas of forage."

Comment 3-14-26

Location of SWEIS Revision(s): None

Response: The surface water quality analysis was not restricted to regulatory limits. In addition to the regulatory parameters listed in Table 5.3.4-3, surface water sampling data used in the analysis included 12 metals, 7 anions, 11 explosives, and 7 radionuclides, for which there are no regulatory limits. None of these data provide evidence of contamination from SNL/NM facilities. Because no evidence of contamination exists and surface water quality is within regulatory limits (including limits for wildlife habitat), no further analysis on the suitability of surface water "for the protection of fish, shellfish, and wildlife" was performed. The only SNL/NM discharge to arroyos is from storm water runoff. The New Mexico Water Quality Control Commission Regulations cited in the SWEIS, filed in 1994 and effective in 1995, are current. This point was discussed in a telephone conversation with the commenter.

*Comment 3-15-26**Location of SWEIS Revision(s): Table 5.3.4-3*

Response: The DOE acknowledges the New Mexico Water Quality Control Commission-designated uses (including wildlife habitat) of onsite ephemeral water courses in its discussion of surface water quality (Section 4.6.2.3). Table 5.3.4-3 has been revised to show the more stringent mercury and selenium standards for wildlife habitat use. In addition to surface water sampling in Tijeras Arroyo (Section 5.3.4.3), SNL/NM also routinely conducts monitoring at Coyote Springs and of surface water runoff from the Lurance Canyon Burn Site. Contaminants analyzed in surface water samples (see responses to comments 3-14-26 and 3-17-26) are those most likely to be found as a result of operations at SNL/NM facilities or contamination at Environmental Restoration (ER) Project sites.

*Comment 3-16-26**Location of SWEIS Revision(s): None*

Response: At present, SNL/NM has three automatic samplers and adjacent bulk samplers (55-gallon drums) in arroyo channel drainages at the Lurance Canyon Burn Site. Two are in the drainages upstream from the Burn Site and one is downstream in the single drainage that leaves the Burn Site area. Samples have been collected during six events since the Fall of 1997. Samples have been analyzed for substances associated with operations at the Burn Site. SNL/NM analyzed for total suspended solids; isotopic uranium, thorium, and strontium; semivolatile organic compounds; nitrates; metals; total petroleum hydrocarbons; and total organic halides. No concentrations of contaminants above background have been detected in any of the samples collected to date. Toxicity characteristics tests have not been performed because contaminants have not been found in the runoff.

Toxic pollution emissions from the open burning of JP-8 fuel are listed in Appendix D, Table D.1-31 of Volume II.

SNL/NM sampled the Burn Site spring periodically until March 1995. Water samples collected at the spring showed constituent concentrations meeting drinking water standards. Total organic carbon (6.3 mg/L in March 1995) was the only constituent noted at concentrations exceeding

typical groundwater samples. This concentration is probably the result of decaying vegetation, as the water was noted to have a brownish tint, the flow rate is very low (allowing water to stand), and the spring is surrounded by vegetation. Acetone and methylene chloride were the only volatile organic compounds detected, both at extremely low concentrations (these are both solvents, often present in the air at analytical laboratories, that are commonly reported at low concentrations, even in purified water samples used for quality control). SNL/NM discontinued sampling at the Burn Site spring because the location of the spring (0.6 mi and 300 vertical ft upgradient from the Lurance Canyon Burn Site) and sampling results indicated that water was unlikely to be affected by Burn Site activities.

Comment 3-17-26

Location of SWEIS Revision(s): None

Response: In addition to the parameters listed in Table 5.3.4–3, surface water samples were analyzed for silver, barium, beryllium, calcium, iron, potassium, magnesium, manganese, sodium, nickel, antimony, tin, thallium, uranium-233/234, uranium-235, uranium-238, thorium-228, thorium-230, thorium-232, and strontium-90. The selection of these parameters was based on constituents of concern at upstream SNL/NM sites or facilities where the potential for storm water runoff exists. The DOE believes these constituents, because of their association with upstream SNL/NM facilities or activities, are the most likely to occur at concentrations toxic to or not protective of aquatic life. Therefore, no analyses were performed for priority pollutants, organic compounds, tritium, or gross alpha.

Comment 3-18-26

Location of SWEIS Revision(s): None

Response: The DOE believes that the quality of storm water runoff from SNL/NM is protective of the water quality of all downstream users, including the Pueblo of Isleta. Because no bioaccumulative or carcinogenic chemicals have been identified, no environmental fate analyses have been performed.

SNL/NM monitors storm water runoff quality from areas near SNL/NM facilities and publishes these data annually in the Site Environmental Reports (SNL 1997d). Analytical data do not indicate contamination of surface water runoff. The surface water quality analysis was not restricted to regulatory limits, as discussed in the response to comment 3-14-26, above.

Comment 3-19-29

Location of SWEIS Revision(s): None

Response: As stated in the response to comment 3-13-29, field surveys at KAFB, including the Withdrawn Area, have identified all wetlands, seeps, springs, and riparian areas, and plant communities were inventoried and characterized. In addition, the presence or probability for occurrence of reptiles and amphibians and habitat that they would normally occupy is known through surveys and literature research. No surveys for aquatic or semiaquatic invertebrates have been accomplished. The limited size of the wetland areas, including the seasonal absence of water for some, correspondingly limits habitat for aquatic life and their presence and development. Analytical data do not indicate contamination of surface water runoff and consequently, there is little chance for contamination of biota, including downstream receptors. Therefore, the known and foreseeable impacts are included in each of the alternatives analyzed.

reptiles and amphibians in these unique areas were not reported in the DEIS, nor have aquatic invertebrate communities associated with the springs, seeps, or riparian areas been fully characterized. Communities of plants and animals in each spring, seep, wetland, and riparian location should be quantified and the indirect and cumulative effects described for each SNL DEIS alternative.

A description of all activities that SNL has implemented to protect and enhance the arroyo tributaries of the Rio Grande should be included. Riparian or channel restoration efforts initiated in any of the canyons (e.g., Madera, Lurance, Sol se Mete, Tijeras) should also be described. Alternatives should be developed which minimize vehicle impacts to canyon bottom habitats and floodplains. The magnitude of spatially and temporally distributed water fluxes (precipitation, runoff, infiltration, recharge, watershed practices), particularly during storm events, and if these processes are managed to restore arroyo processes, functions and riparian communities should be described. The indirect and cumulative impacts to these canyon habitats, as affected by SNL operations, should be identified, quantified, and described in the DEIS with measures identified to enhance riparian and arroyo habitats.

Migratory Birds and other Wildlife

Recently, many migratory bird species have been experiencing population declines. The Migratory Bird Treaty Act (MBTA) provides for a year-round closed season for non-game birds and prohibits the taking of migratory birds, nests, and eggs, except as permitted. Although the prohibitions of the MBTA do not apply to federal agencies or their employees acting in their official capacities, non-federal applicants, contractors, or onsite work crews are still required to comply with the provisions of the MBTA. To avoid potential impacts to nesting birds protected under the MBTA, we recommend that necessary project activities, within appropriate habitat, that may occur during the general nesting season (March-August), be surveyed for active nests. This would include raptors or other birds potentially nesting on existing power poles slated for removal. Alternatively, the project proponent should wait until the young have fledged from the area or reschedule the project outside of the general nesting season. Project activities may occur in other portions of the action area that do not contain nests, and a "buffer zone" should be delineated and maintained around nests to avoid abandonment.

Investigations should also be made to determine if chemical concentrations in soils, sediments, plants, invertebrates, and migratory birds are at levels cumulatively harmful to wildlife species living or foraging at contaminated sites. Investigations should be made to determine if chemicals are being bioaccumulated and transferred via food webs to birds and raptors at levels that may affect their survival or reproductive success. It should be determined if chemicals are present at levels that may affect the abundance or species composition of local flora and fauna. Environmental cleanup should be at the level necessary to protect wildlife. An effort to describe and quantify the indirect and cumulative impacts to wildlife having access to these areas should be made.

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Comment 3-20-29

Location of SWEIS Revision(s): Section 6.4.5

Response: The relatively small amount of DOE/SNL/NM-administered/used land, combined with limited drainage features, water availability, and associated riparian vegetation, significantly limits the opportunity to become involved with arroyo/channel enhancement measures. Both the Cibola National Forest and KAFB manage biological resources and ecosystem processes on the remainder of lands on KAFB, including the Withdrawn Area. Management measures implemented by these agencies, for example, restricted grazing, restricted pedestrian and vehicular access and use, protection of natural springs, restoration of disturbed areas (including stream channels), and groundcover management, all contribute to the protection and enhancement of stream channels and associated habitat provided for wildlife. Text has been added to Section 6.4.5 emphasizing these management measures.

Increases in the amount of storm water runoff from SNL/NM activities due to the replacement of natural surfaces (soil and vegetation) with more impervious surfaces (primarily buildings and parking lots) probably have increased the amount of water in drainage courses, as discussed in Section 5.3.4.4. In addition, there might be a related increase in frequency of water presence in short sections of drainage features. The extent that this increased water availability might have altered bank vegetation is not known, but, like most arroyo bank vegetation, there could be an increase in size, density, and diversity of plants with a possible small increase in forage and cover for wildlife.

Comment 3-21-29

Location of SWEIS Revision(s): None

Response: The suggested recommendations to protect migratory bird species are an integral part of normal operations at SNL/NM as well as KAFB. Management measures that contribute to the protection and enhancement of migratory birds, as well as other wildlife resources, are provided in KAFB's *Integrated Natural Resources Management Plan (USAF 1995a)*, *Fish and Wildlife Plan (USAF 1996)*, and *1997 Raptor Survey and Management Strategies (USAF 1997b)*, and the USFS's *Ecosystem Management Plan for*

National Forest Lands in and Adjacent to the Military Withdrawal, Sandia Ranger District, Cibola National Forest, Bernalillo County, New Mexico (USFS 1996) and the 1985 Cibola National Forest Land and Resource Management Plan (USFS 1985), as amended. Monitoring of certain migratory birds, such as the burrowing owl, has demonstrated that ongoing protective measures have contributed to significant increases in numbers, including numbers of nesting pairs.

Comment 3-22-29

Location of SWEIS Revision(s): Section 4.7.3.4

Response: The DOE agrees with the Department of the Interior's recommendation that there should be investigations for the presence of chemical contaminants (as well as radionuclides). As stated in Section 4.7.3.4, SNL/NM conducts annual ecological monitoring of selected biota, including small mammals, birds, reptiles, amphibians, and vegetation. The referenced 1997 report (Ecological Monitoring for 1996: Small Mammals, Reptiles, Amphibians, Birds, and Vegetation) states that the collected data "could eventually be utilized to detect trends (if any) in contaminant migration through the food chain, provide additional data for the terrestrial surveillance program, and possibly quantify contaminant loads within the local ecosystem." The contamination study is a long-term study that will determine if wildlife populations at SNL/NM are accumulating chemicals from hazardous wastes and that could model radionuclide transport. Although the results of the contamination study, to date, do not show significant contaminant loads, radionuclide and metal analyses on these populations will continue to monitor continuous fluctuations as a result of interactions between the anthropogenic and natural realms.

SNL/NM recently completed an ecological risk assessment validation study (SNL/NM 1999d). This study was conducted for the SNL/NM ER Project to provide site-specific data in support of the ecological risk assessment currently being used to evaluate potential risks to natural populations at contaminated sites. The field work for this study included both biomonitoring and quantitative surveys of key populations at potential ecological risk. Biomonitoring consisted of the collection of soil, plant, invertebrate, and small mammal samples from 4 ER sites and the analysis of these samples to determine the concentration of 18 selected inorganic

analytes. No significant effects to small mammal communities were found at any of the sites. A report presenting the results of these studies is currently in preparation. The study objectives recommended by the Department of Interior will be considered in ongoing study objectives.

Text has been added to Section 4.7.3.4 describing SNL/NM's annual ecological monitoring and ecological risk assessment validation study.

Comment 3-23-36

Location of SWEIS Revision(s): None

Response: The SNL/NM ER Project conducts ecological screening assessments for the Environmental Restoration sites at SNL/NM that correspond to screening procedures in EPA guidance (EPA 1997a), to ensure that cleanup levels are protective of wildlife.

Comment 3-24-29

Location of SWEIS Revision(s): None

Response: See the response to comment 3-7-29.

6

Thank you for the opportunity to provide these comments; we trust they will be of use during preparation of subsequent environmental documentation. If you have questions about these comments or need additional information, please contact us at the above address or telephone (505) 766-3565.

Sincerely,



Glenn B. Selavec
Regional Environmental Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JUN 11 1999

Carol Borgstrom
Director
Office of NEPA Policy and Assistance (EH42)
U.S. Department of Energy (DOE)
1000 Independence Avenue, SW
Washington, D.C. 20585

Dear Ms. Borgstrom:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality Regulations for Implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed a limited review of the U.S. Department of Energy (DOE) Draft Environmental Impact Statement (DEIS) for continued operation of the Sandia Laboratories, New Mexico (SNL/NM).

The purpose of the document is to provide the decision-maker a list of alternatives to address continued operation of the SNL/NM. DOE has identified and assessed four alternatives for the operation of SNL/NM: (1) No Action, (2) Expanded Operations, and (3) Reduced Operation. In the No Action Alternative, DOE would continue status quo the historical mission support activities SNL/NM has conducted at planned operational levels. In the Expanded Operations Alternative, DOE would operate SNL/NM at the highest levels of activity currently foreseeable, including potential expansion/construction of new facilities. In the Reduced Operation, DOE would operate the facility at the minimum level of activities necessary to maintain the capabilities to support the DOE mission. Under all of the alternatives, the affected environment is primarily within 50 miles of SNL/NM. The activities undertaken at SNL/NM are performed within the constraints of applicable environmental regulations, applicable DOE orders, contractual requirements, and approved policies and procedures. The requirements should fully mitigate any potential adverse impacts of the operations to the public, the worker, and the environment.

We classify your Draft EIS as Lack of Objections. EPA did not identify operational conditions which would require objections to the continuation of the operation of the facility. Overall, the analyses indicates little difference in the environmental impacts among alternatives. Our classification will be published in the Federal Register according to our responsibility under Section 309 of the Clean Air Act to inform the public of our views on proposed Federal actions.

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Response to Comments by the United States Environmental Protection Agency

Comment 4-1-6

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 4-2-6

Location of SWEIS Revision(s): None

Response: Comment noted.

4-1-6

4-2-6

2

We appreciate the opportunity to review the DEIS. We request that you send our office two (2) copies of the FEIS at the same time that it is sent to the Office of Federal Activities, (2251A), EPA, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20044.

Sincerely yours,



Michael P. Jansky, P.E.
Regional EIS Coordinator

Response to Comments by the Navajo Nation

No comments identified.



KELSEY A. BEGAYE
PRESIDENT

TAYLOR MCKENZIE, M.D.
VICE PRESIDENT

April 28, 1999

Rush O. Inlow, Deputy Manager
Department of Energy
Albuquerque Operations Office
P.O. Box 5400
Albuquerque, New Mexico 87185-5400

Dear Mr. Inlow:

The Navajo Nation is in receipt of the draft "Site-Wide Environmental Impact Statement" for Sandia National Laboratories/New Mexico. In reviewing the cultural resources section of the draft report, I see you have consulted with the Alamo and Canoncito Chapters of the Navajo Nation and they have expressed no concerns with the project. I reiterate the Nation's letter of May 15, 1999, which states that we are not directly concerned with the development of EIS, but wished that all public documents be forwarded to us for review and possible comment. I offer no further comments on the draft EIS.

Thank you for forwarding the draft EIS to the Navajo Nation. Please feel free to contact me if you have any questions or concerns regarding our involvement with the Site Wide EIS.

Sincerely,

Richard M. Begay, Jr., Program Manager
Historic Preservation Department-
Traditional Culture Program
P.O. Box 4950
Window Rock, Arizona 86515
Tel: (520) 871-7146 Fax: (520) 871-7886

TCP 99-105fmb
cc: Clinton
Consultation Files--Dep 1 of Energy--Sandia Nat'l Laboratories

OFFICE OF THE GOVERNOR



505-866-3111 / 6333
FAX: 505-869-4236

PUEBLO OF ISLETA
P.O. BOX 1270 ISLETA, NM 87022

15 July 1999

Julianne Levings, NEPA Document Manager
U.S. DOE, Albuquerque Operations Office
P.O. Box 5400
Albuquerque, NM 87185

RE: Draft Site-Wide Environmental Impact Statement-Sandia National Laboratories DOE/EIS-0281

Dear Ms. Levings:

Attached you will find the Pueblo of Isleta's environmental comments on the subject document. We sincerely thank DOE for extending the comment period for the Pueblo until Friday 16 July. As you will note, the Pueblo identified a variety of concerns which we believe deserve additional review. We have, in general, limited our comments to those issues of specific concern to the Pueblo of Isleta.

6-1-6

If you have any questions on these comments, please call Mr. Jim Piatt, Director of the Pueblo's Environment Department at (505) 869-5748.

Sincerely,

Randy R. Jim At Saw
for Alvin Lucero
Governor

xc. Michael A. Lente, President, Tribal Council
Margaret Hodge, Office of Public Affairs, Albuquerque Operations Office, DOE

Response to Comments by the Pueblo of Isleta

Comment 6-1-6

Location of SWEIS Revision(s): None

Response: Comment Noted.

A. Document Format

Regulations defining a federal agency's environmental review mandates are established, in large, by the Council of Environmental Quality at 40 CFR 1500 *et. Seq.* Those regulations state in part;

§ 1502.14 Alternatives including the proposed action.

This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (§1502.15) and the Environmental Consequences (§1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public. In this section agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.
- (f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

The Draft Site-Wide Environmental Impact Statement for Sandia National Laboratories / New Mexico (DOE / EIS-0281) [Site Wide] is, at best, inadequate in meeting these mandates, because it fails to:

- 1.) Explore a reasonable range of alternatives;
- 2.) Fails to consider any alternatives by other federal agencies;
- 3.) Fails to consider a "real" no action alternative;
- 4.) Inadequately defines the proposed alternative; and,
- 5.) Inadequately define mitigation measures.

Taking these issues item by item, we provide the following justifications for our conclusions.

Comment 6-2-8

Location of SWEIS Revision(s): None

Response: The responses to comments 6-3-8, 6-4-8, 6-5-8, 6-6-8, and 6-7-44, below, address this comment in detail.

6-2-8

1. Lack of Reasonable Range of Alternatives.

Chapter 3, entitled “Alternatives for Continuing Operations at SNL / NM” presents the three “action” alternatives evaluated by DOE which are identified as:

- No action Alternative (Section 3.2)
- Expanded Operations Alternative (Section 3.3)
- Reduced Operations Alternative (Section 3.4)

A comparison of these “alternatives,” based on Table 3.6 - 1 demonstrates (endnote ¹) that the “no action” alternative and the “Expanded Operations” are, on a “site-wide basis,” essentially identical in the amount of hazardous waste generated, water used and wastewater released. In the majority of instances, on a project-by-project basis, there are far more similarities in these concerns than there are differences. Comparisons of other items of environmental interest yield the same result. We question if this limited range actually meet the CEQ mandate for a reasonable range of alternatives.

2.) Fails to Consider Any Alternatives by Other Federal Agencies.

By limiting the “. . . proposed action . . . to continue to operate SNL / NM as a DOE national laboratory.” (p 3-1), and without considering any other alternatives, DOE precludes evaluation of other potentialities and resultant environmental benefits. Staff were unable to find any indication in the document that alternatives posited by other federal agencies were evaluated.

3.) Fails to Consider a “Real” No Action Alternative.

As noted in Endnote 1 above, there is, in many ways, essentially no difference between the “No Action” alternative and the “Expanded Operations” alternative. A review of Table 3.1-1 indicates that in virtually every case, a significant expansion occurs within the “No Action Alternative” over the ten-year projected period. Such project expansion seriously calls into question the applicability of such program as the “No Action” alternative.

4.) Inadequately Defines the Proposed Alternative.

Throughout the document, environmental impacts are largely described based on contaminant releases from a very limited subset of the 674 buildings (Table 4.4-2) identified as “. . . SNL / NM Buildings . . .” Moreover, as DOE limited its description of environmental concerns to the SNL / NM facilities under its immediate control, even excluding other adjacent DOE facilities, such artificial limitation further dilutes the necessary environmental analyses. Without the necessary evaluation of ALL facilities, in ALL alternatives, we believe the environmental evaluation is fatally flawed.

*Comment 6-3-8**Location of SWEIS Revision(s): None*

Response: The DOE believes that the alternatives evaluated in this SWEIS represent the reasonable alternatives for meeting its purpose and need, as mandated by statute, Presidential Decision Directive, and congressional authorization and appropriation (Section 1.2). The CEQ regulations for implementing NEPA require a Federal agency to “rigorously explore and objectively evaluate all reasonable alternatives” (40 CFR §1502.14). In Question 2A of its *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations* (46 FR 18026), CEQ states: “Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense. . . .” As discussed in Section 1.2 of the SWEIS, the DOE has been assigned specific national security missions through congressional action and Presidential Decision Directives. The three SWEIS alternatives represent the range of levels of operation to carry out these missions, from the minimum levels of activity to maintain core capabilities (Reduced Operations Alternative) to the maximum levels attainable in the existing facilities plus the necessary infrastructure upgrades to implement fully the contemplated missions (Expanded Operations Alternative). The DOE recognizes that the analysis in the SWEIS indicates that there would be very little difference in the environmental impacts among the three SWEIS alternatives. In other words, the three alternatives represent the same mission assignments carried out at different levels. This is because, with the exception of the potential construction of the MESA Complex, there would be very little construction of new facilities and, even then, construction would occur largely in previously disturbed areas or as renovations to existing buildings. In general, the DOE would use the existing physical plant to implement any of the alternatives. Therefore, in many cases, the actual changes in levels of activities represent a small change in relation to current levels, and the change in impacts would be relatively small.

*Comment 6-4-8**Location of SWEIS Revision(s): None*

Response: As discussed in Section 1.2 of the SWEIS, the DOE has been assigned specific national security missions through congressional action and Presidential Decision Directive. To fulfill these missions, the DOE requires the continued operation of SNL/NM as a national laboratory. Section 3.5.1, provides a discussion of why a shutdown of SNL/NM is not a reasonable alternative. The DOE did not preclude alternatives proposed by other Federal agencies; however, none were proposed. No scoping comments were received from other agencies that expressed a desire for other alternatives.

*Comment 6-5-8**Location of SWEIS Revision(s): None*

Response: Under the No Action Alternative, SNL/NM would operate at planned levels as reflected in current DOE management plans. As stated in Section 3.2, “In some cases, these planned levels include increases over today’s operating levels.” The basis for planned levels is described in Section 3.2.1. Smaller activity levels are considered for the Reduced Operations Alternative described in Section 3.4.

A situation like this was anticipated by the CEQ in its guidance on the No Action Alternative, Question 3, in *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations* (46 FR 18026). The CEQ describes a situation that “might involve an action such as updating a land management plan where ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed. In these cases ‘no action’ is ‘no change’ from current management direction or level of management intensity.” The DOE believes that the continuation of SNL/NM programs is a similar situation.

*Comment 6-6-8**Location of SWEIS Revision(s): None*

Response: The DOE considers the environmental analyses performed in the SWEIS to be complete and thorough, based on a framework for impacts analysis that included a comprehensive screening of SNL/NM facilities to consider the complexity of analysis and to identify operations with the highest potential for environmental impacts or concerns. These facilities account for more than 99 percent of all radiation doses to SNL/NM personnel, over 99 percent of all radiation doses to the public, and from 81 to 99 percent of stationary source criteria pollutants. This selection process is detailed in Section 2.3, with facilities analyzed at three different levels of activity. All SNL/NM operations were investigated and considered in the impact analysis (see Section 2.3.2).

The cumulative effects analysis in Chapter 6 considers DOE facilities not related to SNL/NM and USAF operations at KAFB, as well as other activities in the ROI where combined effects could produce environmental impacts. As described in Section 6.1, the analysis assumed SNL/NM levels of operation would be the same as those described for the Expanded Operations Alternative (Section 5.4) to present a bounding scenario of potential cumulative effects.

5.) Inadequately Defines Mitigation Measures.

The CEQ regulations define mitigation as follows:

§ 1508.20 Mitigation.

Mitigation Includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.³⁰³
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

Pertinent language used by CEQ includes "avoidance," "minimizing," "rectifying," "reducing" and "compensating"; verbiage uniformly lacking in this document. It would seem that DOE is content to maintain the *status quo* with, at best, a possible decrease in water usage. The Pueblo reminds DOE that NEPA speaks in terms of *enhancement* of the natural environment as can be seen in § 101(a)(6): "... *enhance* the quality of renewable resources and approach the maximum attainable recycling of depletable resources . . ." (emphasis added).

In summary, and for all of the reasons listed above, the Pueblo seriously questions the document's attainment of the NEPA mandate.

6-7-44

B. SPECIFIC COMMENTS

Chapter 3, Section 3.6.4 Water Resources and Hydrology.

- "... Under a no-cleanup scenario, the only contaminant exceeding U.S. Environmental Protection Agency concentration limits in groundwater would be trichloroethene (TCE). . . ." Information¹ provided to the Pueblo by DOE contractors indicates that an incredible variety of pollutants were cavalierly disposed of at the Chemical Waste Landfill (CWL). Among these pollutants were acids (acetic, chromic, chromic/sulfuric, hydrochloric, nitric,

6-8-24

¹ "Sandia National Laboratories, New Mexico Environmental Restoration Project Chemical Waste Landfill Remediation Landfill Excavation Voluntary Corrective Measure"

*Comment 6-7-44**Location of SWEIS Revision(s): None*

Response: The SWEIS does consider enhancement of the natural environment where feasible. Evidence of this can be found throughout the SWEIS and referenced documents. For example, in Section 5.6.2, the text discusses "improving" the visual quality at SNL/NM. The guidelines instituted to improve visual quality address such concerns as building massing, facades, color, orientation, standardized signage, building corridors, landscaping, and the use of low-water plant selection.

Further, as stated in Section 5.6.11, waste minimization and pollution prevention are key elements of the SNL/NM environmental safety and health management strategies. SNL/NM employs a comprehensive waste minimization program to reduce the quantity of chemicals and radioactive wastes generated onsite. This program includes quantitatively identifying materials and waste source reduction and recycling goals, performing pollution prevention assessments, and incorporating pollution prevention designs and training into new laboratory facilities and processes. Section 5.6.11 also discusses waste water reduction efforts at SNL/NM. SNL/NM has entered into a Memorandum of Understanding with KAFB, the DOE, and the city of Albuquerque to reduce water use by 30 percent by 2004. Finally, the DOE has prepared other NEPA documentation to cover existing ongoing environmental cleanup activities at SNL/NM. An environmental assessment of the ER Project (DOE 1996c) evaluated the potential environmental impacts of site restoration characterization and waste cleanup activities (corrective actions). Reference to this environmental assessment and a brief description of its contents are in Section 1.8.5.

*Comment 6-8-24**Location of SWEIS Revision(s): None*

Response: TCE is the only contaminant of concern for groundwater impacts because it is the only contaminant that has been consistently detected in groundwater samples at the CWL. Low concentrations (far below drinking water standards) of volatile organic compounds, such as acetone and methylene chloride, have also been detected in groundwater

samples; however, these chemicals are known to be commonly used in the laboratories that analyze environmental samples, including those from SNL/NM. Detection of these volatile organic compounds is attributed to laboratory contamination during sample processing after sample collection in the field and is not indicative of environmental contamination at SNL/NM. Other contaminants detected in samples collected in soils at the CWL have not been detected in groundwater. To date, there have been five consecutive quarters during which TCE concentrations in groundwater samples have been within drinking water standards, probably because of the recent implementation of a vapor extraction system. The DOE compares contaminant concentrations in samples with both Federal and state groundwater protection criteria.

The CWL is being excavated. The excavated waste is transported to the Corrective Action Management Unit for treatment, and then disposal in constructed disposal cells. Certain waste, not suitable for disposal at the Corrective Action Management Unit (for example, radioactive waste, polychlorinated biphenyls, or waste regulated under the *Toxic Substances Control Act*), will be transported to approved facilities (Section 5.3.10).

phosphoric, and sulfuric), organics (acetone, alcohol, benzene, epoxy, hydroxylamine hydrochloride, nitroanisole, nitrobenzaldehyde, solvents (?), tetrahydrofuran, tribromobenzene, TCE, triiodophenol, trimethoxybenzene, triphenylamine, triptycene, toluene, urea, xylene, etcetera), metals and metalloids (aluminum salts, arsenic, beryllium, germanium, lead, lithium, mercury, rubidium, selenium, titanium, etcetera), gases (freon), miscellaneous inorganics (ammonium hydroxide, cuprous chloride, cyanide salts, magnesium salts, potassium salts, sodium salts, strontium salts, tin metal, etcetera), miscellaneous organic compounds (shale oil solids) and radioactive wastes (thorium oxide, uranyl nitrate and uranium oxide). With such a list of pollutants which DOE has admitted to disposing at this facility, it is inconceivable that only TCE is of concern. We also note that DOE apparently only screened against EPA MCLs; did DOE also screen against State of New Mexico ground water protection criteria found at 20 NMAC 6.2 for toxic pollutants (§ 1101. TT), or their ground water standards (§ 3103. A. and B.)?

- “. . . The TCE would not impact drinking water supplies because the nearest water supply well is approximately 4 mi from the CWL.” This statement is, at best, disingenuous, in that does not consider development by the Pueblo of its ground water resources nor does it consider development of other ground water resources located off of the Pueblo among which is the proposed Mesa del Sol. Development by the Pueblo and/or City of Albuquerque/State Land Office could easily move the TCE plume in directions as yet unknown.
- “. . . No contamination attributable to SNL / NM activities have been detected in surface waters collected onsite.” This statement is directly contradicted by SNL / NM own report entitled *1997 Annual Site Environmental Report Sandia National Laboratories Albuquerque, New Mexico*. At a minimum, note the following language from page 6-10: “. . . The analytical results presented in table 6-7 show that iron and zinc exceeded permit limits at both stations by a large margin . . . the analysis indicates that there could be a problem. . . ”

Chapter 4, Section 4.6 Water Resources and Hydrology.

- “. . . The groundwater beneath SNL / NM and adjacent areas is the source of drinking water for SNL / NM, KAFB, and adjacent portions of the city of Albuquerque. . . .” We hasten to point out that this resource is also the source of drinking water for Tribal residents, visitors and employees of the Pueblo of Isleta!
- “. . . All known groundwater contamination is the result of past waste management activities that occurred before the enactment of such laws as RCRA . . . TSCA . . . and CWA. . . .” This language is, once again, carefully and selectfully written to tell only a fraction of the concerns facing Pueblo residents. Pollution from DOE’s Inhalation / Toxicology Research

Comment 6-9-24

Location of SWEIS Revision(s): None

Response: Under current flow directions and velocities, the SWEIS states that contamination above maximum contaminant levels to a distance of 410 ft downgradient from the CWL, could occur. (Note that the plume length of 410 ft was calculated based on a conservative scenario assuming no cleanup, although cleanup at the CWL is underway. As mentioned in the response to comment 6-8-24, above, the TCE concentrations measured in groundwater samples at the CWL have been within drinking water standards for five consecutive quarters.) The plume would spread to the west and north, away from the Pueblo of Isleta, which is approximately 1.7 mi to the south. This contamination would be an adverse impact to that portion of the groundwater resource (aquifer), as stated in the Summary and in Sections 3.6.4 and 5.3.4.1. The DOE agrees that development of groundwater resources by the Pueblo of Isleta near its boundary with SNL/NM or by Mesa del Sol to the west could affect groundwater flow direction and velocity. However, increases in velocity, which could occur with pumpage of Mesa del Sol wells or Pueblo of Isleta wells to the southwest, would likely decrease contaminant concentrations (more water would move under the CWL, but the quantity of contaminants entering the water would remain constant). Decreases in velocity, which could occur if wells were installed on Pueblo of Isleta land to the south, probably would cause the plume length to be reduced from the projected 410 ft.

6-8-24, cont.

6-9-24

6-10-26

6-11-24

6-12-24

Comment 6-10-26

Location of SWEIS Revision(s): Section 4.6.2.3

Response: As stated in Section 6.3.4 of the *1997 Site Environmental Report* (SNL 1998e), low flow at National Pollutant Discharge Elimination System (NPDES) monitoring Stations 4 and 5 requires placement of the sample intake tube on the bottom of the drainage channel. This has caused introduction of a greater amount of suspended solids than is representative of the runoff. During the laboratory analysis of these samples, minerals naturally present in the suspended solids, such as zinc and iron, can appear at higher concentrations as well. An inspection of the areas monitored by Stations 4 and 5 found no potential sources of iron or zinc.

Section 4.6.2.3 has been modified to incorporate 1997 NPDES data. Understanding the variability of background concentrations is crucial to the interpretation of analytical results from soil, groundwater, and surface water sampling. Metals and radionuclides occur naturally in soils and groundwater and are not necessarily the result of human activities. To better understand naturally occurring constituents, a comprehensive study of background concentrations in soil and groundwater was completed by SNL/NM in 1996 (SNL/NM 1996e). Analyses of more than 3,700 soil samples collected by SNL/NM and the USAF around KAFB showed that background concentrations of metals and radionuclides in soil vary significantly with location and depth. The variability of soil background concentrations has importance in interpretation of results of surface water sampling, because storm water runoff will pick up surface soil particles and transport them downstream. Soil background variability, combined with the uniqueness of storm events and the difficulties in obtaining consistent surface water samples from intermittently flowing streams, makes determination of the source of naturally occurring metal and radionuclide constituents found in water samples difficult. Groundwater samples also showed variability, with the most significant variation occurring between samples collected west of the fault zone, and within or east of the fault zone (Figure 4.6–2).

Comment 6-11-24

Location of SWEIS Revision(s): Section 4.6.1.3

Response: Section 4.6.1.3 has been modified to indicate that the Pueblo of Isleta also uses groundwater as its source of drinking water.

Comment 6-12-24

Location of SWEIS Revision(s): None

Response: The Lovelace Respiratory Research Institute (formerly the Inhalation Toxicology Research Institute [ITRI]) is discussed in Section 6.2.6 of the SWEIS. Because groundwater contamination associated with past activities at the Lovelace Respiratory Research Institute have been remediated, the DOE determined that there are no cumulative effects. However, because of the proximity of the Lovelace Respiratory Research

Institute to the Pueblo of Isleta, the following paragraphs discuss the groundwater situation.

The Lovelace Respiratory Research Institute discharged its sewage to onsite lagoons from the late 1960s until the early 1990s because of its remote location near the southern boundary of KAFB. In response to the detection of nitrates in groundwater beneath the lagoons in the late 1980s, a sewer line was built connecting the facility with the city of Albuquerque sanitary sewer system, and the Institute stopped discharging to the lagoons in 1992. The lagoons were allowed to dry out and, in 1995 and 1996, contaminated soil, liners, and pipes associated with the lagoons were removed. The lagoon site was closed in 1996 in accordance with DOE Order 5400.5, *Radiation Protection of the Public and the Environment*, the *New Mexico Solid Waste Management Regulations*, and the *New Mexico Water Quality Act*.

In 1998, the New Mexico Environment Department issued the revised DP-519 Groundwater Discharge Permit to the Lovelace Respiratory Research Institute. The permit states “In approving this discharge plan, the New Mexico Environment Department has determined that the requirements of New Mexico Water Quality Control Commission Regulation 3109.C have been met.” The Institute performs semiannual groundwater monitoring of selected onsite and offsite wells. Results of the analyses are sent to the New Mexico Environment Department, with copies going to the Pueblo of Isleta. Nitrate concentrations in onsite wells have declined from a maximum concentration of 12.4 mg/L in the first half of 1996 to a 7.7 mg/L maximum concentration for the first half of 1999. Nitrate concentrations in offsite wells have never exceeded 6.5 mg/L, which is below the New Mexico Water Quality Control Commission standard of 10 mg/L.

Sandia EIS Review

Pueblo of Isleta

Institute contributed to groundwater contamination after these acts were in place; a fact curiously absent from this document.

- “. . . With the exception of flow from one spring there are no perennial streams or other surface water bodies on KAFB. . . .” (Page 4-36). “. . . Wetlands on KAFB are associated with several springs, all within the Arroyo del Coyote drainage . . . Two of the springs, Coyote Springs and Sol Se Mete Spring, flow year-round. . . .” (Page 4-39, emphasis added) Contradictory statements.
- Figure 4.6-6. Have any of the drainages which are shown as entering the Pueblo been monitored for flows and/or pollutants?
- “. . . The Rio Grande flows through the Pueblo of Isleta, beginning 6 mi downstream from the confluence with Tijeras Arroyo. . . .” (p 4-39) The Pueblo believes that the correct distance is approximately 4.5 - 5.0 miles.
- “. . . During storm events in 1994 and 1995. . . .” Why wasn’t the data from 1996 and 1997 included in this EIS? As noted above, we believe that such information could lead to significantly different conclusions.
- “. . . SNL / NM discharges approximately 770,000 gal of water per day to the sanitary sewer . . . The discharged water must meet Federal and state quality standards. . . .” Because the discharge from the Albuquerque WWTP is so close to the Pueblo, and of such magnitude, its effluent must also meet Pueblo of Isleta standards. Consequently, the discharge from SNL, and all other DOE facilities need to consider Tribal water quality standards.

Chapter 5, Section 5.3.3. Geology and Soils

- “The term soil contamination, as used in the SWEIS, is the presence of any toxic, hazardous, or radioactive substances in the near-surface soil (nominally, the upper 6-inches to 1 ft) that is not naturally occurring. . . .” This pseudo-definition raises at least two concerns;
 - a.) Why the limitation to toxic, hazardous or radioactive when other compounds may have a deleterious effect without being RCRA/CERCLA listed? Examples of other pollutants of concern include unionized ammonia and nitrate.
 - b.) Why the limitation to surficial soil layers? Anions will penetrate soils to the wetting depth but may still be available to deep-rooted vegetation. Moreover, the CWL shows significant pollutant loads as deep as 75 feet.
- “. . . However, “there can be no direct effect on the public because affected sites are not available to public use”. . . .” This lapse in logic is of special concern to the Pueblo. Contaminated soils can be carried off-site by wind and water resulting in contamination of

Page 5 of 9

*Comment 6-13-26*6-12-24,
cont.*Location of SWEIS Revision(s): Sections 4.6.2.1 and 4.6.2.3*

Response: The Sol Se Mete spring flows year-round. The text in Sections 4.6.2.1 and 4.6.2.3 has been corrected.

6-13-26

Comment 6-14-26

6-14-26

Location of SWEIS Revision(s): None

Response: The drainages entering the Pueblo of Isleta from KAFB are small arroyos located away from SNL/NM activities or known sites of contamination. These drainage areas have not been sampled by SNL/NM or the USAF.

6-15-26

6-16-26

6-17-26

*Comment 6-15-26**Location of SWEIS Revision(s): Section 4.6.2.3*

Response: The discharge point of Tijeras Arroyo to the Rio Grande was visually surveyed, and the shortest downstream distance (along the eastern edge of the Rio Grande flowpath) to the Pueblo of Isleta boundary is 4.7 mi. Section 4.6.2.3 has been revised.

6-18-21

6-19-21

6-20-21

*Comment 6-16-26**Location of SWEIS Revision(s): None*

Response: SNL/NM conducted a comprehensive surface water study in 1994 and 1995 to establish background concentrations and determine if contamination was present in runoff in onsite arroyos. Because of the difficulty in performing this type of study with sporadic runoff, and because the results of the study did not show evidence of contamination, the effort has not been repeated. SNL/NM continues monitoring runoff from TAs-I, -II, and -IV for compliance with NPDES permits, as described in Section 4.6.2.3 (note that 1997 monitoring data have been added to the Final SWEIS). In addition, SNL/NM samples storm water runoff from the Lurance Canyon Burn Site and ER Project Site 16, both in or near Arroyo del Coyote. To date, samples from these sites have shown no evidence of contamination.

Comment 6-17-26***Location of SWEIS Revision(s): None***

Response: The city of Albuquerque sets minimum quality standards for SNL/NM discharge to the sanitary sewer. SNL/NM is responsible for meeting these standards. The city of Albuquerque is responsible for ensuring that the discharge from the Southside Water Reclamation Plant to the Rio Grande meets applicable Federal and state quality standards, or any other standards agreed to by the city of Albuquerque and the Pueblo of Isleta.

Comment 6-18-21***Location of SWEIS Revision(s): None***

Response: The definition of soil contamination is not intended to limit the analysis to *Resource Conservation and Recovery Act (RCRA)*- or *Comprehensive Environmental Response, Compensation, and Liability Act*-listed contaminants. Other compounds having a deleterious effect would be considered “toxic” and would, therefore, be included in the definition. Because unionized ammonia and nitrates are products of agricultural application of fertilizers and SNL/NM does not contain agricultural areas, these constituents were not chemicals of concern.

Comment 6-19-21***Location of SWEIS Revision(s): None***

Response: The soil analysis focused on the potential for contact of soils by workers or the general public. Areas of soil contamination, including outdoor testing areas and sites undergoing cleanup by SNL/NM, are discussed. Ecological risks from consumption of potentially contaminated vegetation by wildlife are evaluated by SNL/NM at Environmental Restoration sites. Deeper contamination, such as that present at the CWL, presents no direct contact threat. However, the threat of deeper contamination to groundwater is addressed in Section 5.3.4.1. This deeper contamination includes the unsaturated zone—those soils from near ground surface to the water table.

*Comment 6-20-21**Location of SWEIS Revision(s): Section 5.3.3.1*

Response: The quoted statement in Section 5.3.3.1 is from the *Environmental Assessment of the Environmental Restoration Project at Sandia National Laboratories/New Mexico* (DOE 1996c). Risk analyses were performed for the Environmental Assessment to determine the threat to workers at SNL/NM TAs and the general public from contaminant sources at SNL/NM. These analyses included the potential resuspension of particles in air. The results showed hazard indexes ranging from 7.51×10^{-3} to 7.82×10^{-2} for the general public; hazard indexes less than 1 indicate the risk to receptors is not significant. The potential for contaminants to be carried off of KAFB by water is addressed in the surface water analysis for the SWEIS, Section 5.3.4.3. Section 5.3.3.1 has been reworded to clarify that analyses indicate no significant risk to the general public.

the entire ecosystem, and all of its components, even if the original sources of such contaminants are not readily available to the public. While some dilution of contaminant levels would be expected with such transport, the categorical statement of “no effect” is simply not warranted.

- “. . . The Sled Track Complex . . . has had DU, beryllium, and lead fragments released from high velocity impact tests. A total of 1,601 point sources and 33 area sources were cleaned up during a voluntary corrective measure. . . .” Were any of these point sources / area sources within those lands leased from the Pueblo of Isleta? Have these lands been surveyed for such contamination? If so, what was the result of the investigation and when was it conducted? If not, why hasn’t such a review been undertaken?

Chapter 5, Section 5.3.4 Water Resources and Hydrology.

As has been mentioned earlier, the startlingly lacking of information on groundwater concerns associated with ITRI, outside of the number of monitoring wells shown in Figure 4.6 - 3 (page 4-33), is very disconcerting. Tribal files contain information from the New Mexico Environment Department’s AIP staff which clearly document significant concerns associated with this facility.

- “TCE presently in the groundwater is attributed to vapor phase transport of TCE volatilizing in the unsaturated zone . . . Appendix B contains a discussion on the derivation of the vapor source term, which was calculated as 33 g per year into the uppermost saturated layer. . . .” The quote above, and the remaining discussion on this point, fails to recognize the fact that exceedances of the MCL have already occurred more than 500 feet below the ground surface. The purported slow vertical and horizontal movement rates, reported as fractions of hundredths of a foot per year, utterly fail to recognize that vapor phase transport is not the same as liquid phase; the pollutant has reached the water table! Table 5.3.4-1 shows a reservoir of 31,000 kg of TCE in an area which can continue to “feed” this plume which the quote above attributes to 33 g per year. To put our concerns into the proper perspective, we simply note that 33 grams are 1.065×10^{-6} of the total available to pollute these essential waters. Moreover, we note that the TCE decomposition product noted in this discussion, dichloroethane, is itself regulated under 40 CFR Section 141.61 entitled “Maximum contaminate levels for organic contaminants” adopted pursuant to the Safe Drinking Water Act, as a priority pollutant under Section 307 (a) of the Clean Water Act, and section 1101. TT. of the New Mexico groundwater regulations as a toxic pollutant. We find this entire discussion to be entirely contrived.
- “. . . The city of Albuquerque San Juan/Chama Project is projected to begin operation in 2004” The Pueblo has yet to take an official stand on this proposal but is very concerned with what is currently known about it. We strongly recommend that DOE limit its dependence upon this project as a mitigating factor for its ground water and surface water

Comment 6-21-21

Location of SWEIS Revision(s): None

6-20-21, cont.

Response: None of the point or area sources identified during the voluntary corrective measure survey conducted in 1994 were on land leased from the Pueblo of Isleta. The closest point of the survey to the Pueblo boundary was 2.2 mi. At the Long Sled Track (the closest to the Pueblo of Isleta), more than 90 percent of the sources were identified within a 0.2-mi radius of a point 2.5 mi north of the boundary. Because of the diminishing number of sources with distance, it was highly unlikely that sources would have been identified as far south as the Pueblo boundary. Therefore, the survey was not extended to the Pueblo lands.

6-21-21

6-22-24

Comment 6-22-24

Location of SWEIS Revision(s): None

6-23-24

Response: See the response to comment 6-12-24, above.

Comment 6-23-24

Location of SWEIS Revision(s): None

6-24-24

Response: Section 5.3.4.1 of the SWEIS states “This uppermost *saturated* [italics added] layer is a silty clay layer, approximately 40 ft thick, through which the downward (vertical) movement occurs at a pore velocity of 0.03 ft per year and horizontal movement occurs at a pore velocity of 0.07 ft per year.” The analysis conservatively assumed that liquid-phase transport through this uppermost saturated layer was instantaneous. The relatively rapid vapor-phase transport through the unsaturated soil to this saturated layer was simulated in the analysis to match the measured transport time. The 33-g-per-year rate is based on measurements of actual concentrations of TCE in groundwater and reflects the rate of volatilization of the TCE source. The SWEIS clearly acknowledges that exceedances of the maximum contaminant level have occurred at the CWL (see Summary, Sections 3.6.4, 4.6.1.3, 5.3.4.1, 5.4.4.1, 5.5.4.1, and Appendix B.1 of Volume II) and attributes these to the relatively rapid transport of TCE to the water table by way of the vapor phase. The 31,000 kg of TCE is the source quantity prior

to remediation (used in the SWEIS analysis as a worst-case scenario). The majority of this quantity will be removed, reducing the 33 g per year projected to reach the water table through vapor phase transport. Further, a vapor extraction system, in operation since 1997, appears to have reduced TCE concentrations to below maximum contaminant levels. At present, there have been five consecutive quarters during which TCE concentrations in CWL groundwater samples have been below the 0.005-mg/L drinking water standard. Dichloroethane has not been detected in any groundwater samples collected at the CWL.

Comment 6-24-24

Location of SWEIS Revision(s): None

Response: The DOE did not assume, for the groundwater quantity analysis, that the city of Albuquerque would be using water from the San Juan/Chama Project. Although this project could significantly reduce the rate of aquifer drawdown in the Albuquerque area, thus reducing SNL/NM's contribution to aquifer drawdown, the DOE does not rely on this project as a mitigating factor and acknowledges SNL/NM's contribution to aquifer drawdown as an adverse impact of continued SNL/NM operations.

Sandia EIS Review

Pueblo of Isleta

modeling efforts..

- Section 5.3.4.3 Surface Water Quality. DOE should, at a minimum, compare its stormwater samples against the State's irrigation and livestock usages as well as comparing the samples against all of the Pueblo of Isleta's standards.
- "... Surface water sampling results indicate storm water runoff from SNL / NM in TAs-1, -II, and -IV does not contribute contaminants to Tijeras Arroyo. ..." As mentioned earlier, SNL / NM own documents clearly contradict this statement. Note Figure 6-2 and Table 6-7 in the aforementioned 1997 annual report.
- Data presented in Table 5.3.4-3 cannot be related to collection sites shown in Figure 5.3.4-4 because the sampling locations are not shown in the figure.
- "... These small flows represent small fractions (0.0001 to 0.001 percent) of the annual Rio Grande flow above its confluence with Tijeras Arroyo. ..." Such statements are of absolutely no benefit; yearly averages are of little concern. High intensity storm events are often highly localized and can result in huge loads and extremely high concentrations during the ascending leg of the storm hydrograph. Such short term events can, and do, lead to short term exceedances of acute criteria; however, you only need to poison a fish (or a man) once to kill it if the concentration is high enough.

6-24-24,
cont.

6-25-26

6-26-26

6-27-13

6-28-26

*Comment 6-25-26**Location of SWEIS Revision(s): None*

Response: The SWEIS compares storm water sample analyses against standards for the New Mexico Water Quality Control Commission designated uses of Tijeras Arroyo, which are livestock watering and wildlife habitat (Table 5.3.4-3). Irrigation is not a New Mexico Water Quality Control Commission-designated use for Tijeras Arroyo; therefore, the samples are not compared to these standards. Because Tijeras Arroyo does not cross Pueblo of Isleta land, these New Mexico Water Quality Control Commission limits were used; however, the Pueblo of Isleta water quality standards are mentioned in Section 4.6.2.3.

*Comment 6-26-26**Location of SWEIS Revision(s): None*

Response: See the response to comment 6-10-26.

*Comment 6-27-13**Location of SWEIS Revision(s): Figure 5.3.4-4*

Response: The sampling locations have been added to Figure 5.3.4-4.

*Comment 6-28-26**Location of SWEIS Revision(s): None*

Response: The intent of the quoted statement from Section 5.3.4.4 is to provide perspective on SNL/NM's incremental contribution to water quantity in the Rio Grande. The statement, and the supporting text, indicate that SNL/NM's incremental contribution to surface water *quantity* in the Rio Grande, through excess storm water runoff and discharge to the Southside Water Reclamation Plant, is neither beneficial nor adverse.

There is no evidence of short-term exceedances of acute criteria in storm water runoff at SNL/NM. Moreover, extensive soil sampling conducted by SNL/NM in the vicinity of current and past SNL/NM operations and at monitoring stations, and sampling of surface water in the arroyos during storm events, have not shown that there is a potential for such exceedances (Sections 4.6.2.3 and 5.3.4.3).

1.

FACILITY	CATEGORY	NA - 10 YEAR	EXPANDED (% OF NA)	REDUCED (% OF NA)	COMMENT
NGF	Hazardous Waste (kg)	3,680	3,680 (100%)	3,680 (100%)	
	Water Used (gal)	5 M	5 M (100%)	5 M (100%)	
	Wastewater (gal)	5 M	5 M (100%)	5 M (100%)	¿ No consumption?
MDL	Hazardous Waste (kg)	4,410	4,738 (107%)	1,688 (38%)	
	Water Used (gal)	77.2 M	77.2 M (100%)	44.1 M (57%)	
	Wastewater (gal)	77 M	77 M (100%)	44 M (57%)	0.3 % consumption?
AMPL	Hazardous Waste (kg)	5,915	6,625 (112%)	4,732 (80%)	
IMRL	Hazardous Waste (kg)	1,850	2,000 (108%)	2,000 (108%)	Reduced > No Action
ECF	Hazardous Waste (kg)	500	500 (100%)	200 (40%)	
	Water Used (gal)	6.5 M	7 M (108%)	4 M (62 %)	
	Wastewater (gal)	5 M	6.4 M (128%)	3.2 M (80%)	Higher percentages of wastewater
TBC	Hazardous Waste (kg)	0.5	0.75 (150%)	0.0 (0%)	
STC	Hazardous Waste (kg)	15	50 (333%)	3 (20%)	
CC	Hazardous Waste (kg)	12	15 (125%)	12 (100%)	
SATURN	Hazardous Waste (kg)	501	1,286 (257%)	100 (20%)	
HERMES	Hazardous Waste (kg)	316	915 (290%)	25 (8%)	
SABRE	Hazardous Waste (kg)	76	132 (174%)	0 (0%)	
SPHINX	Hazardous Waste (kg)	45	107 (238%)	3.6 (8%)	
RHEPP I	Hazardous Waste (kg)	5	10 (200%)	0 (0%)	
RHEPP II	Hazardous Waste (kg)	1	1 (100%)	0 (0%)	
Z-Machine	Hazardous Waste (kg)	1,000	1,250 (125%)	400 (40%)	
TESLA	Hazardous Waste (kg)	50	65 (130%)	2 (4%)	

6-29-20

Comment 6-29-20

Location of SWEIS Revision(s): Table 3.6–1

Response: This table contains selected information from Table 3.6–1 of the Draft SWEIS and was included as an endnote to the Pueblo of Isleta comments as stated in comment 6-3-8. The issue raised (the limited variation among alternatives) is addressed in the response to that comment. The following text addresses additional comments listed in the right column of this endnote.

The DOE believes the figures presented in Table 3.6–1, the text, and the appendixes are accurate and has made every attempt to ensure the quality of the data through numerous peer and technical reviews. In Table 3.6–1 and its underlying analysis, the SWEIS quantifies the environmental impacts resulting from SNL/NM missions, facilities, and activities. At the same time, the SWEIS introduces the concept of selected facilities to supplement impact data with a measure that conveys additional information about overall impacts (see Section 2.3.2). Table 3.6–1 and its source, the SNL/NM FSID (SNL/NM 1998ee), identify component estimates (for example, process water use), underlying assumptions, data sources, and other related information.

With regard to the negligible differences in water use and wastewater generated values listed in Table 3.6–1, specific information is provided below for the Neutron Generator Facility (NGF), MDL, Explosive Components Facility, and Gamma Irradiation Facility (GIF). For the NGF and MDL, the water use and wastewater values are related to industrial manufacturing processes using a single-pass operation with negligible evaporation (loss) or chemical conversion (consumption), which is reflected in the values listed in Table 3.6–1.

Water use at the GIF (reduced to zero by the year 2000) under the No Action Alternative is higher than water use (approximately 17,000 gallons per year) under the Reduced Operations Alternative because of the alternative assumptions. Under the No Action Alternative, the GIF would be replaced by the New Gamma Irradiation Facility (NGIF), as discussed in Section 3.2.5.2. After the NGIF became operational, the DOE would not conduct irradiation tests at the GIF and would no longer use the GIF reactor water pool, thereby reducing water use to zero. Under the Reduced

APPRM	Hazardous Waste (kg)	100	200 (200%)	5 (5%)	
RITS	Hazardous Waste (kg)	204	272 (136%)	34 (17%)	
NGIF	Water Used (gal)	0.2 M	0.2 M (100%)	0 (0%)	
GIF	Water Used (gal)	0	0.02 M	0.02 M	Reduced operation > NA
ACRR - DP	Water Used (gal)	0	0.1 M	0	
	Wastewater (gal)	0	0.05 M	0	
ACRR - Med	Water Used (gal)	5 M	11 M	1.2 M	
	Wastewater (gal)	1 M	2.2 M (220%)	0.2 M (20%)	
ACF	Hazardous Waste (kg)	5	9 (180%)	5 (100%)	
LCBS	Hazardous Waste (kg)	900	900 (100%)	900 (100%)	
	Wastewater (gal)	0.02 M	0.02 M (100%)	0.02 M (100%)	
CTTF - West	Hazardous Waste (kg)	0	0.1	0.1	Reduced operation > NA
Steam Plant	Water Used (gal)	17 M	20 M (118%)	9.5 M (56%)	
	CATEGORY	NA - 10 YEAR	EXPANDED (% OF NA)	REDUCED (% OF NA)	
TOTALS	Hazardous Waste (kg)	19,585.5	21,852.75 (112%)	13,789.6 (70%)	
	WATER USED (gals)	110.9 M	120.52 M (109%)	63.82 M (58%)	
	WASTEWATER (gals)	88.02 M	90.67 M (103%)	52.42 M (60%)	

6-29-20, cont.

Operations Alternative, the GIF reactor water pool would remain operational; however, no irradiation tests would be completed. Approximately 17,000 gallons per year would be required to replace water lost through evaporation. It is also assumed that the NGIF would not be completed, thus no irradiation tests would be conducted at the NGIF and there would be no use of process water (Section 3.4.4.1).

The hazardous waste generation projection for the Integrated Materials Research Laboratory under the No Action Alternative ranges from 2,400 kg in the base year to 2,100 kg per year by 2003 to 1,850 kg per year by 2008. This projected decrease would be due, in part, to the expected development of waste avoidance and pollution prevention measures. The Reduced Operations Alternative hazardous waste projection of 2,000 kg per year for the Integrated Materials Research Laboratory is based on the assumption that the DOE would implement the alternative immediately and, therefore, does not consider the possibility of the development of future potential waste avoidance and pollution prevention measures; therefore, the Reduced Operations Alternative quantity would be slightly higher after 2003. For clarification, a footnote has been added to Table 3.6–1.

The hazardous waste generation projection for the Containment Technology Test Facility (CTTF) under the No Action Alternative would be reduced to zero because the current test will be completed in 2000. The current test is in the fourth year of a six-year test period. At this time under the No Action Alternative, there are no scheduled tests beyond 2003 at the CTTF (see Section 3.2.6.3), so there were no waste projections. The Reduced Operations Alternative assumes the current test would be continued over a period of several years to maintain the existing capability (see Section 3.4.5.3). Essentially, current operations at the CTTF are at the Reduced Operations Alternative levels. For clarification, a footnote has been added to Table 3.6–1.



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PETER MAGGIORE
Secretary

June 15, 1999

Julianne Levings, NEPA Document Manager
U.S. DOE, Albuquerque Operations Office
P.O. Box 5400, Albuquerque, NM 87185

Dear Ms. Levings:

RE: DRAFT SITE-WIDE ENVIRONMENTAL IMPACT STATEMENT FOR SANDIA NATIONAL LABORATORIES/NEW MEXICO (DOE/EIS-0281); U.S. DEPARTMENT OF ENERGY, APRIL 1999

This transmits New Mexico Environment Department (NMED) staff comments concerning the above-referenced Draft Site-Wide Environmental Impact Statement (SWEIS).

A. GROUND WATER QUALITY

1. **General Comment.** The SWEIS was reviewed with respect to ground water issues primarily to determine the degree of compliance by Sandia National Laboratories/New Mexico (SNL/NM) with New Mexico Water Quality Control Commission (NMWQCC) regulations or for deficiencies or inaccuracies which prevent an adequate assessment of continued operations at SNL/NM.

It is important to note a general aspect about this document. The SWEIS' sections on ground water and ground water resource impacts speculate as to the sources and the future consequences of existing contamination identified at SNL/NM. These assertions presume that foreseeable future use of the ground water resource at SNL/NM is known. Additionally, the SWEIS evaluations assert that none of the proposed alternatives will affect contamination present at SNL/NM. NMED staff recommends that the SWEIS avoid making such assertions without support from further characterizations.

2. **3.6.4 Water Resources and Hydrology.** The SWEIS states, "Groundwater contamination attributable to known SNL/NM activities is present at one site, the Chemical Waste Landfill (CWL) in TA-III." And also, "TCE would not impact drinking water because the nearest water supply well is approximately 4 mi. from the CWL." These statements imply that (a) this is the only SNL/NM-attributable contamination identified at SNL/NM, (b) the CWL TCE plume is fully defined at 410 feet long, and (c) water supply wells will not be placed any closer than 4 miles from the CWL. These implications are highly questionable:

With respect to (a), NMED believes that sufficient data have been developed to support the attribution to known SNL/NM activities to other tech areas in addition to Tech Area-III as sources of ground water contamination; e.g., Tech Area-II is a significant TCE groundwater

7-1-24

7-2-8

7-3-24

7-4-24

Response to Comments by the New Mexico Environment Department

Comment 7-1-24

Location of SWEIS Revision(s): None

Response: The DOE uses a 10-year period for its SWEIS analysis (to 2008). The DOE believes the 10-year future is reasonably foreseeable. Projections for this period are based on the best available information. See the response to comment 7-6-24 for a discussion on groundwater quality impacts.

Comment 7-2-8

Location of SWEIS Revision(s): None

Response: The ER Project (Section 2.3.5.8) is addressing existing contamination at SNL/NM. ER Project activities proceed independently of the chosen alternative. Further, for actions taken under any of the alternatives, SNL/NM would manage hazardous materials in accordance with Federal and state regulations, permit requirements, and DOE orders and guidelines to minimize the potential for contamination of the environment.

Comment 7-3-24

Location of SWEIS Revision(s): None

Response: The responses to comments 7-4-24, 7-5-24, and 7-6-24 address items (a), (b), and (c) in detail.

Comment 7-4-24

Location of SWEIS Revision(s): Sections 4.6.1.3 and 5.3.4.1

Response: The Final SWEIS cites data from the recently published 1998 *Environmental Monitoring Report* (SNL 1999a) that indicate attribution of hydrocarbon contamination in groundwater to the Lurance Canyon Burn Site and TCE contamination to the septic system leach field at TA-V (Sections 4.6.1.3 and 5.3.4.1). Based on available environmental monitoring data, the DOE does not believe sufficient evidence exists to support the attribution of "Sandia North" contamination to SNL/NM

contamination source for the "Sandia North" TCE plume, and discharges to a septic system leach field in TA-V have resulted in TCE groundwater contamination.

7-4-24,
cont.

With respect to (b), NMED believes that SNL/NM has not demonstrated that the CWL TCE plume is defined to its maximum vertical extent, therefore cannot be certain of its full extent.

7-5-24

Regarding (c), WQCC Regulations 20 NMAC 6.2 Sections 3103, STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS, state that ground water may not be allowed to exceed standards "at any place of withdrawal for present or reasonably foreseeable future use." The NMED interprets the "reasonably foreseeable future" to be at least 200 years or more. SNL/NM cannot predict with any reasonable certainty over that period of time whether water supply wells may be installed within a 4-mile radius of the CWL. Figure 4.65 on page 4-37 shows future proposed water supply wells for the anticipated Mesa Del Sol development. These wells may have a significant effect on ground water flow direction and velocity in proximity to Tech Area-III in the future.

7-6-24

3. **4.6.1 Ground Water.** Ground water contamination is noted at "Sandia North" (TA1, TA2, and TA4), the CWL, TA5, and the Burn Site. However, no statement is included regarding the detection of fuel constituents in ground water at the Burn Site during the past year.

7-7-24

4. **Table 4.6-1.** Maximum Recorded Levels of Suspected Groundwater Contamination at SNL/NM. This table shows Sandia North as having a maximum measured concentration of TCE at 0.0056 mg/l. NMED has observed TCE levels up to 0.008 mg/L in that area from its own sampling results.

7-8-24

5. **4.6.1 Lurance Canyon Burn Site.** Page 4-35 describes observed above-standard nitrate contamination of ground water, and attempts to rule out fertilizers as a source (which have been used at the burn site) with isotopic analyses. NMED has not yet ruled out the Burn Site as a source for nitrate in ground water. Dissolved hydrocarbons associated with the Burn Site have also been found in ground water.

7-9-24

6. **5.3.4.1 Groundwater Quality. Sandia North** - Nitrate and dilute concentrations of TCE underlying Sandia North have a potential to reach Kirtland Air Force Base (KAFB) and/or City of Albuquerque production wells. A better attempt at estimating the impacts to these production wells should be made.

7-10-24

TA V - No statement is included regarding the impact of TCE contamination at TA5.

7-11-24

Lurance Canyon Burn Site - Ground water is stated to occur within a thin layer of alluvium in the canyon bottom in the vicinity of the Burn Site. We are not aware of information that supports this statement. The "no impact to existing potable water supplies" statement should be supported by some estimate of travel time based on current knowledge of contaminant concentrations.

7-12-24

SNL/NM should model the cumulative impacts of the various ground water contamination plumes on KAFB and City of Albuquerque production wells under current and projected conditions. Using the USGS/SNL ground-water model, current conditions would be based on

7-13-38

activities; no specific activities or disposal sites that could be responsible for the groundwater contamination have been identified in TA-II. However, investigation of potential sources at Sandia North is ongoing.

Comment 7-5-24

Location of SWEIS Revision(s): None

Response: The CWL modeling conducted for the SWEIS was a conservative analysis using the best data available. It provides a quantitative estimate of impacts to the groundwater resource under various cleanup scenarios (Table B.1-4 in Appendix B of Volume II). Modeling assumptions and model inputs are presented in Appendix B.1. Ongoing remediation (for example, operation of a vapor extraction system) might be altering the shape and extent of the plume. TCE concentrations, as measured in 12 monitoring wells at the CWL, have been below the maximum contaminant level since August 1997.

SNL/NM is working with the New Mexico Environment Department toward closure of this site. The New Mexico Environment Department will ultimately approve whether SNL/NM has conducted the appropriate actions at the CWL; SNL/NM has worked with the New Mexico Environment Department on this process. Should monitoring well data indicate unanticipated increases in concentrations or migration of contaminants, SNL/NM would work with the New Mexico Environment Department to resolve the issue.

Comment 7-6-24

Location of SWEIS Revision(s): None

Response: The SWEIS states that contamination above maximum contaminant levels to a distance of 410 ft downgradient from the CWL is an impact to that portion of the groundwater resource (aquifer). The mention of 4 mi to the nearest well provides the reader a perspective on the location of the nearest receptor. The DOE acknowledges that water supply wells could be installed within a 4-mi radius in the future. The DOE agrees that the proposed Mesa del Sol wells could affect groundwater flow direction and velocity. However, increases in velocity would tend to decrease contaminant concentrations.

The DOE recognizes that the New Mexico Environment Department interprets the “reasonably foreseeable future” to be at least 200 or more years. For further information on the modeling at CWL, refer to Appendix B.

Comment 7-7-24

Location of SWEIS Revision(s): Sections 4.6.1.3 and 5.3.4.1

Response: A statement regarding the detection of fuel constituents at the Lurance Canyon Burn Site has been included in Sections 4.6.1.3 and 5.3.4.1. The fuel contamination was reported to the New Mexico Environment Department in a memorandum report dated October 26, 1998.

Comment 7-8-24

Location of SWEIS Revision(s): Table 4.6-1

Response: Table 4.6-1 was in error and has been corrected. The maximum detected TCE concentration is 0.014 mg/L.

Comment 7-9-24

Location of SWEIS Revision(s): Section 4.6.1.3

Response: The reference to the isotopic study has been removed from the Lurance Canyon Burn Site subsection of Section 4.6.1.3. The study was conducted at the Burn Site in cooperation with the New Mexico Environment Department Groundwater Bureau in an attempt to identify the source of nitrates. These tests were inconclusive, and an investigation to identify the nitrate source and to study the extent of fuel contamination is ongoing. Investigative activities include the installation of a background well upgradient of the site and a monitoring well immediately downgradient of the site boundary. A statement has been added to Section 4.6.1.3 that indicates the presence of low levels of toluene, ethyl benzene, and xylene in downgradient monitoring wells.

*Comment 7-10-24**Location of SWEIS Revision(s): None*

Response: The investigation of Sandia North is still under way. As more information, characterizing the contamination source, becomes available, SNL/NM will analyze the impacts. Data will be presented in the Annual Site Environmental Monitoring Reports. The need for and results of all Sandia North investigations are reported to and discussed with the New Mexico Environment Department.

*Comment 7-11-24**Location of SWEIS Revision(s): Section 5.3.4.1*

Response: TCE contamination in TA-V groundwater is unlikely to pose a threat to human health or the environment, based on analytical modeling conducted for the *Summary Report of Groundwater Investigations at Technical Area V, Operable Units 1306 and 1307* (SNL/NM 1999c). This modeling assumed the nearest potential downgradient receptor was a hypothetical residence located near the proposed Mesa del Sol subdivision, approximately 9,000 ft west of TA-V, at the KAFB boundary. Results indicated that no contaminant concentrations at this receptor would exceed the remedial action standards or even 10 percent of the preliminary remediation goals. Therefore, the DOE believes there is minimal potential for risk to future residents at the KAFB boundary and minimal impact to human health. This information has been added to the discussion in Section 5.3.4.1.

*Comment 7-12-24**Location of SWEIS Revision(s): Section 5.3.4.1*

Response: The statement in Section 5.3.4.1 has been revised to reflect that groundwater in the vicinity of the Lurance Canyon Burn Site is found in fractured bedrock, beneath a layer of alluvium, under semiconfined to confined conditions. Since 1997, two piezometers have been collecting data near the Lurance Canyon Burn Site arroyo channel to monitor for the presence of water at the bedrock-alluvium interface. Data indicate that no

groundwater is present at the bedrock-alluvium interface in spite of several periods of heavy rainfall (Freshour 1999). Very limited data are available to estimate travel times; however, no potable water supplies exist near the burn site.

Comment 7-13-38

Location of SWEIS Revision(s): None

Response: The DOE believes Chapter 6 provides an understanding of SNL/NM's contribution to cumulative environmental impact. Groundwater contamination was not modeled under cumulative impacts because the locations of contamination are discrete with no commingling of contaminant plumes. The suggested model is beyond the scope of the analysis performed for this SWEIS. The DOE used the best available information in the SWEIS analysis. Where sufficient data were available, such as for the CWL, the DOE performed modeling to determine impacts on KAFB and city of Albuquerque production wells.

existing well fields and projected conditions would include the effects of the planned Mesa del Sol well field and the proposed extraction wells at the KAFB golf course.

7-13-38,
cont.

7. **7.3 Environment, Health and Safety Laws, Regulations, and Other Requirements for Each Resource Area.** Pages 7-3 through 7-22 set forth many laws, regulations and requirements; however, nowhere in the document is there a mention of NMWQCC regulations: 20 NMAC 6.2 is completely missing.

7-14-24

8. **Chapter 8-References, New Mexico Statutes Annotated.** This section has no citation for NMSA-74-6, the "Water Quality Act".

7-15-13

9. **Appendix B - B.1 Groundwater Quality.** Page B-2 states: "Vapor-phase transport by way of diffusion is the only mechanism by which the TCE could have reached the water table in the relatively short time period between TCE disposal and the appearance of contamination at the water table (DOE 1992d)." Department staff believes that other explanations may exist. It is likely that modeling results would vary greatly depending on recharge input and the thickness of the mixing zone for the modeling exercise.

7-16-24

B. SURFACE WATER QUALITY

1. **4.6.2 Affected Environment-Surface Water.** SNL/NM has documented storm-water runoff samples containing oil and grease, explosives, radionuclides, and possibly metals contamination. These surface-water samples were collected from arroyos and storm-water drains below SNL/NM sites on KAFB. Unfortunately, the analytical data in Table 4.6-2 of the SWEIS cannot be correlated to sampling locations in Figure 4.6-7. SNL should provide a table and figure wherein laboratory results can be identified with the sample location.

7-17-26

2. **5.3.4.3 Environmental Consequences, No Action Alternative-Surface Water Quality.** Most metals and radionuclides are likely to be bound to the sediment, especially silt-sized particles, sediment transportation should be modeled. Sediment is transported from the mountains to the flood plain and to the Rio Grande as bed load and total suspended sediment (TSS) in the major arroyos. SNL should calculate the rates at which sediment is moving off of KAFB in the major arroyos and determine SNL's contribution.

7-18-26

For example, erosion/soil loss for the watershed can be calculated using the Universal Soil Loss Equation. The contribution from SNL ER sites, active testing facilities, and roads can then be estimated and calculated as a percentage of the total watershed sediment yield. TSS can be measured from storm-water samples; sediments transported as bed load. Thus, SNL can estimate its contribution to sediments being moved off of KAFB by bed transport and as TSS.

The locations of the storm water samples listed in Table 5.3.4-3 should be clarified in figure 5.3.4-4.

7-19-13

Sandia should characterize potential impacts on storm water discharges resulting from the storm drain renovation project for TA I.

7-20-26

3. **General Comments: Storm Water Runoff.** : The prior comments reflect what in fact constitutes a major fault with the SWEIS regarding surface water quality, its lack of recognition

7-21-26

Comment 7-14-24

Location of SWEIS Revision(s): Section 7.3.4.7

Response: A description of 20 *New Mexico Administrative Code* (NMAC) 6.2 has been added to Section 7.3.4.7.

Comment 7-15-13

Location of SWEIS Revision(s): Chapter 8

Response: *New Mexico Statutes Annotated* (NMSA)-74-6 has been added to Chapter 8.

Comment 7-16-24

Location of SWEIS Revision(s): None

Response: The DOE agrees that modeling results would vary with recharge input and thickness of the mixing zone; however, the data used are the best currently available. The DOE believes that vapor phase transport remains the most plausible means to explain the existence of groundwater contamination because liquid-phase TCE has only been detected in the upper 80 ft of the 480-ft unsaturated zone. Contaminated soil is currently being removed from the CWL as part of the formal closure process, which is subject to oversight and approval by the New Mexico Environment Department, as discussed in the response to comment 7-5-24.

Comment 7-17-26

Location of SWEIS Revision(s): None

Response: The intent of Table 4.6-2 is to summarize the analytical results for surface water samples in a statistical manner. As such, there is not a direct tie between any value in the table and any individual sampling location on Figure 4.6-7. The requested information is available in Table A-3 and Figure A-1 of the *SNL Site-Wide Hydrogeologic Characterization Project, Calendar Year 1995, Annual Report* (SNL/NM 1996g).

*Comment 7-18-26**Location of SWEIS Revision(s): None*

Response: The DOE agrees that various calculations could be performed to estimate sediment movement as a function of surface runoff. The SWEIS used a more direct evaluation, that is, analytical data from surface water samples collected in Tijeras Arroyo (Section 4.6.2). The DOE believes it has adequately addressed impacts based on the best available data.

Evaluation of sediment movement off KAFB and SNL/NM's contribution to the sediment load (by bed transport and as total suspended solids) is a point of current discussion between the New Mexico Environment Department, SNL/NM, and the DOE. No calculations have yet been performed.

*Comment 7-19-13**Location of SWEIS Revision(s): Figure 5.3.4-4*

Response: The sampling locations have been added to Figure 5.3.4-4.

*Comment 7-20-26**Location of SWEIS Revision(s): None*

Response: The DOE expects negligible impacts on storm water discharges as a result of the storm drain renovation project in TA-I. When channels that are presently open and unlined are either lined with concrete or replaced by buried piping, the erosion potential along the storm drain will decrease. The volume of water discharged to Tijeras Arroyo could increase due to the elimination of infiltration previously occurring in the unlined channels. However, the analysis of surface water quantity described in Appendix B.3 of Volume II assumed no infiltration in the channels.

*Comment 7-21-26**Location of SWEIS Revision(s): None*

Response: The DOE disagrees that the SWEIS does not recognize the possibility that storm water runoff could carry contamination off the site and to the Rio Grande. This was the focus of the surface water analysis described in Section 5.3.4.3 and the reason for presenting analytical results from samples collected from Tijeras Arroyo near the downstream exit from KAFB (Table 5.3.4–3). The general conclusion from this analysis is that there is no evidence of contaminant migration from SNL/NM.

Julianne Levings
June 15, 1999
Page 4

that storm water runoff could carry contamination (generated by both current and legacy waste produced at both KAFB and SNL/NM) to the Rio Grande. This feature prevents the conduct of an adequate environmental assessment, and makes it difficult for NMED staff to address USEPA-regulated storm water requirements associated with RCRA Environmental (ER) sites. Department staff would like to make a number of recommendations regarding this matter:

a. SNL/NM and KAFB should review 40 CFR Parts 122, 123, and 124, Vol. 55, No. 222/ November 16, 1990, page 48012, regarding USEPA's reference to storm water control at RCRA SWMUs.

b. Storm water monitoring by KAFB and SNL/NM needs to address the impact of storm water flow from KAFB/SNL by itself and in combination with storm water flow from the City of Albuquerque. This can be done by monitoring storm water flow at the upper reaches of Tijeras Canyon. In addition, KAFB and SNL/NM could voluntarily increase monitoring and their number of storm water stations such that a more representative model of storm water flow impact from these facilities to Tijeras Canyon can be delineated. This is especially important at times when the only storm water flow entering Tijeras Canyon is coming from KAFB and SNL/NM.

c. The Department's Surface Water Quality Bureau (SWQB) recommends that SNL/NM and KAFB coordinate their efforts in addressing surface water by using a unified watershed approach, as recommended by the Clean Water Act. The SWQB would be glad to assist both entities in achieving this endeavor.

d. SNL/NM has been, and KAFB is, making plans to voluntarily assess ER sites for erosion potential. SWQB recommends that these facilities, through a cooperative effort, address future land use at ER sites which have high to medium erosion potential. For example, an ER site may qualify for no further action under RCRA but still have a high to medium erosion potential. If these sites are then used (e.g., for training or vehicle traffic) without consideration of the impact of these activities in generating increased erosion problems, massive movement of sediments to the Rio Grande can result during future storm water events.

C. AIR QUALITY

1. **4.9.2.3 Affected Environment – Radiological Air Quality.** The SWEIS states that a higher radiological release occurred in 1996, and was attributed to the conversion and refurbishing of the Annular Core Research Reactor for medical isotope production. However, it is not clear, whether the higher radiological release was temporary, isolated to 1996, or elevated radiological releases can be expected in the future. In addition, it is stated that NESHAP "confirmatory measurements" were higher than calculated emissions. Based on this statement, it is not clear whether prior to 1996, reported emissions (summarized in Table 4.9-5) of Argon-41 from the ACRR and SPR were calculated or measured. Are the increases in radiological emissions of Argon-41 from the ACRR and SPR partially attributable to a change in reporting from calculated to measured values?

2. **5.3.7.2 Environmental Consequences – Radiological Air Quality.** The SWEIS states that the ACRR and HFC emissions for base year 1996 are different due to the refurbishing operations to change over to the "medical isotope production configuration." It is also shown in Table 4.9-5, that in 1996 the measured releases for Argon-41 were 35.4 (Ci/yr). However, in Table 5.3.7-7 the radiological emission of Argon-41 from the ACRR in the "medical isotope configuration" is estimated to be 1.1 (Ci/yr). It is not clear, whether the measured emission of Argon-41 in the base year of 1996 was only due to the "process" of reconfiguration. It should be

Comment 7-22-26

Location of SWEIS Revision(s): None

Response: The DOE has reviewed the regulations containing provisions for the NPDES Program (40 CFR Parts 122, 123, and 124) and believes that SNL/NM is in compliance.

Comment 7-23-26

Location of SWEIS Revision(s): None

Response: See the response to comment 7-24-1, below.

Comment 7-24-1

Location of SWEIS Revision(s): None

Response: The "Unified Watershed Assessment" is an approach directed by the *Clean Water Action Plan* (EPA 1998e) involving coordination among government entities for evaluating watershed conditions and priorities. Using this approach, states and tribes have identified the highest priority watersheds for restoration. The *Clean Water Action Plan* was announced by the President in 1998, primarily to address water quality impacts from nonpoint sources of pollution such as runoff from areas of crop production, animal feeding operations, and abandoned mines. The Secretary of Energy has endorsed the goals of the *Clean Water Action Plan*, and directed senior managers to identify actions the DOE could take voluntarily to support the initiative. These actions will occur within the DOE's existing missions and budgets. As watershed priorities are determined and *Clean Water Action Plan* funding becomes available, SNL/NM will participate in cooperative efforts with other government entities to the extent necessary to achieve the watershed restoration goals.

SNL/NM and the DOE are cooperating with the Surface Water Quality Board through monthly meetings of the Surface Water Assessment Team.

7-21-26,
cont.

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7-24-1

7-25-36

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7-28-28

*Comment 7-25-36**Location of SWEIS Revision(s): None*

Response: SNL/NM uses best management practices and implements procedures to minimize erosion and offsite flow at ER Project sites, such as the construction of barriers, ditches, and collection ponds; contouring of the ground surface; and revegetation. Sites are not reutilized until the New Mexico Environment Department approves the No Further Action proposal. Approval of the No Further Action designation is based, in part, on the future land use designated by the Future Use, Logistics, and Support Working Group (Section 4.3.1.3).

*Comment 7-26-28**Location of SWEIS Revision(s): None*

Response: The elevated radiological release for the Annular Core Research Reactor (ACRR) is for 1996 only; such releases are not anticipated in the future. This can be confirmed from the 1997 National Emissions Standards for Hazardous Air Pollutants (NESHAP)-reported atmospheric radiological releases (SNL/NM 1998gg) and from projected radiological releases for the SWEIS under each of the alternatives (refer to Table D.2–1 of Appendix D in Volume II), which would be lower than those reported for 1996.

*Comment 7-27-28**Location of SWEIS Revision(s): None*

Response: The reported emissions before 1996 (refer to Table 4.9–5) were calculated. The increase in radiological emissions of argon-41 from the ACRR is attributable partly to NESHAP “confirmatory measurements” requirements instituted for radioactive air emissions and partly to conversion and refurbishment of the ACRR for medical isotope production. The increase in radiological emissions of argon-41 from Sandia Pulsed Reactor is attributable to changes in reporting instituted in 1996 under NESHAP “confirmatory measurements” requirements. Refer to Sections 5.3.7.2, 5.4.7.2, and 5.5.7.2.

Comment 7-28-28

Location of SWEIS Revision(s): Sections 5.3.7.2, 5.4.7.2, and 5.5.7.2

Response: A sentence has been added to Sections 5.3.7.2, 5.4.7.2, and 5.5.7.2 to clarify that argon-41 emission from the ACRR would be lower than the base year emission under medical isotope configuration. A large but unquantifiable portion of 1996 emissions was related to refurbishment operations.

properly clarified the emission of Argon-41 will be reduced from the base year of 1996 when the ACRR is in the "medical isotope configuration", if this is the case.

D. WASTE GENERATION

1. **4.12.3 Affected Environment - Waste Generation.** The region of influence for waste generation is defined as on-site waste management facilities only. However, a release from incidents that may occur during transportation is a reasonable foreseeable impact. Since 1994, 7 transportation-related incidents have occurred during transportation of hazardous wastes or material. Shouldn't the region of influence include transportation routes and consider any potential releases along these routes?

2. **5.4.10 Environmental Consequences – Expanded Operations.** It is stated that increased waste volumes would be offset by increased pollution prevention programs which project a 33 percent decrease in total waste disposal needs by FY 2000, thereby not exceeding existing waste management disposal capacities. The 33 percent decrease should be justified with reasonable estimates of specific reductions of waste types using specific pollution prevention technology for each waste type. It is June 1999; how is it possible that Sandia can achieve a 33 percent waste reduction by year 2000? Would existing permitted storage and disposal capacity be exceeded if the 33 percent reduction is not achieved? Have the quantities and increases reported on Table 5.4.10-1 been adjusted for the estimated 33 percent decreases?

3. **5.4.10 Environmental Consequences – Expanded Operations.** Section 5.2.11 states that impacts resulting from waste generation will be addressed, but the impact analysis is omitted in Section 5.4.10 for all waste types. What are the environmental consequences and impacts for the increased generation of wastes shown on Table 5.4.10-1 in terms of physical safety, regulatory requirements, and security measures associated with storage capacity, personnel safety, and treatment capacity?

4. **5.4.10 Environmental Consequences – Expanded Operations.** Increased quantities of low level mixed wastes are significant for the proposed action (68%), but no information is given that describes how Sandia will legally manage these increased mixed waste quantities. Please describe how Sandia can legally generate this increased quantity of mixed waste and maintain compliance with the Federal Facilities Compliance Act and 20 NMAC 4.1. Will this increased quantity of mixed waste be included as part of the mixed waste quantities being managed by the Conceptual Site Treatment Plan for Mixed Waste? Will a formal modification to the Conceptual Site Treatment Plan be required?

5. **5.4.10.2 Environmental Consequences – Expanded Operations.** Increased quantities of hazardous wastes are significant for the expanded operations alternative (192% increase), but no information is given that describes how Sandia will legally manage these increased waste quantities. Please clarify how Sandia can legally generate and process this increased quantity of hazardous waste under the current RCRA Permit at the Hazardous Waste Management Facility without a formal permit modification.

6. **5.4.10.2 Environmental Consequences – Expanded Operations.** The discussion of ER Program waste under special projects says that ER waste handling is presented in Section

7-28-28,
cont.

7-29-43

7-30-34

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7-33-34

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Comment 7-29-43

Location of SWEIS Revision(s): Section 4.12.2

Response: The ROI for waste generation is the SNL/NM site. Section 4.11.2 states, "The transportation ROI consists of three areas: within KAFB, the major transportation corridors in Albuquerque, and the routes to and from DOE facilities and waste disposal sites." The seven incidents listed in Table 4.11-3 did not involve waste and no material was released.

The following sentence has been added to Section 4.12.2: "The transportation of waste is discussed in Section 4.11, and details of the analysis are presented in Appendix G."

Comment 7-30-34

Location of SWEIS Revision(s): Sections 4.12.3.7, 5.3.10, 5.4.10, and 5.5.10

Response: Section 4.12.3.7 summarizes waste minimization activities. Waste inventory projections for low-level waste (LLW), low-level mixed waste (LLMW), transuranic (TRU) waste, and hazardous waste are presented in Figures 4.12-1 through 4.12-4. These figures represent the best available information. Chapter 12, Volume II, of the *Environmental Information Document* (EID) (SNL/NM 1998f) details pollution-prevention and waste-minimization efforts at SNL/NM. As stated in the Trends and Requirements subsection of the EID, the base year for measuring the 33-percent reduction goal, by waste type, was 1993. The statement in Section 4.12.3.7, discussing waste minimization, has been modified to include mention of the base year for measuring progress toward the 33-percent reduction goal.

The analysis did not take credit for the waste minimization projection. The following clarification has been added to Sections 5.3.10, 5.4.10, and 5.5.10 of the SWEIS: "Waste projections used for analysis do not take credit for potential waste minimization techniques." In addition, the last sentence of the paragraph for each alternative has been clarified to explain that increased generation activities would not exceed existing waste management disposal capacities.

Section 5.4.10.1, in the subsection on Current Capacity for the Expanded Operations Alternative, states that there is sufficient capacity to accommodate the anticipated increases in radioactive wastes because only 4.2 percent of the total available capacity is being used at present. Therefore, because of the available capacity, no problems are foreseen for either the No Action or Reduced Operations Alternatives.

In addition, Section 5.4.10.2 states, “Under the Expanded Operations Alternative, the total volume of hazardous waste generated at SNL/NM, requiring offsite disposal at licensed/approved facilities, would not exceed the existing 286.5 cubic meters of storage and handling capacities at the Hazard Waste Management Facility and its associated storage buildings... . Projections provide that a maximum of 26 percent of the existing hazardous waste capacity would be used.”

Comment 7-31-34

Location of SWEIS Revision(s): Section 5.2.11

Response: The sentence in Section 5.2.11 has been corrected to state that the *analysis* of potential impacts considered physical safety, regulatory requirements, and security measures associated with storage capacity, personnel safety, and treatment capacity. SNL/NM facilities use trained personnel and approved program procedures to control waste from the point of generation through storage, treatment, and disposal. The DOE believes SNL/NM procedures reduce potential adverse impacts to human health and the environment, especially in the areas of physical safety, regulatory requirements, and security measures. These engineering controls and administrative procedures should not change as a result of any of the three alternatives. The increased generation activities would not exceed existing waste management disposal capacities.

Comment 7-32-34

Location of SWEIS Revision(s): None

Response: At present, SNL/NM is a mixed-waste generator. The DOE expects future mixed-waste generation and management to be consistent with current waste streams and management practices. The DOE and SNL/NM will not generate wastes beyond permitted capacities and will maintain compliance with the existing Site Treatment Plan.

As discussed in Appendix H, Section H.2, of Volume II, waste projections were the maximum quantities generated for any 1-year period. Individual selected facility waste projections are presented in the FSID (SNL/NM 1998ee). If additional capacity was required, the DOE would enter formal discussions with the New Mexico Environment Department.

Comment 7-33-34

Location of SWEIS Revision(s): None

Response: Section 5.4.10.2 states, “Under the Expanded Operations Alternative...projections provide that a maximum of 26 percent of the existing hazardous waste capacity would be used.” (See the response to comment 7-30-34.) Therefore, no permit modification is required because the facility is within permitted capacity.

Comment 7-34-36

Location of SWEIS Revision(s): Section 5.4.10.1

Response: The ER Project, including the Corrective Action Management Unit and the CWL, is discussed in Section 4.12.3.3. Specifically, that section states, “SNL/NM has received a permit modification from EPA Region 6 and the New Mexico Environment Department for a Corrective Action Management Unit designed to be a treatment and disposal unit exclusively for ER Project-generated hazardous waste.” The reference in Chapter 5 has been corrected from 4.12.6 to 4.12.3.3.

For a discussion of ER Project soil-related issues, see Section 4.5.3.3, subsection on Soil Contamination. For a discussion of ER Project groundwater-related issues, see Section 4.6.1.3, subsection on Groundwater Quality. ER Project waste projections are listed in Table 5.3.10–2. A reference has been added to Section 5.4.10.1, subsection on Special Projects, after “2004.” Sections 5.3.10.1 and 5.5.10.1 reflect this information.

The DOE expects to manage wastes according to the *Waste Management Programmatic Environmental Impact Statement* and the associated RODs (DOE 1997i). Section 1.8.2 discusses this Programmatic Environmental Impact Statement. Wastes not disposed of at the Corrective Action Management Unit are disposed of offsite. The most common waste

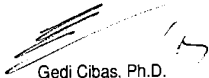
Julianne Levings
June 15, 1999
Page 6

4.12.6. There is no section 4.12.6. A full discussion of planned ER waste disposition should be presented that includes planned CAMU treatment and disposal methods.

7. **5.4.10.3 Environmental Consequences – Expanded Operations.** Sandia has committed to a 30 percent reduction of water use by 2004, but no explanation is given for how this goal will be achieved. It is stated that under the expanded alternative, SNL/NM would generate 322 M gal of wastewater. Current base-year (1997) usage is already 440 M gal. How can SNL/NM expand the facility while reducing water usage and discharge significantly below current levels? If water conservation efforts are unsuccessful, what are the estimated usage and wastewater discharge quantities? What are the impacts associated with these increased levels of water usage and wastewater discharge? Will current agreements and permits accommodate increased usage and discharge that will occur under the expanded alternative?

We appreciate the opportunity to review this document, please let us know if you have any questions on the above.

Sincerely,



Gedi Cibas, Ph.D.
Environmental Impact Review Coordinator

NMED File No. 1267ER

7-34-36,
cont.

7-35-20

shipment destinations are listed in Table 4.11–2. For example, Grassy Mountain, Utah, received 27 hazardous waste shipments in the 1997 timeframe. The transportation analysis, as presented in Section 5.3.9.3 and Section G.3 of Volume II, includes the representative case destinations for wastes, including ER Project wastes, in Table 5.3.9–7 and Table G.3–2.

Comment 7-35-20

Location of SWEIS Revision(s): Section 5.6.11.1

Response: The DOE and SNL/NM are committed to continuing the effort to reduce water use and the resulting wastewater. Under the Expanded Operations Alternative, projected water use would be between 495 million and 545 million gallons per year (see Table 5.4.2–1). The conservation goal for a 30-percent reduction is based on 1996 usage of 440 million gallons. Wastewater discharge would range from 322 million to 354 million gallons per year. Projected water use and wastewater discharge would be well within system capacities and recent quantities.

A more detailed discussion of water conservation has been added to Section 5.6.11.1, including descriptions of several large projects at MDL and the Steam Plant. For example, in 1996 work began on improving the MDL's reverse osmosis water treatment system. The MDL is currently researching a water-recycling project to further reduce water consumption by 70 to 80 percent. This project uses sophisticated sensors to monitor the quality of water before it enters the recycling loop, preventing the introduction of contaminants to the recycled water system. Another project, originally designed in 1996, would take some of the process wastewater at the MDL and pump it to be reused in an adjacent cooling tower, resulting in savings of approximately 12 million gallons per year.



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1 July 1999

Cathy Roxlau
Tetra Tech
2300 Buena Vista NE
Suite 110
Albuquerque, NM 87106

Tetra Tech NUS, Inc.

JUL 0 6 1999

RECEIVED

Dear Ms Roxlau,

This letter is in response to your request for comment on the Draft Site Wide Environmental Impact Statement for Sandia National Laboratories, New Mexico.

This office has reviewed the document and have no comments at this time. We look forward to consultation regarding effect of undertakings on eligible cultural resources as specific projects develop in the future.

Thank You

Sincerely,

Alysia L. Abbott
Staff Archaeologist
Historic Preservation Division

Response to Comments by the State of New Mexico
Office of Cultural Affairs

No comments identified.

JUN-15-1999 TUE 04:15 PM

FAX NO. 7



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*EXCLUSIVE COMMITTEE

June 15, 1999

Julianne Levings
NEPA Document Manager
US DOE Albuquerque Operations Office
P.O. Box 5400
Albuquerque, NM 87185

Via Fax Transmission Only: 505-845-6392

Dear Ms. Levings:

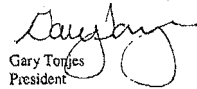
Please accept this letter in support of Sandia National Laboratories.

We have reviewed the site wide Environmental Impact Statement, and appreciate the regular newsletters and other communications about Sandia and the Department of Energy.

Albuquerque Economic Development supports the current operations of Sandia National Laboratories and desires to see an expansion of Sandia's mission.

Please feel free to incorporate this letter into your records.

Sincerely,


Gary Torres
President

9-1-6

Response to Comments by Albuquerque Economic Development, Inc.

Comment 9-1-6

Location of SWEIS Revision(s): None

Response: Comment noted.



June 15, 1999

Ms. Julianne Levings, NEPA Document Manager
U.S. Department of Energy
Albuquerque Operations Office
P.O. Box 5400
Albuquerque, NM 87185

Dear Ms. Levings:

I have reviewed the Sandia National Laboratories' Site-Wide Environmental Impact Statement (SWEIS). I have participated in various aspects of community-based environmental awareness and training with K-12 schools, TVI Community College and local residents. The information presented is a good summary for the public to understand what environmental-related operations are occurring and could potentially impact human health and the environment. It is also a resource for educators to research and learn about environmental issues in our community.

I support this SWEIS as the U.S. Department of Energy has made it readily available to the public and made great efforts to solicit community input. Having worked in the environmental field for the past seven years, it is reassuring that environmental stewardship and responsibility is ever increasing with federal facility sites.

I do have one recommendation regarding the Sandia National Laboratories SWEIS. Without knowing if it is available, is this document available in Spanish for the large Spanish-speaking population in the State? It is vital to ensure that all populations are aware of the many environmental issues related to SNL.

Should you have any questions, I can be reached at 505-224-5024 or by e-mail at csanchez@tvi.cc.nm.us.

Sincerely,

Charles M. Sanchez
Charles M. Sanchez,
Project Manager

ALBUQUERQUE • TECHNICAL • VOCATIONAL • INSTITUTE
MAIN CAMPUS • 525 BUENA VISTA SE • ALBUQUERQUE, NM 87106-4096 • PHONE 505 224-3000

Response to Comments by the Albuquerque Technical-Vocational Institute

Comment 10-1-6

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 10-2-6

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 10-3-4

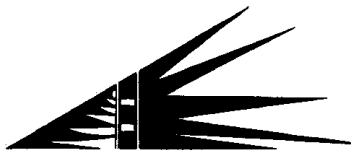
Location of SWEIS Revision(s): None

Response: The Summary of the Draft SWEIS is available in hard copy and on the Internet in Spanish. The project newsletters are also available in hard copy and on the Internet in Spanish. Public service announcements to advertise the public hearings for the Draft SWEIS were sent to four Spanish-language radio stations in Bernalillo county. A Spanish translator was available at all public meetings and the toll-free number instructions provided to the public to record any comments were available in Spanish. Due to the limited request and use of Spanish-language documents and services made available to the public during the preparation of the SWEIS, only the Summary of the Final SWEIS will be available in Spanish, both through the mail and on the Internet.

10-1-6

10-2-6

10-3-4



SOUTHWEST RESEARCH AND INFORMATION CENTER
 P.O. Box 4524 Albuquerque, NM 87106 505-262-1862 FAX: 505-262-1864

June 15, 1999

Julianne Levings, EIS Project Office
 U.S. DOE, Albuquerque Operations Office
 PO Box 5400
 Albuquerque, NM 87185-5400

VIA FAX (845-6392) AND U.S. MAIL

Dear Ms. Levings:

The following are comments by Southwest Research and Information Center (SRIC) on the draft Site-Wide Environmental Impact Statement for Sandia National Laboratories/New Mexico, DOE/EIS-0281. This comments are in addition to the scoping comments submitted on July 7, 1997, which are incorporated by reference because they have not been fully considered in the draft SWEIS, and in addition to the oral comments presented by Don Hancock at the public hearing of May 22, 1999.

SRIC is a 28-year old, private, nonprofit educational organization based in Albuquerque which has a long history of interest and involvement in the environmental impacts of the Sandia National Laboratories/Kirtland Air Force Base complex, as well as the DOE weapons complex generally.

ALTERNATIVES

Reduced Operations. The draft SWEIS added a third alternative -- Reduced Operations -- to the no action and expanded operations alternatives identified in the Notice of Intent (NOI) of May 30, 1997 (62 Federal Register 29332-29335). SRIC strongly supports the inclusion of the Reduced Operations alternative.

However, the DOE bias against this alternative is reflected in the inadequate description and analysis of this alternative in the draft SWEIS. For example, the draft SWEIS admits that for some facilities, "reduced operations" would actually be increased operations compared with the base period activities (at 3-18). The draft SWEIS is apparently based on the U.S. maintaining its nuclear weapons arsenal at START-I levels, even though over the next 10 years, START-II or START-III levels could result in real reduced operations. The final SWEIS should discuss reduced operations for specific facilities and the resulting impacts for the lower nuclear weapons arsenal levels.

11-1-6

11-2-8

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**Response to Comments by the Southwest Center for Research and Information
 Comment 11-1-6**

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 11-2-8

Location of SWEIS Revision(s): None

Response: The Stockpile Stewardship and Management Programmatic Environmental Impact Statement (DOE 1996a) established SNL/NM's programmatic roles and responsibilities for the DOE and other Federal agencies, including the primary mission of nuclear weapons stewardship and management. To accomplish the DOE's purpose and need, including conducting research and development in advanced manufacturing, electronics, and pulsed power, SNL/NM must maintain technical expertise, capabilities, and facilities. Therefore, the Reduced Operations Alternative was configured to meet DOE and interagency programs needed to maintain SNL/NM facilities and capabilities. A minimum level of support was determined for each selected facility; the assumptions used for the activities are presented in the FSID (SNL/NM 1998ee).

For example, under the Reduced Operations Alternative at NGF, the FSID states, "The operating level under the 'reduced' alternative is estimated at 2,000 neutron generators per year. Although the facility could manufacture significantly less than the projected number, mission requirements would not allow production levels to drop below the 2,000 limit." Another example from the FSID for operations of MDL states, "The throughput of 2,666 wafers is based on single-shift operation." At present, MDL operates at one-and-one-quarter shifts. A third example from the FSID for operations at Z-machine states, "The 84 shots is the expected output from a minimal crew firing the accelerator two times per week for 42 weeks and would include no nuclear material target testing."

The Reduced Operations Alternative analyzes the impacts of the lowest level of operations required to maintain the capability to carry out mission assignments.

Withdrawn land. SRIC and other commentors also specifically requested consideration of a fourth reasonable alternative -- returning all or part of the withdrawn Forest Service lands to public use, including carrying out the necessary decontaminating and decommissioning activities. While the draft SWEIS lists that scoping comment (at 1-7), there is no adequate discussion of why that alternative was not included as its own alternative or in the discussion of the Reduced Operations alternative. There is a brief mention of the U.S. Forest Service environmental analysis in 1996 that proposes to open 200 acres of DOE land and 900 acres of Air Force land to recreational use (at 6-17), but returning only 5 percent of the withdrawn land to public use is not an adequate description of or consideration of a much larger return of withdrawn land.

For example, the draft SWEIS describes the two DOE facilities in the withdrawn area -- the Aerial Cable Facility and the Lurance Canyon Burn Site. The draft SWEIS does not justify DOE's need for any of the DOE withdrawn land in the northern portion of the withdrawn area. The final SWEIS should discuss what need, if any, DOE has for that land and the impacts, if any, of returning all of that land to public use. The final SWEIS should also discuss the impacts, if any, on DOE operations of return of all of the Air Force withdrawn land south and east of the two DOE facilities in the withdrawn area to public use.

Further, given that under the Reduced Operations Alternative the Aerial Cable Facility would conduct two test activities per year and the Lurance Canyon site would conduct one test activity per year (at 3-6), the final SWEIS should discuss why those test activities could not be foregone or whether other facilities at Sandia or other federal government facilities could carry out those tests, if they are needed. Thus, the final SWEIS should consider eliminating one or both of those test facilities and also returning that land to public use.

ENVIRONMENTAL IMPACTS
SRIC appreciates the fact that in the draft SWEIS there has been some attempt to describe individual Sandia facilities (especially Chapter 2) and to try to quantify impacts on a facility-by-facility basis, including the useful summary table 3.6-1.

However, there are some gaps in summary table 3.6-1. For example, for the Microelectronics Development Laboratory and Thunder Range Complex, the expenditures are not included; such costs should be included in the final SWEIS. For the low-level and low-level mixed waste, quantities are sometimes in kilograms and sometimes in cubic feet, which is confusing for the reader and doesn't provide comparability. In the final SWEIS common units or both kilogram and cubic feet units should be used.

11-3-8

11-4-7

11-5-7

11-6-6

11-7-15

11-8-13

Comment 11-3-8

Location of SWEIS Revision(s): Section 3.5.3

Response: As discussed in Section 3.5.2, the Stockpile Stewardship and Management Programmatic Environmental Impact Statement established SNL/NM's programmatic roles and responsibilities. To accomplish the primary mission from the DOE, SNL/NM contributes its specialized capabilities to the insurance of a safe, secure, and reliable nuclear weapons stockpile. In fact, SNL/NM has developed and perfected some unique outdoor testing capabilities in the Withdrawn Area. Specifically, the Aerial Cable Facility and the Lurance Canyon Burn Site provide unique testing capabilities that are an essential complement to the other physical testing capabilities and facilities available in TA-III (Physical Testing and Simulation Facility Group) and Coyote Test Field (Outdoor Test Facility Group). Areas surrounding these two sites are necessary for safety buffer zones and the physiography is optimal to minimize the areal extent of these zones. The current location at SNL/NM provides a configuration that would be cost prohibitive and physically difficult to duplicate at another DOE site. In addition, if another DOE site could be found that was available and compatible for relocation of these testing facilities, moving the facilities would result in the temporary unavailability of these capabilities to the weapons program. Section 3.5.3 has been added to the Final SWEIS, which discusses why return of the Withdrawn Area is not considered a reasonable alternative.

Comment 11-4-7

Location of SWEIS Revision(s): None

Response: SNL/NM is only one of several users of the Withdrawn Area. Other DOE activities, not associated with SNL/NM at KAFB, such as those of the Nonproliferation and National Security Institute and the Transportation Safety Division, are conducted on USAF-permitted land in the Withdrawn Area, as well as in the northern portion of the area specifically withdrawn by the DOE. This information is provided in Section 4.3.1.3. Although large portions of land might not directly support specific facilities or programs, they are used as buffer areas surrounding testing and training grounds and facilities for the DOE and USAF. Activities conducted

here necessitate the continued use of both the USAF and DOE portions of the Withdrawn Area.

As discussed in the response to comment 11-3-8, the Aerial Cable Facility and the Lurance Canyon Burn Site are unique and necessary facilities. The DOE believes that, for the reasonably foreseeable future, the outdoor test facilities (Section 2.3.4.5) in the Withdrawn Area, along with the Nonproliferation and National Security Institute and Transportation Safety Division, are needed to meet the DOE's and SNL/NM's operational and mission goals.

Comment 11-5-7

Location of SWEIS Revision(s): None

Response: The response to comment 11-3-8 and Section 3.5.3 of the Final SWEIS discusses the unique capabilities of the Aerial Cable Facility and the Lurance Canyon Burn Site.

With regard to the two test activities per year at the Aerial Cable Facility and one test activity per year at the Lurance Canyon Burn Site, the DOE believes these tests would be the minimal level of operations needed to maintain SNL/NM facilities and equipment in an operational readiness mode. Specifically, to have the Aerial Cable Facility reduce testing activities from the base year (27 tests) to the Reduced Operations Alternative (2 tests), the DOE has assumed cessation of testing for weapon modification, or joint test assemblies, no work for Energy Programs, and no work for the Other Federal Agencies Program. The remaining work would be for direct stockpile activities to maintain current certifications. With regard to the Reduced Operations Alternative at the Lurance Canyon Burn Site, as with the Aerial Cable Facility, reduced testing assumes cessation of testing for weapon modification or joint test assemblies, no work for Energy Programs, and no work for the Other Federal Agencies Program. The remaining work would be for direct stockpile activities to maintain current certifications.

Comment 11-6-6

Location of SWEIS Revision(s): None

Response: Comment noted.

*Comment 11-7-15**Location of SWEIS Revision(s): Table 3.6–1*

Response: Not all categories presented in Table 3.6–1 apply to each facility listed. For example, not every facility uses process water. In other instances, electricity consumption was not available on a facility-by-facility basis. For completeness of analysis, the DOE gathered information on the balance of operations as discussed in Section 2.3.2. Additional information on expenditures has been added to Table 3.6–1 on the MDL and Thunder Range.

*Comment 11-8-13**Location of SWEIS Revision(s): None*

Response: The SWEIS presents wastes volumes in the units most commonly associated with the waste type. Radioactive wastes are usually reported in units of volume while hazardous wastes are reported in units of mass. A metric conversion table is provided near the front of all SWEIS volumes. Table H.3–1 lists general density conversion factors by waste type.

Water resources. Section 5.3, water resources and hydrology, has numerous inadequacies. An inconsistency is that baseline groundwater use to 2008 is said to be 575 million cubic feet (at 3-43) and 593 million cubic feet (at 6-15). Either of those estimates may be inconsistent with combined historic use of 2,475 million cubic feet for Kirtland and Sandia (at 6-21) compared with the projected use for each one separately (at B-10) and it also seems to not adequately account for the actual peaks that have occurred during the past decade (at 6-21). The discrepancies need to be explained and rectified in the final SWEIS.

Under either no action or expanded operations, there would be an increase in water use (3-43) and in "reduced operations" there would only be a 4 million cubic feet reduction. That is unacceptable. Real mitigation measures to bring about at least a 40 percent water conservation reduction should be discussed and included in the mitigation section (at 5-201).

Very importantly, the draft SWEIS assumes that the Sandia groundwater withdrawal will cause a 28 foot decline over ten years (at 5-27). However, the actual drawdown could be higher, since the models used are not described, and the nearby cone of depression north of Sandia which is not considered. Further, the New Mexico State Engineer Water Conservation Policy could limit such withdrawals since they are in excess of the 2.5 feet per year included in that policy.

The draft SWEIS understates the impact of the Sandia withdrawals by including Mesa del Sol development withdrawal which will not occur in 1998 and 1999 as projected and will likely be much lower than assumed (at 5-27). In addition, the impacts are understated by assuming San Juan/Chama water is used by Albuquerque by 2004 (at 5-26). Much more realistic estimates must be used in the final SWEIS to show the actual, much higher impacts of Sandia groundwater use.

Transportation. The draft SWEIS discussion of transportation does not provide adequate information on the assumptions. For example, "vehicular profiles" are not described (at D-104). The final SWEIS should include information regarding the number, types, and ages of vehicles. Under the Expanded Operations Alternative, a 10 percent increase in vehicles per day from 1995 was assumed (at D-105), but no explanation of why that is a reasonable assumption is included. Under the Reduced Operations Alternative, a three percent decrease in vehicles per day from 1995 was assumed (at D-106), but no explanation of why that is a reasonable assumption was included. The final SWEIS should provide the basis for those assumptions and why other numbers or a range of increase and decrease should be used.

Comment 11-9-20

Location of SWEIS Revision(s): Table 6.4-1

11-9-20

Response: Table 3.6-2 shows SNL/NM using a total of 575 million ft³ over 10 years at base-year 1996 consumption rates because Table 3.6-2 is comparing the base year to the alternatives. This is different from the information presented in Chapter 6, Table 6.4-1, which shows 59.3 million ft³ per year under the Expanded Operations Alternative, because Table 6.4-1 is comparing annual parameters for SNL/NM, DOE, and KAFB activities as a projection. It is also different than the information listed in Table 6.4-3 because that is historic, showing 2,475 million ft³ over the previous 12 years (1985-1996) as the combined withdrawal for KAFB and SNL/NM. However, the quantity for groundwater withdrawal listed in Table 6.4-1 for the Expanded Operations Alternative did not match the quantity reported in Table 3.6-2 in the Draft SWEIS. Table 6.4-1 has been corrected.

11-10-44

11-11-24

11-12-24

Comment 11-10-44

Location of SWEIS Revision(s): None

Response: The water use projections presented for the No Action Alternative (Section 5.3.2) and Expanded Operations Alternative (Section 5.4.2) are a function of increases in gross square footage and the maximum required infrastructure support for the selected facilities. These projections are bounding estimates. Actual usage is expected to be less due to ongoing water use reduction efforts. SNL/NM's announced goal (regardless of selected alternative) of a 30-percent reduction in water use is consistent with stated goals for the city of Albuquerque and KAFB. The DOE believes this is a significant reduction.

11-13-43

Comment 11-11-24

Location of SWEIS Revision(s): None

Response: The SWEIS states that a maximum 28 ft of local drawdown would result from all pumpage in the Albuquerque-Belen Basin; SNL/NM's portion of this drawdown would be approximately 3 ft (Table 5.3.4-2). The method used to calculate this drawdown is a simple linear model that compared historic use and drawdown over the 12-year period from 1985 through

1996. The cone of depression present during the historic period would be reflected in the drawdown measurements for those years and, therefore, in the resulting analysis. The method used is described in Appendix B.2 of Volume II.

The 2.5-ft drawdown limit from the draft conservation policy restricts only acquisition of additional water rights in cases where drawdown exceeds the limit. The SWEIS projects that combined KAFB and SNL/NM water use over the 1998 to 2008 period would be within current water rights.

Comment 11-12-24

Location of SWEIS Revision(s): None

Response: The analysis does not assume Mesa del Sol withdrawals in 1998 and 1999, as stated in the comment (see Table B.2–3 in Appendix B of Volume II). The announced 30-percent water conservation assumptions have been projected in the analysis for the city of Albuquerque and for KAFB (exclusive of SNL/NM). Corresponding water conservation plans for SNL/NM were not included, thus making the analysis more conservative. The San Juan/Chama project is mentioned in the SWEIS, but is not included in the analysis (Appendix B.2 of Volume II).

The DOE believes that the impacts associated with SNL/NM's groundwater use are the continuing drawdown that is caused by this use (in combination with other water users in the Albuquerque-Belen Basin) and the potential effects of this drawdown on water supply wells, springs, or land as described in Section 5.3.4.2. If the analysis overestimates Mesa del Sol withdrawal, as suggested by the comment, these impacts would be less than predicted in the SWEIS because drawdown would be less, although SNL/NM's percentage of local groundwater withdrawal would be greater.

Comment 11-13-43

Location of SWEIS Revision(s): Section 4.9.1.3, Volume II, Section D.1.4

Response: A description of the Mobile5a inputs is provided in *Sandia National Laboratories, 1996, Estimation of Carbon Monoxide Emissions Due to SNL Commuter and On-Base Traffic for Conformity Determination*

(SNL 1996c). A footnote to Table D.1–30 of Appendix D in Volume II provides this reference.

The numbers of vehicles are listed in Table D.1–30 of Volume II for the 1996 baseline and the three alternatives. Baseline vehicle information from this table has been added to Section 4.9.13. Although not reproduced in the Draft SWEIS, 22 other input parameters (including vehicle types and ages) are discussed in Appendix A to the Sandia report (SNL 1996c), including the input and output files. A summary of these input parameters has been added to Volume II, Section D.1.4.

The 10-percent increase in commuter traffic is a result of the 10-percent increase in the number of employees discussed in Section 5.4.12 (see Table 5.4.12–1). This increase is a result of the increase in SNL/NM employees (direct technical full-time equivalents) associated with the selected facilities (see Table 3.6–1, Personnel). A calculation using these personnel projections was used to estimate nontechnical support staff increases based on a simple ratio. The result was a 10-percent increase in personnel, SNL/NM-wide, under the Expanded Operations Alternative. Sections 5.3.9.2, 5.4.9.2, and 5.5.9.2 all explain that the number of SNL/NM commuter vehicles is assumed to increase (or decrease) at the same rate as the SNL/NM work force level. Additional information on vehicle profiles and on commuter traffic projections for each of the three alternatives has been added to Volume II, Section D.1.4.

The projected decrease in total carbon monoxide releases in tons per year under all alternatives is totally based on "improvements in vehicle fleet emissions" (at D-104). The bases of that assumption about such improvements must be described and justified in the final SWEIS. In addition, the final SWEIS should discuss a much larger decrease in impacts if Sandia would implement, as it should, an aggressive alternative transportation strategy of carpooling, buses, biking. Such a program would improve commuting to and from Sandia, would reduce increasing traffic and air emissions problems in Albuquerque and in the vicinity of Sandia. Such a program should be implemented for its own merits, but should also be an expanded Sandia mission to provide for scientific, economic, and social benefits to the Albuquerque area and provide technology development and practical alternatives that could be used in other places as growth, sprawl, and transportation problems are increasing in many parts of the U.S. and in other countries.

Moreover, increasing air pollution problems in Albuquerque make voluntary or mandatory reductions in air emissions from transportation likely. Thus, the final SWEIS should also discuss such measures as mitigation measures that could be implemented. The draft SWEIS discussion of mitigation measures for air quality and transportation (at 5-202 and 5-203) is grossly inadequate as it does not recognize the Albuquerque area-wide importance of these issues and the need for Sandia to provide and promote such mitigation measures.

Radioactive material inventory. In the Appendix A discussion of radioactive material inventory, there is a mention of "recent major reductions in overall radioactive material stored onsite" (at A-16). The final SWEIS should fully describe such reductions, including the amounts, disposition of the materials and their destinations. The final SWEIS should also discuss the locations and storage capacity of current "excess storage capacity" (at A-16).

Environmental justice. The discussion of environmental justice issues in Chapter 5 is inadequate. For example, the cultural, religious, and environmental impacts on Isleta Pueblo are not fully described. The impacts on low-income and minority neighborhoods from Sandia transportation of hazardous and radioactive materials through those neighborhoods and groundwater discharge and contamination are not adequately discussed. For example, City of Albuquerque treatment of Sandia sewage in low-income South Valley areas is not discussed. There is no discussion of economic inequalities in the Albuquerque area and Sandia's role in creating and perpetuating such inequalities. The final SWEIS must fully address all of those issues and include mitigation measures which are totally lacking in the draft SWEIS (at 5-204).

Comment 11-14-27

11-14-27

Location of SWEIS Revision(s): Volume II, Section D.1.4

Response: The basis of the assumption for a decrease in total carbon monoxide releases, based on "improvements" in vehicle fleet emissions, is discussed in *Estimation of Carbon Monoxide Emissions Due to SNL Commuter and On-Base Traffic for Conformity Determination* (SNL 1996c). Briefly, this document was produced in response to the Albuquerque/ Bernalillo County Air Quality Board's enactment of the General Conformity Regulation in November 1994. As a result, SNL/NM evaluated all carbon monoxide emissions from onsite activities and included all mobile source carbon monoxide emissions from SNL/NM commuter and on-base vehicles. The report uses city of Albuquerque projections of improved vehicle emissions based on newer, cleaner burning automobiles replacing older vehicles and on more stringent vehicle inspections. Text has been added to Volume II, Section D.1.4, to clarify this assumption.

11-15-43

11-16-27

11-17-34

Comment 11-15-43

Location of SWEIS Revision(s): Section 5.6.8

Response: At this time, SNL/NM has a voluntary program for traffic minimization. The city of Albuquerque provides bus routes that nearly span the city boundaries. Several bus routes include KAFB to provide access to SNL/NM. However, the most significant efforts in car-pooling are exercised by individuals who live in outlying crosstown areas or in Belen or Los Lunas. The SNL/NM van or car pool coordinator provides assistance to potential participants. Both the DOE and SNL/NM allow employees to work on a 9-day work schedule (rather than 10 days) over 2 weeks, thus reducing SNL/NM and DOE commuter traffic as much as 10 percent.

11-18-32

SNL/NM actively promotes alternative transportation for employees to commute to work. Current alternatives include walking, bicycling, riding in a van pool, riding in a car pool, and riding the city bus. SNL/NM encourages its employees to reduce the number of cars coming to the base to provide improved air quality, less traffic congestion, reduced travel time, and fewer parking problems. SNL/NM workforce bicyclists commuted approximately 345,000 mi during the Winter Pollution Advisory Periods the last 3 years, avoiding the production of about 15,600 lb of carbon

monoxide pollution. Employees have used 844-RIDE to learn more about van pools, car pools, and city bus service, or to obtain a city bike path map.

The Sandia National Laboratories Institutional Plan (SNL 1997b) briefly describes energy resource research and development, as noted in Section 2.1.2. In 1997, SNL/NM undertook 218 research and development projects using DOE-focused technologies and unique SNL/NM science and engineering capabilities. Nearly 16 percent of the projects had applications that were energy resources-related. For example Sandia's Combustion Research Facility collaborates with industry on its combustion projects and concentrates on reducing noxious emissions and developing improved technologies for internal combustion engines. In addition, SNL/NM has a cooperative research and development agreement with the United States Advanced Battery Consortium for development of electric vehicle battery technologies. Sandia scientists and engineers are also developing new materials fuel processing catalysts and improved manufacturing processing for batteries, fuel cells, and supercapacitors.

Notwithstanding SNL/NM's primary mission, several events caused the DOE to request that SNL/NM apply its knowledge and expertise to support its other mission lines. SNL/NM accomplished this task by expanding its research, developed primarily as an offshoot of weapons research, into a number of environmental and energy fields. Areas where SNL/NM has been active include waste management, environmental restoration, energy efficiency, renewable energy, magnetic fusion, and nuclear, fossil, and solar energy. SNL/NM's efforts to reduce noxious emissions include the onsite use of battery-powered carts and low-emission (particularly compressed natural gas) vehicles.

Text has been added to Section 5.6.8 describing SNL/NM's initiatives for improving air quality.

Comment 11-16-27

Location of SWEIS Revision(s): None

Response: The analysis presented in the SWEIS accounts for the importance of air quality in the city of Albuquerque, particularly because Albuquerque is listed as a maintenance area for carbon monoxide. Based on the air impact analysis for criteria pollutants presented in the SWEIS, which showed a

projected decrease in vehicular air emissions from SNL/NM, the DOE has not devised additional mitigation measures for reducing vehicular emissions any further. However, the DOE and SNL/NM are committed to ongoing activities as discussed in the response to comment 11-15-43.

Comment 11-17-34

Location of SWEIS Revision(s): Volume II, Section A.3.2.1

Response: SNL/NM has significantly reduced radioactive and chemical inventories. Since 1995, SNL/NM has reduced source nuclear material holdings by 22.4 metric tons, nearly 39 percent of the former inventory. Surplus source nuclear material holdings were reduced by 79 percent. Further, SNL/NM has reduced its inventory of surplus other nuclear material by 40 percent. Planning for these reductions began in 1993 with an extensive inventory assessment. Disposition options were identified, including returning materials to vendors, better inventory and purchasing controls, and disposal of unneeded materials at the Nevada Test Site. SNL/NM has plans for additional inventory reduction activities through 2002. A detailed discussion is provided in Chapter 11 of Volume II of the EID (SNL/NM 1998f). That chapter also includes material storage facility information. Text has been added to Volume II, Section A.3.2.1, providing further information on radioactive material inventories.

Comment 11-18-32

Location of SWEIS Revision(s): None

Response: As discussed in Section 5.3.6.4 and identified in Section 5.3.12, a Traditional Cultural Property (TCP) study has been conducted. Fifteen Native American tribes have been contacted to determine the presence of TCPs in the ROI. Consultations will continue with some of the tribes, including the Pueblo of Isleta. At this time, no specific TCPs have been identified and no TCPs are known to exist in the ROI.

With regard to cultural, religious, and environmental impacts to low-income and minority neighborhoods (including the Pueblo of Isleta), the DOE believes the analyses are accurate. For each resource area, the SNL/NM SWEIS analyzed whether an environmental justice impact was

occurring. The environmental justice analysis is in accordance with Executive Order 12898 and is consistent with the *Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses* (EPA 1998d). For an additional discussion on environmental justice methodology, see response to comment 14-2-32.

With regard to transportation and groundwater contamination impacts to low-income and minority neighborhoods, the analysis, as reported in Section 5.3.13, found no disproportionately high and adverse impacts to these groups. SNL/NM does not discharge to groundwater.

As shown in Section 6.4.2 in the Summary of Infrastructure Cumulative Impacts, the projected amount of wastewater to the sanitary sewer system at KAFB (including SNL/NM) would represent 3 percent of the expected wastewater processed in the south valley by the city of Albuquerque. If water conservation goals are met, this estimate of water discharge should decline. The DOE also believes the city of Albuquerque is committed to developing and managing the use of public services and facilities in an efficient and equitable manner, as stated in the Albuquerque/Bernalillo County Comprehensive Plan (COA 1988).

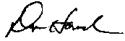
See the response to comment 14-4-32 on the methodology used in the analysis.

The DOE also believes that SNL/NM provides a positive stabilizing force in the demographic characteristics and economic base of the ROI, as presented in Sections 4.14, 5.3.12, 5.4.12, and 5.5.12. The recent past, current, and projected strong growth in the ROI is a result of other industrial and economic sectors. Further, the DOE and SNL/NM have active minority employee recruitment and community outreach programs, based on improving the quality of the workforce and quality of life for citizens.

The DOE believes, based on the potential impacts described in the SWEIS, that no mitigation measures would be required. If access to TCPs became a concern, the DOE would consult with the tribe to develop an agreement and procedure for access to specific sites.

Utilities. In light of announced DOE/USAF plans to obtain electricity within the next several months from a provider other than Public Service Company of New Mexico, the final SWEIS should include a discussion of the impacts of such a change either in the near-term or in the 2001-2002 timeframe established by New Mexico state law.

Thank you for your full consideration of these comments.



Don Hancock, Director
Nuclear Waste Safety Program



Wm. Paul Robinson
Research Director

11-19-18

Comment 11-19-18

Location of SWEIS Revision(s): Sections 6.4.2, 7.3.2, and Chapter 8

Response: Additional information describing utility deregulation has been added to Sections 6.4.2 and 7.3.2 and to Chapter 8. Briefly, the *Electric Utility Restructuring Act* of 1999 increases competition in electric generation markets, potentially decreases consumer costs, and possibly creates a loss of jobs at Public Service Company of New Mexico (the current local supplier of electricity) and new jobs at competing suppliers. The DOE does not anticipate electricity generators moving or changing the current electricity supply grid.

Please note that the following comments are scoping comments prepared prior to the release of the Draft SWEIS. They have been included here at the request of the Southwest Research and Information Center. The DOE considered these comments in preparing the Draft SWEIS; some have been addressed in the Draft SWEIS and others are comments on how the Draft SWEIS should be prepared and, therefore, are not applicable.



July 7, 1997

Ms. Donna A. Bergman
U.S. Department of Energy
Albuquerque Operations Office
PO Box 5490
Albuquerque, NM 87185-5444

RE: SANDIA SWEIS SCOPING

Dear Ms. Bergman:

The following are comments by Southwest Research and Information Center (SRIC) regarding the scope and alternatives that should be considered in the Sandia Site-wide Environmental Impact Statement (SWEIS). SRIC is also commenting on the schedule and procedures, including public involvement and work plan, that should be followed. SRIC is a 26-year-old private, nonprofit educational organization based in Albuquerque which has had a long history of interest and involvement in the environmental impacts of the Sandia National Laboratories/Kirtland Air Force Base complex and of the DOE nuclear weapons complex.

As you are aware, Don Hancock of SRIC attended the scoping open house on June 23 and discussed various aspects of the SWEIS with you and other DOE and Sandia officials.

SWEIS Scope

The SWEIS must be a comprehensive EIS that covers all existing Sandia facilities and activities, as well as proposed and planned new facilities and activities at least through the year 2006 (for which time DOE has specific plans for weapons development, waste management, and environmental restoration activities). The EIS must document all environmental impacts as well as cumulative impacts of Sandia, KAFB, and associated facilities using federal government lands, including Forest Service lands, in the SNL/KAFB complex area.

SRIC is particularly concerned about the apparent intent to "lump together" the environmental impacts of all KAFB and DOE-funded operations (62 Federal Register 29333) rather than to look at their cumulative impacts and the impacts of particular major facilities

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12-1-7

12-2-38

Comment 12-1-7

Location of SWEIS Revision(s): None

Response: The DOE agrees the SWEIS should be comprehensive and has evaluated SNL/NM environmental impacts for the period from 1998 to 2008. In evaluating SNL/NM operations, the DOE considered SNL/NM support for DOE's National Security, Energy Resources, Environmental Quality, and Science and Technology mission lines, as described in Sections 2.1.1 through 2.1.4. This evaluation included waste generation projections and ER Project planned activities.

The details on waste generation (including ER Project wastes) are discussed primarily in Sections 2.3.5.7, 4.12, 5.3.10, 5.4.10, and 5.5.10, while ER activities are discussed primarily in Sections 2.3.5.8, 4.5.3.3, 4.6.1.3, and 5.3.3.1. Table 3.1-1 summarizes SNL/NM facility activity levels used as the basis of alternatives analysis, including waste generation projections. SNL/NM facility activity level details are presented in the SNL/NM FSID (SNL/NM 1998ee). Cumulative impacts of SNL/NM, KAFB, other DOE-funded operations on KAFB (as identified in the Notice of Intent, 62 FR 29334), and other activities in the ROI, including the city of Albuquerque, are presented in Chapter 6.

Comment 12-2-38

Location of SWEIS Revision(s): None

Response: As stated in Section 1.4, the DOE has examined the environmental impacts of three levels of operation (alternatives) at SNL/NM. Further, the DOE has provided an understanding of SNL/NM's contribution to cumulative environmental impacts in context with USAF activities at KAFB (Sections 6.2.8 and 6.4), other DOE-funded operations on KAFB (Sections 6.2.1 through 6.2.7), and other activities in the Albuquerque area (Section 6.3). Seven additional facilities, the DOE Albuquerque Operations Office, Energy Training Complex, Transportation Safeguards Division, Nonproliferation and National Security Institute, Ross Aviation, Inc., Lovelace Respiratory Research Institute, and Federal Manufacturing & Technology/New Mexico (AlliedSignal), comprise the other DOE-funded operations on KAFB.

To examine the environmental impacts of the three alternatives, the DOE used a framework for impact analysis based on facilities, rather than programs. As discussed in Section 2.3, the DOE's assessment started with approximately 670 buildings, 5 TAs, and the structures in the Coyote Test Field facilities, which are listed in the FSID (SNL/NM 1998ee). By assessing and refining the list, the DOE identified the facilities with the highest potential for environmental impacts or concerns and then grouped them according to function and location. Table 2.3–1 identifies the 10 facilities or facility groups selected for in-depth analysis. For completeness of analysis, the DOE also gathered information on the balance of operations at SNL/NM.

which have disproportionate environmental effects. SRIC believes that the SWEIS must include both kinds of analysis because decisionmakers and the public must be aware not only of the cumulative impacts of all the operations but also aware of the particular facilities and activities that create specific impacts so as to be able to discuss mitigation measures and alternatives for specific facilities and activities.

SRIC is also concerned about the fact that neither the Notice of Intent (NOI), nor the fact sheet available at the scoping meetings, explicitly mention the following issues:

- * full consideration of Native American cultural and religious sites;
- * Full consideration of impacts of SNL/KAFB on the Pueblo of Isleta;
- * Full consideration of impacts of SNL/KAFB on Albuquerque and Bernalillo County, including its compliance with environmental laws, including the Clean Air Act and Clean Water Act, and the impacts of SNL/KAFB in relation to Albuquerque and Bernalillo County policies regarding water conservation, growth management, and transportation planning.
- * full consideration of the use of and impacts of Forest Service lands, including the alternative of returning those lands to unrestricted, public use.

SRIC also believes the SWEIS cannot depend upon the analysis done in the Stockpile Stewardship and Management PEIS and the Waste Management PEIS as they relate to Sandia. Both documents use old data and questionable modeling procedures and cannot be considered to be adequate or reliable for the purposes of the SWEIS.

The NOI mentions the possibility of a classified appendix (62 Federal Register 29335). SRIC does not believe that there is a basis for such an appendix and strongly urges that DOE fulfill its pledge to "provide to the public as much information as possible."

Alternatives

In addition to the No Action and Expanded Operations alternatives, at least two other alternatives must be included. First, the SWEIS must analyze the alternative of returning all or part of the withdrawn Forest Service lands to public use, including carrying out necessary decontamination and decommissioning activities. This is a reasonable alternative and one that has been requested by numerous citizens, especially in the East Mountain area, for years.

Second, a Reduced Operations alternative must be included; SRIC rejects and strongly objects to the description in the NOI (62 Federal Register 29334) that this alternative will be included as

12-2-38,
cont.

12-3-30

12-4-39

12-5-8

12-6-14

12-7-1

12-8-8

12-9-8

Comment 12-3-30

Location of SWEIS Revision(s): None

Response: The DOE considered Native American cultural and religious sites in its analyses. The DOE consulted with 15 Native American governments, including the Pueblo of Isleta, and with the New Mexico State Historic Preservation Officer (Section 5.2.6).

Comment 12-4-39

Location of SWEIS Revision(s): None

Response: The DOE considered environmental impacts of SNL/NM on the Pueblo of Isleta as appropriate through the evaluation of resource-specific regions of influence. The methodologies for these resource areas are presented in Sections 5.2.1 through 5.2.14. Cultural Resources impacts are presented by alternative in Sections 5.3.6, 5.4.6, and 5.5.6.

The DOE considered environmental impacts of SNL/NM on Albuquerque and Bernalillo county by resource area, as discussed in Section 6.4. The DOE has examined SNL/NM's compliance with laws such as the *Clean Air Act* (see Table 6.4-4), including an air conformity analysis described in Section 5.3.7.1, water conservation (Section 6.4.4), growth (Section 6.4.12), and transportation (Section 6.4.9). For a discussion of SNL/NM's ongoing efforts to reduce traffic, see the response to comment 11-15-43.

Comment 12-5-8

Location of SWEIS Revision(s): Section 3.5.3

Response: The DOE has considered the use of, and impacts to, the Withdrawn Area. For a discussion on unique and necessary capabilities of the Outdoor Test Facilities and the Withdrawn Area, see the response to comment 11-3-8. A new section (Section 3.5.3) has been added to the text of the SWEIS, explaining why returning the Withdrawn Area is not a feasible alternative.

*Comment 12-6-14**Location of SWEIS Revision(s): None*

Response: The SWEIS did not rely on the Stockpile Stewardship and Management Programmatic Environmental Impact Statement (DOE 1996a) data. The SWEIS used the latest data available, much of which are contained in the EID and FSID (SNL/NM 1998f, 1998ee). The SWEIS does rely on the Stockpile Stewardship and Management Programmatic Environmental Impact Statement and ROD for information related to the mission statement and needs of this program as it applies to SNL/NM. Similarly, the SWEIS used the Waste Management Programmatic Environmental Impact Statement (DOE 1997i) RODs to plan the management of SNL/NM's wastes, but contains the best available waste generation projections and updated legacy waste storage data from a variety of sources.

*Comment 12-7-1**Location of SWEIS Revision(s): None*

Response: The DOE agrees that the SWEIS should not have a classified appendix. See also the response to comment 2-3-1.

*Comment 12-8-8**Location of SWEIS Revision(s): Section 3.5.3*

Response: Section 3.5 discusses alternatives that were considered but eliminated from detailed analysis in the SWEIS, including a shutdown of SNL/NM and expansion of nonweapons environmental and renewable energy research. For a discussion on unique and necessary capabilities of the Outdoor Test Facilities and the Withdrawn Area and the reason this alternative was not considered, see the response to comment 11-3-8 and Section 3.5.3 in the Final SWEIS.

Comment 12-9-8

Location of SWEIS Revision(s): None

Response: The DOE received several comments during public scoping requesting inclusion of a Reduced Operations Alternative and, as a result, added the Reduced Operations Alternative to the SWEIS. Under the Reduced Operations Alternative, DOE and interagency programs and activities at SNL/NM would be reduced to the minimum level of operations needed to maintain SNL/NM facilities and capabilities. Section 3.4 describes activities that would occur at specific facilities as a result of implementing the Reduced Operations Alternative. Section 5.5 describes the impacts that would result from this alternative.

an alternative considered but eliminated from further analysis. There is no basis for the NOI statement that "current activities...are at the minimum level of operations needed to protect the technical capability and competency to support the site's assigned missions." Over the years DOE has considered reducing the level of operations at various facilities at Sandia below existing operations, so such an alternative cannot be rejected. In addition, the Reduced Operations alternative must be included for at least two reasons. 1) It is certainly a reasonable alternative that during the next approximately ten years various options to reduce the DOE weapons lab generally and/or Sandia specifically will be proposed. The Clinton Administration position to support START III, which could result in many fewer nuclear weapons and a much scaled by nuclear weapons complex, is ample reason to consider reduced operations at Sandia as a reasonable alternative. 2) To provide proper comparative analysis, a Reduced Operations alternative must be included. For example, in order to adequately analyze existing environmental impacts and ways of reducing or mitigating these impacts, some analysis is necessary of which facility or activity changes could bring about reduced environmental effects.

Implementation Plan/Work Plan

Based on conversation with you at the scoping meeting, SRIC understands that since an Implementation Plan is no longer required by DOE regulations, one will not be done for the SWEIS. SRIC strongly urges that the Work Plan or some other similar document be made available for public comment by the fall of 1997 that would provide at least the following information:

- * schedule for issuance of the draft SWEIS and final SWEIS
- * the specific alternatives that will be included in the draft SWEIS and a detailed explanation of why alternatives in addition to the two mentioned NOI will not be fully analyzed, if that remains DOE's position
- * a description of what facilities and activities will be included and which such activities, if any, will not be included in the analysis.
- * a description of which contractor(s) will be preparing the SWEIS.
- * a description of the roles that other federal agencies will play, including the Air Force as a cooperating agency, and the Forest Service.
- * a description of what projects, if any, for which DOE intends to prepare other NEPA documents during the preparation of the SWEIS.

It is extremely important that DOE actively cooperate with and involve the Pueblo of Isleta in the preparation of the draft SWEIS.

3

Comment 12-10-1

Location of SWEIS Revision(s): None

Response: Although the DOE did not prepare an implementation plan or work plan, it developed a series of newsletters, gave several presentations to concerned citizen groups (for example the Citizen Advisory Board), and maintained an internet web site to stimulate public involvement. The DOE offered to make presentations to 40 groups, of which 17 agreed. The newsletters included the ways to obtain additional information, the schedule for issuance of the draft and Final SWEIS, specific alternatives, and the analysis framework (facility-based). The USAF's role as a cooperating agency was announced in the *Federal Register* and is described in Section 1.9. Other Federal government entities, such as the EPA, the USFS, and the U.S. Fish and Wildlife Service, were contacted to provide comments on the Draft SWEIS. DOE press releases were used to inform the public and included the August 1997 announcement of the DOE's selection of contractors to prepare the SWEIS (Chapter 10 lists the SWEIS preparers and organizations). Finally, Section 1.8 describes SWEIS-related NEPA documents, including the recent *Neutron Generator/Switch Tube Prototyping Relocation Environmental Assessment* (DOE 1994a).

Comment 12-11-4

Location of SWEIS Revision(s): None

Response: The DOE agrees that much information related to Isleta is available only through the tribe and has made appropriate requests for the information. Specifically, Volume II, Appendix C, discusses information about cultural and religious sites.

The DOE has consulted with the Pueblo of Isleta, including holding informational meetings with the Governor and his representatives. There have been several site visits to SNL/NM and KAFB by Pueblo elders, which allowed the elders to view SNL/NM facilities and areas of operations. The DOE has actively encouraged formal comments and has established lines of communication with the Pueblo of Isleta that will continue beyond the publication of the Final SWEIS and the ROD.

12-9-8,
cont.

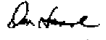
12-10-1

12-11-4

Much information related to Isleta land and water and environmental impacts of existing operations is available only from the tribe, as is information about cultural and religious sites within the bounds of the SNL/KAEB area. DOE should also provide mechanisms, including computer access, for the public to obtain basic environmental data being used for the SWEIS.

Thank you for your consideration.

Sincerely,


Don Hancock, Director
Nuclear Waste Safety Program


Wm. Paul Robinson
Research Director

| 12-11-4,
| cont.

| 12-12-4

Comment 12-12-4

Location of SWEIS Revision(s): None

Response: Data used in the SWEIS analyses have been made available through the Public Reading Rooms. These data sources include the EID, FSID, and the Geographic Information System Atlas (SNL/NM 1998f, 1998ee, 1997j). The April 1999 Newsletter, of which the DOE distributed more than 2,300 copies, described where to obtain more information about the SWEIS, including the SWEIS web site.

Based on personal exchanges (by phone and in person during the Public Hearings) with Jim Bartosch of TINUS, commenter wishes to remain anonymous. The commenter wanted a formal response.

This reviewer would like to see aircraft accidents analysis include fuel load and cargo. As an example, a fully loaded C-5 carries approximately 330,000 pounds of fuel and 260,000 pounds of cargo. The cumulative effect does not appear in the document. Also consider the C-5 cargo plane carries military hardware and hazardous materials, which could include (a worst case) scenario explosives and radioactive materials.

Currently the analysis includes only consequences associated with the material inventory in the impacted Sandia facility. The analysis does not include the cumulative effect of the cargo. Hazardous materials are routinely shipped by air, what is the impact of this? Since ACRR would supply up to 100% of the country's supply of medical isotopes, at least one flight a week would carry that material by air the analysis should reflect the potential impacts during a crash. It is likely that radioactive materials are routinely present in air cargo (military as well as commercial considering the number of hospitals here) at the Sunport. In addition, the analysis does not consider a crash off base into the local community associated with a Ross Aviation flight or a flight associated Sandia or DOE materials.

Table F.5-2 lists general aircraft type, this reviewer is concerned that the fuel loads and cargo loads are not considered in the analysis as it relates to the consequences. In other words, some types of flights could have significantly higher consequences that could require restricted air operations. A possible conclusion could be certain types of flights (combination of type of plane and cargo) could be restricted from flying over certain Sandia facilities.

This reviewer would like to see a graphic (map) depicting the information presented in Table F.5-2. This reviewer could not visualize which runways were which.

Expand table F.5-2 to give specific information on the types on aircraft within each general type (as an example Large Military includes C-130, C-141, C-5, C-17, etc.). Please include fuel load and cargo capacity to better understand the potential risks. This reviewer is concerned that less frequent flights with higher consequence are not adequately described in this document. 10 times the energy could be associated with the aircraft and an underestimation of the spread of hazardous material is occurring. A result of your analysis could be changes in the management of hazardous material at Sandia (examples- reducing operational inventories or moving storage of materials to other Sandia facilities) or flight operations in and out of the Sunport.

The current transportation analysis does not appear to adequately address impacts resulting from air transport. Currently the transportation of hazardous materials is dominated by truck transport. A better description of why is necessary since medical isotopes (as an example) would be shipped by air rather than truck. Moreover, the analysis should be done to determine whether other hazardous materials are shipped by air and the information should be presented. Cumulative analysis should include all hazardous material traffic through the airport just like truck transport analysis currently presents.

What does not appear to be included is flights carrying materials to and from Sandia which could lead to offsite accidents. What are the consequences of these flights crashing into populated areas of the local community? The current analysis assumes that the crash of a plane into a Sandia facility would bound impacts to the public vs. an aircraft crash carrying Sandia or DOE cargo crashing into an Albuquerque community.

The reviewer would like the focus of the responses to be how to get information into the document versus how not to get information in. The reviewer believes the information is available and any additional analysis could be presented especially if the information exists in a reference.

Response to Anonymous Comments

Comment 13-1-37

Location of SWEIS Revision(s): None

Response: It is not necessary for the aircraft accident analysis to include the impact of aircraft fuel or cargo loading, because the accident analysis assumed that the impact of any aircraft, regardless of fuel load or cargo, would create worst-case conditions that would affect all of a building's hazardous material at risk.

The annual frequency (or probability) of any type of aircraft crash into an SNL/NM facility is listed in Table F.5-5 and additional details are listed in Tables F.5-6 through F.5-13 of Volume II. Many of the aircraft listed in the tables do not carry hazardous materials. If a specific aircraft type like the C-5 were analyzed, the frequency would be much smaller than it would for the group (for example, large military), which is already smaller than required for analysis under DOE guidelines. Such accidents are considered implausible (less than 1 in 10,000,000 chance per year) and were not considered in the SWEIS analysis.

Comment 13-2-37

Location of SWEIS Revision(s): None

Response: See the response to comment 13-1-37.

The accident impact resulting from a shipment of medical isotopes by air is discussed in the MIPP EIS (DOE 1996b). This accident would not be the bounding case for the SWEIS.

An accident impact of shipping radioactive materials resulting from shipments into the Albuquerque International Sunport for non-SNL/NM facilities is beyond the scope of this SWEIS.

The consequences of a Ross Aviation aircraft crash with DOE cargo are bounded by the aircraft crash analyses in the SWEIS.

In addition, the analysis is conservative in assuming that most or all of a building's hazardous inventory would be released in the event of an aircraft impact. In reality, only a portion of the hazardous inventory would be released. Although a specific aircraft's hazardous inventory would add to the

13-1-37

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13-7-37

amounts released, the frequency (or probability) of a specific aircraft carrying hazardous materials and crashing on the site would be smaller than required for analysis under DOE guidelines. Additional details on medical isotope shipments can be found in the MIPP EIS (DOE 1996b). Although a crash of a non-DOE or non-SNL/NM aircraft into a local community is not in the scope of the SWEIS, aircraft carrying DOE or SNL/NM cargo are in the scope. Because of the low number of takeoffs and landings of aircraft carrying cargo for DOE or SNL/NM, the frequency of a crash in a local community is smaller than that required for analysis under DOE guidelines.

Comment 13-3-37

Location of SWEIS Revision(s): None

Response: See the response to comment 13-1-37.

Comment 13-4-13

Location of SWEIS Revision(s): Volume II, Section F.5

Response: A map has been added to Section F.5 of Volume II.

Comment 13-5-37

Location of SWEIS Revision(s): None

Response: The DOE believes it isn't necessary to expand Table F.5-2 to include specific aircraft types within each category. These aircraft types are covered in the military aircraft categories. See the response to comment 13-1-37 for further details.

Comment 13-6-43

Location of SWEIS Revision(s): Volume II, Section G.8

Response: Additional information on air transport has been added to Section G.8 in Volume II. Section G.8 presents information on the quantities of all cargo landed at the Albuquerque International Sunport. It also presents information on hazardous materials shipped throughout the

United States and estimates of the small quantities associated with the Sunport.

Comment 13-7-37

Location of SWEIS Revision(s): None

Response: The aircraft accident analysis estimated only the probability of an aircraft crash into an SNL/NM facility. The analysis of such a crash assumed impacts to all of a building's hazardous material at risk. Determining the probability of a commercial aircraft taking off or landing at the Sunport crashing into the Albuquerque community is not within the scope of this SWEIS. The probability of a crash of an aircraft with SNL/NM or DOE cargo is small—less than 10^{-6} per year (or 1 in a million)—and the SWEIS has not analyzed it further for consequences to the public.

In addition, the probability of an airplane crashing before landing or after takeoff is considerably smaller than during takeoff or landing. The probability of a specific type of airplane carrying hazardous DOE or SNL/NM cargo crashing into an Albuquerque community is smaller than required for analysis under DOE guidelines.

Ron Faich, Ph.D.
9400 SNOWHEIGHTS NE
ALBUQUERQUE, NM 87112
(505) 296-0015

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June 15, 1999

Ms. Julianne Levings
Albuquerque Operations Office, EIS PO
U.S. Department of Energy
P.O. Box 5400
Albuquerque, NM 87185-9901

Re: Comments on the Draft Sandia National Laboratory/NM Site-Wide Environmental Impact Statement

Dear Ms. Levings:

I am writing to reiterate in a more formal manner the verbal comments I made at the public meetings on May 19, and May 22, 1999, in regards to the Draft Sandia National Laboratory/NM Site-Wide Environmental Impact Statement (SNL/NM SWEIS).

By way of background, I am the person who authored the initial drafts of the Socioeconomics and Environmental Justice sections of the Pantex SWEIS and the Los Alamos National Laboratory SWEIS. In addition, while briefly under contract with SNL/NM, I authored the initial draft of most of Chapter 9, Socioeconomics and Community Services, of SNL/NM's Environmental Information Document (EID). I am writing now as a private citizen since I am currently neither under contract with nor employed by any DOE contractor. Clearly, however, my comments on the Draft SNL/NM SWEIS are rooted in my experiences with these earlier documents. I am also writing, by the way, as a stakeholder who resides approximately 5 miles due north of SNL/NM's Technical Areas I, II and IV.

Socioeconomics

Defining the SNL/NM socioeconomic Region of Influence (ROI) as Bernalillo, Sandoval, Torrance and Valencia Counties overstates, in my view, the socioeconomic impact of SNL/NM in central New Mexico. For example, the northwestern portion of Sandoval County includes the eastern extent of Navajo Indian trust lands and the southernmost part of the Jicarilla Apache Indian Reservation. The socioeconomic of this area are not impacted in the least by SNL/NM's operations, as would also be the case for most of Torrance County more than a few miles south of the I-40 corridor. On the other hand, by not including the southernmost part of Santa Fe County along I-40 in the ROI, the SWEIS excludes from consideration the burgeoning community of Edgewood, which certainly is home to many SNL/NM employees. Figure 4.14-4 in the Draft reveals that less than 1% of employed persons in Sandoval County and less than 1.4% of employed persons in Valencia County are employees of SNL/NM. In both the Pantex and LANL SWEIS', a larger proportion of a county's total employment was required for that county's inclusion in the respective socioeconomic ROI, for that county to be considered significantly impacted socioeconomically by the respective DOE facility. I would urge that the SNL/NM socioeconomic ROI be redefined in terms of subcounty areas so that a more accurate geographic

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Response to Comments by Ron Faich

Comment 14-1-31

Location of SWEIS Revision(s): None

Response: The current four-county ROI is a reasonable basis for assessing SNL/NM-related socioeconomic impacts. As stated in Sections 4.14.2 and 5.2.12, 97.5 percent of the SNL/NM employees reside in the four-county ROI. The analysis in Chapter 5 follows the analysis presented in the *Economic Impact of Sandia National Laboratories on Central New Mexico and the State of New Mexico Fiscal Year 1996* (DOE 1997j) prepared by New Mexico State University for the Office of Technology and Site Programs, DOE/Albuquerque Operations Office, as stated in Sections 4.14.2 and 5.2.12. This study is considered the most definitive work on this subject at the time the Draft SWEIS was prepared. This publicly available annual report uses the four-county ROI. The annual reports provide a basis for comparing potential economic activity, income, and employment changes that would result from the three alternatives. The economic activity, income and employment multipliers used in the socioeconomic analysis came from these reports (see text box in Section 4.14.3.3).

With regard to using information from Santa Fe county to refine the existing ROI, the results would not change because no other county has a sufficient number of SNL/NM employees to affect the four-county analysis. While SNL/NM is the fifth-largest private employer in New Mexico and third largest in the ROI, as stated in Section 4.14.3.2, SNL/NM personnel represent only 1 to 3 percent of the total workforce in each of the four counties (see Table 4.14-4). Of the Santa Fe county labor force total of approximately 51,997 persons (in 1990), not more than 171 were SNL/NM employees, which represents 0.3 percent of the total Santa Fe county labor force.

With regard to using information from subcounty areas to refine the existing ROI, the results would not change because the differences between the alternatives based on the county analyses are small (see Sections 5.3.12, 5.4.12, and 5.5.12). For example, the Expanded Operations Alternative represents the largest potential change to the regional economy. The analysis presented in Section 5.4.12.2 shows that the economic activity, income, and employment for the Expanded Operations Alternative would change by less than one percent from the 1997 base year (see Table 5.4.12-1). Historically,

increases or decreases in operational levels of activities at SNL/NM have been gradual. The DOE believes the Expanded Operations Alternative would not have a noticeable change in the economic base (economic activity, income, and employment), demographic characteristic, housing, and services in the ROI. Using a subcounty analysis would not visibly change the results of the four-county analysis nor the conclusions of this analysis.

picture of SNL/NM's socioeconomic impact is conveyed in the Final SWEIS.

Environmental Justice

The Draft SNL/NM SWEIS is seriously deficient in its treatment of Environmental Justice (EJ), in my opinion. First, the SWEIS utilizes an in-house SNL/NM document as the basis for the analysis of minority and low income demographics within a 50-mile radius of SNL/NM. Neither the Pantex nor the LANL SWEIS' utilized in-house demographic analyses in either their draft or final versions. To have done so would have subjected these prior documents to charges of conflicts of interests, especially in the case of the LANL SWEIS. Second, and more important, is the SNL/NM SWEIS' use of a 50% threshold for the definition of a "minority" area; i.e., only areas whose populations are at least 50% minority persons are considered in the Draft SWEIS as worthy of scrutiny from an EJ perspective. A 25% minority population threshold was utilized in the EJ analyses of both the Pantex and LANL SWEIS', so why is this more sensitive standard not used in the SNL/NM SWEIS? The treatment of EJ in the Draft SWEIS is nothing more than a whitewash, literally and figuratively, in my opinion. And you need not look far for a more sensitive analysis.

The Manzano Area was one of the alternative sites considered in the Pantex SWEIS for the storage of plutonium pits. Accordingly, the Pantex document presents (on pages 5-71 to 5-75) a demographic analysis of the minority and low income populations living within 50 miles of the southernmost peak in the Manzano Area, utilizing 25% as the threshold for defining a potentially EJ-sensitive minority or low income area. With only a few exceptions mainly in the northeast part of Albuquerque, nearly every 1990 Census tract within the 50-mile radius circle has a population which is at least 25% minority, thus warranting scrutiny from an EJ perspective. By contrast, in the SNL/NM Draft SWEIS, only five Block Groups (portions of tracts) near SNL/NM are identified as potentially EJ-sensitive because more than 49% of their populations in 1990 were minority persons (these 5 Block Groups are identified in the Draft SWEIS, by the way, and then never referred to again in any of the subsequent EJ "analyses" for the various resource areas).

The other serious problem with the Draft SWEIS' treatment of EJ lies in the logic of the analyses performed for the various resource areas. The flow of the arguments is as follows: there are no adverse impacts in the ROI as a whole (for each resource area), so therefore, there can be no disproportionate and adverse impacts for any minority or low income subarea of the ROI (see 5.3.13, for example). Not true, as minimal knowledge of the history of the EJ movement would reveal! In case after case historically, a large area around, say, an oil refinery appeared environmentally sound, but in neighborhoods immediately adjacent to the refinery, a low income minority population was devastated by contaminants from the facility. The EJ Executive Order is the result of countless situations like this from across the US. Thus, to say there are no adverse impacts in the ROI as a whole, so therefore there can be no disproportionate and adverse impacts in any subareas of the ROI, simply does not rise to the standard of an adequate EJ analysis.

I strongly urge that the EJ sections of the Draft SNL/NM SWEIS be completely revised, utilizing a 25% threshold for the definition of EJ-sensitive minority areas and closely examining the minority and low income neighborhoods immediately north, west and southwest of SNL/NM for any disproportionate and adverse impacts resulting from various levels of SNL/NM operations. I am enclosing a copy of background documents from the original EJ analysis of the Manzano Area prepared for the Pantex SWEIS, to assist with the improvement of the EJ analysis in the SNL/NM SWEIS. Please contact me if you have any questions about this material.

2

Comment 14-2-32

Location of SWEIS Revision(s): None

14-1-31,
cont.

14-2-32

14-3-32

14-4-32

14-5-32

Response: The comment appears to be referring to a document entitled *Addressing Environmental Justice Under the National Environmental Policy Act at Sandia National Laboratories/New Mexico* as the basis for analysis of minority and low-income demographics within the 50-mi ROI. As stated in Section 5.2.14, data were extracted from this SNL/NM document, but the SWEIS analysis approach did not rely on the document. Also, Section 5.2.14 states that the potential for disproportionately high and adverse human health or environmental impacts from the proposed alternatives on minority and low-income populations was examined in accordance with Executive Order 12898, *Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations*. In addition, this SWEIS analysis used CEQ and EPA guidance was used for identifying minority and low-income populations and determining whether the human health and environmental effects on these populations are disproportionately high and adverse. Because ROIs vary by resource area, all resource areas were analyzed on an individual basis for environmental justice impacts (see Section 5.3.13 including Table 5.3.13-1). As discussed in Section 5.3.13, water resources, cultural resources, air quality, human health, and transportation were analyzed in greater detail. The DOE acknowledges that there are different approaches to assessing environmental justice impacts. However, no disproportionately high and adverse impacts were identified in any of the SWEIS alternatives.

The DOE recognizes that the Pantex SWEIS and Los Alamos National Laboratory SWEIS used a 25-percent minority threshold for analysis. Both the Pantex SWEIS (published in November 1996) and the environmental justice methodology used in the Los Alamos National Laboratory SWEIS (developed in 1996) predate the CEQ (December 1997) and EPA (April 1998) guidance on conducting an environmental justice analysis. The guidance suggests identifying minority populations where either "(a) the minority population of the affected area exceeds 50 percent, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis." The SNL/NM SWEIS used this publicly available guidance but considered 49-percent minority as the

threshold because it was close to the 50-percent guidance threshold and because, as noted in Section 5.2.14, the minority population, per the 1990 New Mexico state census, was approximately 49 percent (51 percent by 1996) of the total state population. The DOE believes this analysis accurately reflects impacts to minority and low-income populations.

Comment 14-3-32

Location of SWEIS Revision(s): Figure 4.15–3

Response: The response to comment 14-2-32 discusses the minority threshold used for the environmental analysis.

The DOE recognizes that the Pantex SWEIS and Los Alamos National Laboratory SWEIS used a 25-percent low-income threshold for analysis. Both the Pantex SWEIS (published in November 1996) and the environmental justice methodology used in the Los Alamos National Laboratory SWEIS (developed in 1996) predate the Council on Environmental Quality (December 1997) and EPA (April 1998) guidance on conducting an environmental justice analysis. The guidance suggests using “...annual statistical poverty thresholds” to identify low-income populations. The SWEIS considered the threshold of 21 percent, which was the threshold used in the 1990 New Mexico census (see Sections 4.14.2 and 5.2.14).

The commenter is referred to Figure 4.15–3, Environmental Justice Areas, where the five highlighted block groups with the potential for high environmental justice concerns, related to impacts on minority populations located near KAFB, are presented. Specifically, the inset to the figure identifies the areas of high environmental justice concern (see Figure 4.15–3, Legend). The figure’s caption has been changed to better reflect this information. As stated in Section 4.15.2, Figure 4.15–3 is a composite assessment of both minority and low-income populations (SNL/NM 1997f). The introductory sentence in Section 4.15.2 has been clarified indicating that there are areas of high environmental justice concern. Section 5.3.13 refers to the figure as part of the discussion on environmental justice-related transportation impacts, which focuses on the three principal KAFB gates: Wyoming, Gibson, and Eubank, and the five highlighted block groups.

*Comment 14-4-32**Location of SWEIS Revision(s): None*

Response: As discussed in Section 5.2.14, because ROIs vary by resource area, all resource areas were analyzed on an individual basis for environmental justice impacts and, in addition, five were looked at in detail (water resources, cultural resources, air quality, human health, and transportation). The effects of each resource area are presented in Sections 5.3.1 through 5.3.12 and summarized in Table 5.3.13–1. The proportional effect on low-income and minority populations, by resource area under the No Action Alternative, are discussed and presented in Section 5.3.13 and Table 5.3.13–1. For example, in the human health resource area, the maximally exposed individual's (MEI's) lifetime risk of a fatal cancer increases by 1 in 13.3 million. Because there is not an adverse effect on the conservatively derived MEI, there would not be any individual in any minority or economically disadvantaged neighborhood with a greater exposure. Thus, there is also no disproportionately high and adverse impact. Only one resource area, water resources, was determined to have adverse impacts and, as stated in Section 5.3.13, the impacts affect all communities equally. No disproportionately high and adverse impacts were identified in any of the SWEIS alternatives. The DOE believes this analysis accurately reflects impacts to minority and low-income populations.

*Comment 14-5-32**Location of SWEIS Revision(s): None*

Response: The response to comment 14-3-32 discusses the minority and low-income thresholds used during the environmental justice analysis.

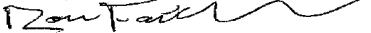
Cumulative Effects Analysis

The examination of Air Force facilities in the Cumulative Effects section of the Draft SWEIS is seriously deficient, in my opinion. The SWEIS must go beyond a simple listing of the various Air Force units which operate on KAFB. Recognizing and analyzing the potential of interconnected consequences resulting from neighboring DOE and DoD nuclear facilities is an essential part of the SWEIS, in my view. Any "environmental impact analysis" which ignores the proximity of, and potential interaction between, DOE and DoD nuclear operations on KAFB is just another example of excessive bureaucratic tunnel vision and does a disservice to the citizens who reside in the area which might be impacted by the unintended consequences of the dual operations of the two Federal departments.

In particular, I am concerned that no attention is given in the Draft SWEIS to the possibility of an accident scenario which envelops both the facilities of SNL/NM's Tech Area V and the nearby Kirtland Underground Munitions and Maintenance Storage Complex (KUMMSC) operated by the Air Force. KUMMSC has been identified in the local media as DoD's largest inland storage facility for nuclear weapons. According to Table F.2-21 in the Draft SWEIS, KUMMSC is only about 2 km northwest of SNL's Tech Area V. Thus, for example, is there any possibility, however remote, that an airplane crash into Tech Area V could trigger nuclear reactions in SNL's facilities that lead to detonations of nuclear weapons in storage at KUMMSC? What if the plane which crashes is one of the many huge Air Force transports which carry nuclear weapons to or from KUMMSC? Or, could a severe earthquake in the area result in a similar sequence of events, with the same catastrophic consequences for the people of central New Mexico? Any Cumulative Effects Analysis which does not address questions such as these, resulting from the proximity of DOE's and DoD's nuclear facilities on KAFB, fails to fulfill the letter and spirit of NEPA, in my view.

Thank you for your attention to the issues raised in this letter.

Sincerely,



Ron Faich, Ph.D.

Enclosures

*Comment 14-6-38**Location of SWEIS Revision(s): None*

14-6-38

Response: Intersite nuclear explosive transfers are covered in the Pantex SWEIS (DOE 1996k). The types of transfers include weapons stored at classified DoD facilities being returned to the Pantex Plant for dismantlement; weapons returned to the Pantex Plant for testing, modification, component replacement, or repairs; and weapons returned to DoD facilities from the Pantex Plant after testing, modification, component replacement, or repairs.

14-7-37

The Pantex SWEIS assesses aircraft accidents into nuclear explosive facilities. It also analyzes the potential penetration of KAFB Type D magazines with 30 ft of overburden. The frequency with which this type of accident could occur is zero.

14-8-38

The DOE has assessed cumulative effects by combining the potential effects of the Expanded Operations Alternative with the effects of past, present, and reasonably foreseeable activities in the ROIs. As discussed in Section 6.2.8, the description of DoD activities at KAFB and the analysis of their potential environmental impacts is not exhaustive nor totally inclusive of all DoD activities and operations.

In fact, many of the existing environmental consequences in Chapters 4 and 5 contain interconnected consequences including land use, infrastructure, water withdrawal, nonradiological air quality, waste, transportation, and socioeconomics. Chapter 6 describes the environmental effects of implementing the Expanded Operations Alternative, combined with other identified actions by public and private entities in the ROI. These actions include DOE activities at SNL/NM, seven DOE facilities, KAFB, and local and regional influences.

*Comment 14-7-37**Location of SWEIS Revision(s): None*

Response: According to the Kirtland Underground Munitions and Maintenance Storage Complex (KUMMSC) Environmental Assessment (USAF 1986), "The innovative physical design of the facility...reduces

dramatically the probability of an aircraft engaging the Munitions Storage Facility, and all but eliminates the possibility of a falling aircraft penetrating such a below-ground structure.” In addition, the KUMMSC is in an area meeting “the stringent requirement in which hazards potential was characterized as ‘inconsequential’ and therefore... impractical to suggest any land use control on the basis of accident hazard... .” The Environmental Assessment also states, “The site selection/comprehensive planning process also mitigates against the inherent danger to neighboring structures and personnel working in the vicinity of the facility.”

Comment 14-8-38

Location of SWEIS Revision(s): None

Response: See the responses to comments 14-6-38 and 14-7-37.



Citizens' Advisory Board
Sandia National Laboratories/DOE
8338A Comanche Road NE
Albuquerque, NM 87110

Phone (505) 293-5514 FAX (505) 298-4631

Memorandum

To: Julianne Levings, DOE NEPA Document Manager
From: Kim Ong, CAB Groundwater Task Group Leader
Date: 06/22/99
cc: Tami Toops DOE/KAO, Ted Wolff SNL
Re: Draft DOE SNL/NM Site-Wide Environmental Impact Statement, April 1999 -- Public Comments

I am providing the comments below for the subject DOE SNL/NM SWEIS as the Groundwater Task Group leader of the SNL/DOE Citizens' Advisory Board (CAB) for environmental management. These comments express my views and have not received consensus approval of the CAB although other members of the CAB may share these views.

15-1-6

I wish to congratulate the SWEIS project team for compiling a thorough, comprehensive and excellent environmental impact report. Also, THE SWEIS project teams' efforts in public outreach is appreciated that included several presentations at monthly CAB meetings.

15-2-6

The SWEIS contains a wealth of information on SNL's facilities, locations, activities, and affected environments and will be a useful reference document for the CAB.

The CAB is interested in all twelve environmental resource areas addressed in the SWEIS; however, I will comment only on the water resources and hydrology areas.

I agree with the SWEIS's analysis that under the three future operations alternatives (status quo, expanded activities, or reduced levels) that no additional impacts will occur to water resources and hydrology providing that the SWEIS emphasizes and ascertains that the following measures will be taken:

- Assurance should be given that each SNL project will take responsibility for assuming costs, handling, transportation, cleanup, disposal, and regulatory compliance for any waste generated that may potentially contaminate groundwater and surface water resources. This assumption of responsibility will encourage operational efficiency and waste reduction.
- Excessive withdrawal of groundwater from the Albuquerque Basin Aquifer is a major public concern for this arid region. It is recommended that policies and procedures be adopted at SNL by all projects for minimizing water usage, conserving the water that is used, and for recycling wastewater whenever possible.

15-3-34

15-4-20

Response to Comments by Kim Ong

Comment 15-1-6

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 15-2-6

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 15-3-34

Location of SWEIS Revision(s): None

Response: The DOE and SNL/NM are committed to waste avoidance and pollution prevention. As stated in the SWEIS (Section 2.3.5), the ER Project is independent of the alternatives. The DOE and SNL/NM will continue to manage wastes and materials in accordance with appropriate agreements, orders, laws, and permits.

Comment 15-4-20

Location of SWEIS Revision(s): None

Response: The DOE and SNL/NM recognize the importance of water use in the Albuquerque-Belen Basin aquifer and are committed to water use reduction efforts.

Section 5.6.11.1 provides specific information on SNL/NM water conservation efforts.

- It is recommended that all SNL projects take steps within operational procedures and physical structures to prevent liquid discharges and storm runoff that may carry contaminants from facilities and test sites into arroyos. Contaminants in arroyo flow may infiltrate to the groundwater system or may reach and may degrade water quality in the Rio Grande.
- Contaminants such as TCE and nitrates have been found in samples taken from groundwater monitoring wells located near SNL disposal sites and test sites. The sources of these contaminants have not been determined. The full impact of these groundwater contaminants may be better assessed if more effort were directed toward obtaining appropriate data that would be applied in scientific computer models for the purpose of accurately determining the groundwater flow directions and velocities. These models could also be used to determine the changes in contaminant concentrations along the groundwater flow path. These models may predict if the contaminants would naturally attenuate to harmless concentration levels in the groundwater and if, and when, the contaminated groundwater would reach public water-supply wells.

I hope that these comments may be useful for your final SWEIS analysis although these comments are being submitted slightly beyond the official public comment period. Thank you for the opportunity to participate in your SWEIS process.

15-5-26

15-6-36

Comment 15-5-26


Location of SWEIS Revision(s): None

Response: SNL/NM facilities do not actively discharge liquids to arroyos. The only discharge is storm water runoff from SNL/NM facilities. Hazardous materials are managed in accordance with Federal and state regulations, permit requirements, and DOE Orders and guidelines to minimize the potential for contaminant discharge and storm water runoff that could potentially migrate to surface water or groundwater. SNL/NM has NPDES permits covering storm water runoff at TAs-I, -II, and -IV. These runoff discharges are monitored. The SWEIS analysis did not find surface water contamination attributable to SNL/NM facilities (Section 5.3.4.3).

Comment 15-6-36

Location of SWEIS Revision(s): None

Response: SNL/NM has performed particle path modeling to establish travel times of contaminants to potential receptors (Vol II, Appendix B.1.1). Because of the relatively long travel times projected from this modeling, substantial attenuation would take place, lowering concentrations to below maximum contaminant levels by the time they could reach receptors. Although the DOE has no plans for additional modeling at this time, future groundwater monitoring results could cause the DOE to reconsider the need for such a program.


 N. -15' 99 (TUE) 13:00 U. S. DOE / EISPO TEL: 505 845 6392 P. 001
 06-15-99 13:40 5052932099 Diane Terry 001

TO: JULIANNE LEVINGS, NEPA DOCUMENT MANAGER
 RE: SITE-WIDE ENVIRONMENTAL IMPACT STATEMENT COMMENTS
 FROM: DIANE TERRY

- * Covering only a 10 year time frame seems to fall short when considering the purpose of an EIS and the expense of doing an EIS. | 16-1-1
 Could you extend the planning to 20 years and still have valid data?
- * If human remains from Isleta Pueblo are found will they be reburied? | 16-2-30
- * I was glad to see good Environmental Restoration information. | 16-3-6
- * Due to the fact that in Albuquerque we get more of a radiation dose from the sun would you calculate that fact and tell us how close we come to the safe exposure limits. | 16-4-33
- * I was glad to see the improvements in waste reduction and better tracking in the Chemical Materials Management and Control Area. | 16-5-6
- * In the Draft Summary on S-15 the definition of Low-Level Mixed Waste is incomplete. | 16-6-13

1000 Betts Street NE
 Albuquerque, NM 87112
 293-2099

Post-It® Fax Note	7671	Date	6/15/99	# of pages	1
To	Bill Taber	From	J. Levings		
Co./Dept.	TANDU	Co.	AL-EISPO		
Phone #	247-4933	Phone #	845-6201		
Fax #	247-8151	Fax #	6372		

Response to Comments by Dianne Terry

Comment 16-1-1

Location of SWEIS Revision(s): None

Response: The DOE has established general guidelines on what period an EIS should cover. In general, the purpose of a SWEIS is to evaluate near-term proposed projects, which generally means a 5- to 10-year period. The development of a SWEIS requires some degree of certainty about the proposed projects. The DOE considers many projects or programs on an annual basis but funds only a limited number. To evaluate the potential impacts of a project that has little likelihood of receiving funds would unnecessarily imply that there could be greater impacts than are realistically foreseeable. The validity of data that looked ahead 20 years could be questionable due to the ever-changing needs of the DOE, the completion of ongoing programs, and the implementation of new projects unforeseeable at the present time.

Comment 16-2-30

Location of SWEIS Revision(s): None

Response: Native American human remains discovered on land occupied by SNL/NM facilities would fall under the protection of the *Native American Graves Protection and Repatriation Act of 1990* (NAGPRA) (25 U.S.C. §3001). Under NAGPRA, if Native American human remains are discovered on Federal lands (SNL/NM, DOE, or KAFB), the Federal agency with jurisdiction over those lands consults with potentially interested Native American groups to determine which tribe(s) is affiliated with the remains. The disposition and treatment of the remains occurs in accordance with the wishes of the affiliated tribe(s). Section 7.3.6.4 provides a brief description of NAGPRA.

Comment 16-3-6

Location of SWEIS Revision(s): None

Response: Comment noted.

*Comment 16-4-33**Location of SWEIS Revision(s): None*

Response: Referring to Chapter 4, Figure 4.10–2, the dose from the sun in the Albuquerque area is 40 mrem/yr, while the dose from the earth (radon and external radiation from rocks and soil) is 226 mrem/yr. The balance of the 360-mrem/yr background radiation dose comes from medical radiation, food, consumer products, air travel, and weapons test fallout. Exposure limits are set only for situations that would impose an additional dose to an individual (worker) or to a population surrounding a facility. There is no exposure limit for natural radiation.

As stated in the text box “Historic Cancer Rate” near Section 5.3.8.1, New Mexico’s 1997 cancer death rate was 146 per 100,000 persons compared to a national average of 173 per 100,000 persons. These rates reflect all cancer risk factors including age, genetic, and environmental factors.

*Comment 16-5-6**Location of SWEIS Revision(s): None*

Response: Comment noted.

*Comment 16-6-13**Location of SWEIS Revision(s): Summary*

Response: The text was mistakenly cut off and has been corrected in the Final SWEIS.

May 9, 1999

Ms. Julianne Levings, EIS PO
Albuquerque Operations Office
US Department of Energy
P.O. Box 5400
Albuquerque, New Mexico 87185-5400

Dear Ms. Levings:

Enclosed are two copies of my comments on the "Summary" of the *Draft Site-wide Environmental Impact Statement*: one for your staff and one for William Tabor at Tetra Tech NUS. My comments have been divided into two categories. Comments in black ink are suggestions to the NUS editorial staff for improving the clarity of the document. They require no response under the NEPA process.

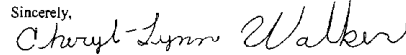
Comment in red ink do request a response.

In general, I had a great deal of difficulty following the information presented in the "Summary." Many of the materials were cut from their moorings in Volume I. As a result, vital definitions and background information that would have made the "Summary" more comprehensible did not get transferred into the "Summary." Also many of the conclusions in the "Summary" appeared to be based on statistical analysis of incomplete information rather than on valid statistical samplings. Most likely the information I seek is in Volume I and I will feel less perplexed as I read the complete presentation.

It's a rule of thumb that summaries suffer from the time crunch. Massive effort is invested in the main body of the work and by the time deadlines arrive, there is no time or funds left to do justice to the "Summary." In this case, however, most people will not wade through the main volume--as I plan to do. Therefore, the "Summary" becomes a crucial document. Please do consider rewriting the "Summary" to more accurately and completely reflect the messages conveyed by the SWEIS.

It is my understanding that my comments to Volume I can be sent to you at any time between now and June 15. I appreciate the opportunity to make public comment about my concerns and hope that I have the pleasure of meeting you at one of the scheduled public meetings.

Sincerely,



Cheryl-Lynn Walker
12408 Morrow NE
Albuquerque, NM
H: (505) 294-7538 W: (505) 768-1450

Response to Comments by the Cheryl-Lynn Walker

Comment 17-1-13

Location of SWEIS Revision(s): None

Response: Based on correspondence with the comment author, comments in black were deleted from the version that appears in this document. Therefore, the only comments that appear in this document are those that were in red. However, many of the "black" comments have resulted in editorial changes to the Final SWEIS.

17-1-13

Comment 17-2-13

Location of SWEIS Revision(s): None

Response: The DOE has made every attempt to make the Summary as informative as possible while keeping its size reasonable. The details that support the conclusions and summary statements are in Volume I. Further detail supporting statements in Volume I are in Volume II (Appendixes). Throughout the SWEIS, statements and conclusions are appropriately referenced.

17-2-13

17-3-13

Comment 17-3-13

Location of SWEIS Revision(s): None

Response: The DOE agrees that the Summary is an important part of the SWEIS and believes it accurately reflects the entire SWEIS. The DOE has made every attempt to make the Summary comprehensive without burdening the reader with supporting details, which are provided in Volumes I and II.

Page	Section	Item	Suggestions/Concerns
	PURPOSE AND NEED	This Site-Wide Environmental Impact Statement (SWEIS) evaluates the environmental impacts associated with alternative levels of operation at SNL/NM that will meet these responsibilities.	Since the concept “alternate levels of operation” has not yet been explained in the summary, providing a little more information here might help the reader.
	PURPOSE AND NEED	the DOE has performed a <i>thorough</i> environmental analysis of ongoing SNL/NM operations and proposed operations to 2008.	Can <i>thorough</i> be appropriately used here? The facilities investigated were representative, and some areas were not investigated at all.
S-4	SCOPING PROCESS	Site-Wide Environmental Impact Statement Preparation Timeline	Without specified times of completion, can you call this graphic a timeline? It does show a process and milestones, but no times.
S-6	AFFECTED ENVIRONMENT	Nearby communities include Rio Rancho and Corrales to the northwest, the Pueblo of Sandia and town of Bernalillo to the north, and the Pueblo of Isleta and towns of Los Lunas and Belen to the south.	Bosque Farms, Edgewood, Moriarty, and other east mountain communities, and Laguna Pueblo are also all within a 50-mile radius, which is the area purportedly bounded by this study.
S-8	SNL/NM Activities on KAFB	TA-I is located in the northeast part of KAFB. It is the most densely developed and populated of the TAs, with over 6,600 employees	Sandia employees? Includes contractors? Includes base employees? Includes base personnel?
S-8	SNL/NM Activities on KAFB	TA-V consists of about 35 closely grouped structures where experimental and engineering nuclear reactors are located. Approximately 160 personnel work in the area.	Approximately 160 personnel work in the area. Are you sure? Last info I read was there were no more than 75 permanent employees working in TA V, and the number of contractors rarely exceeds 25.
S-8	SNL/NM Activities on KAFB	Manzano Bunkers?	When these facilities meet three of the four criteria mentioned on S-5 for inclusion, why have the bunkers not been covered in this study?
S-10	Geology and Soils	Seismic activity, slope stability, and soil contamination were evaluated in the <i>geology and soils resource area</i> . The largest magnitude earthquake in Albuquerque <i>this century</i> measured 4.7 on the Richter scale.	Is the <i>geology and soils resource area</i> a physical area at Sandia? A physiocratic province? A what? Are you sure? Since instrumented seismic records were not kept until 1960, we have no way of knowing magnitude of quakes occurring earlier in the century. Since the earthquake you are referring to occurred in 1971, wouldn't it be safer to say <i>the largest magnitude earthquake in Albuquerque in the past 30 years?</i>
S-10	Geology and Soils	Slope stability has not been an issue at SNL/NM facilities.	Slope and soil stability studies, mandated by DOE STD 1022-94, have been noticeably absent from Sandia SARs. Since release of radionuclides during earthquakes has been identified as the most prominent risk factor, why have the slope instability, seismic liquefaction of soils, soil-

17-4-13

*Comment 17-4-13**Location of SWEIS Revision(s): Summary*

Response: The alternative levels of operation covered in the SWEIS are defined under the major heading “Alternatives.” The phrase “see Alternatives Subsection of this Summary” has been added to the Purpose and Need section of the Summary.

17-5-7

17-6-13

Comment 17-5-7

17-7-16

Location of SWEIS Revision(s): None

Response: The DOE considers the environmental analyses performed in the SWEIS to be thorough, based on a framework for impacts analysis that included a comprehensive facility screening to consider the complexity of analysis and identify operations with the highest potential for environmental impacts or concerns. This selection process is detailed in Section 2.3, with facilities analyzed at three different levels of activity. Specific facility information can be found in the SNL/NM FSID (SNL/NM 1998ee). All facilities and activities were investigated and considered in the impact analyses (Section 2.3.2).

17-8-13

17-9-16

17-10-15

17-11-13

*Comment 17-6-13**Location of SWEIS Revision(s): None*

17-12-21

Response: The DOE believes that the figure is satisfactory as prepared. The figure represents the appropriate time frame and milestones for the SWEIS process.

17-13-21

*Comment 17-7-16**Location of SWEIS Revision(s): None*

Response: The nearby community information is not intended to describe communities within a 50-mile radius, but rather to list those communities in the Rio Grande valley that are close to SNL/NM.

*Comment 17-8-13**Location of SWEIS Revision(s): None*

Response: The “over 6,600” employees refers to SNL/NM employees only.

*Comment 17-9-16**Location of SWEIS Revision(s): None*

Response: The DOE believes the number of personnel at TA-V is accurate. The number was obtained from the SNL/NM EID (SNL/NM 1998f).

*Comment 17-10-15**Location of SWEIS Revision(s): None*

Response: The Manzano Bunkers have been covered in the SWEIS analysis. Section 4.12 provides information on other infrastructure facilities including the High Bay Waste Storage Facility, the Manzano waste storage bunkers, the Interim Storage Site, the CWL and the associated Corrective Action Management Unit, and the Solid Waste Transfer Facility. Section 4.4 discusses selected infrastructure facilities. For impacts, see Sections 5.3.2 and 5.3.10. See also the response to comment 17-5-7.

*Comment 17-11-13**Location of SWEIS Revision(s): Summary*

Response: The sentence has been changed to read “...geology and soils resource sections of the SWEIS.”

*Comment 17-12-21**Location of SWEIS Revision(s): None*

Response: The DOE disagrees with the statement that there is “no way” of knowing the magnitude of earthquakes that predate instrumented seismic records. Eyewitness accounts of the events and reports of damage have long been used by seismologists in estimating the magnitude of earthquakes (Mercalli scale). Eyewitness accounts and damage summaries of 38

earthquakes occurring from 1855 to 1989 are presented in *Seismicity of the United States 1568-1989* (USGS 1993b). Only two of these occurred in Albuquerque: a magnitude 4.5 (Richter scale) earthquake in 1970 and a magnitude 4.7 earthquake in 1971. Both were centered near the intersection of Interstates 40 and 25, approximately 7 mi northwest of the fault complex that intersects KAFB. Damage associated with both earthquakes included broken windows, a collapsed barn, and merchandise falling off store shelves. Based on a review of historical data, the DOE believes the statement in the SWEIS is correct.

Comment 17-13-21

Location of SWEIS Revision(s): None

Response: DOE-STD-1022-94, *Natural Phenomena Hazards Characterization Criteria*, mandates these types of studies only for Performance Category 4 (PC-4) facilities. PC-4 refers to the safety system for a high power category reactor. SNL/NM does not have any PC-4 facilities. A PC-4 facility would require a structural performance goal equivalent to a commercial nuclear power plant.

Page	Section	Item	Suggestions/Concerns
			<p>structure interaction, soil failure induced by ground shaking, and associated analyses mandated by DOE STD 1022-94 not been routinely conducted for Sandia sites?</p> <p>If these studies have been conducted, please list titles and locations of these studies.</p>
S-10	Water Resources	<p>At SNL/NM TAs, depth to groundwater is 400 to 500 ft.</p> <p>Concentrations of contaminants above Federal drinking water standards have been detected in groundwater near several SNL/NM facilities. Of these contaminants, concentrations of trichloroethene (TCE) at one site are attributed to past SNL/NM waste disposal practices. This site is 4 mi from the nearest water supply well.</p> <p>Surface water at KAFB is almost exclusively ephemeral, that is, present in onsite drainages</p>	<p>Are you sure? Latest data show groundwater occurring in some areas at 200 feet. Also, Volume 1 indicates that depth in several TAs is at 300 feet.</p> <p>Again, accurate data here are of major concern because surface contaminants can more easily reach groundwater when the water table is shallow?</p> <p>Are these data complete? Does this paragraph accurately represent groundwater conditions at SNL?</p> <p>Why aren't all affected sites mentioned here? Why only the CWL? And why only TCE?</p> <p>If depth to groundwater is shallower than previously thought, is 4 miles an effective barrier to contaminant transport?</p> <p>Meaning "Ephemeral" means <i>transitory, lasting for a brief time</i>. Although ephemeral streams would most likely be present in drainages, ephemeral does not in itself imply "present in drainages."</p>
S-10	Water Resources	<p>Surface water flowing through KAFB could discharge to the Rio Grande, 6 mi downstream from the KAFB boundary.</p>	<p>Under what circumstances?</p> <p>If a storm water event were of sufficient magnitude, storm water runoff flowing through KAFB could reach the Rio Grande, discharging at a point 6 miles downstream from the KAFB boundary. Most often, however, storm water would evaporate or be absorbed in soils before reaching the Rio Grande</p>
S-10	Air Quality	<p>The SNL/NM steam plant, which provides heat to a large number of SNL/NM facilities, accounts for more than 90 percent of the total SNL/NM emission of pollutants from fixed facilities regulated by the <i>Clean Air Act</i>. <u>All emissions are within permitted levels</u> and result in concentrations of these pollutants that are below</p>	<p>All emissions at the steam plant are within permitted levels?</p> <p>If so, are the other 10% of emissions at Sandia within regulatory levels?</p> <p>OR, All emissions of criteria pollutants at Sandia?</p>

17-13-21, cont.

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17-15-24

17-16-24

17-17-24

17-18-24

17-19-26

17-20-26

17-21-27

Comment 17-14-24

Location of SWEIS Revision(s): Section 4.6.1.3

Response: Groundwater in the Albuquerque-Belen Basin aquifer lies approximately 490 ft beneath TAs-I, -II, and -IV, and approximately 480 ft beneath TAs-III and -V. Contamination under TA-II (Sandia North) is in a perched groundwater layer (not connected with the main aquifer) approximately 290 ft below the ground surface. Section 4.6.1.3 has been changed to read "perched" rather than "shallow" groundwater.

Comment 17-15-24

Location of SWEIS Revision(s): None

Response: The DOE agrees that contaminants can more easily reach groundwater when the water table is shallow. Every attempt has been made to ensure the data are accurate.

Comment 17-16-24

Location of SWEIS Revision(s): Various

Response: The areas of potential groundwater contamination listed are presented in Section 4.6.1.3. Until the publication of the latest groundwater monitoring data in 1999, attribution of these contaminants was certain only at one site, the CWL. Based on the latest data, fuel components at the Lurance Canyon Burn Site and TCE at TA-V are also attributed to SNL/NM activities. The text has been updated in the Summary and Sections 3.6.4, 4.6.1.3, and 5.3.4.1 to reflect these data.

Comment 17-17-24

Location of SWEIS Revision(s): Summary

Response: See responses to comments 17-16-24 and 19-18-24.

*Comment 17-18-24**Location of SWEIS Revision(s): None*

Response: Depth to groundwater is approximately 480 ft at the CWL. Four mi is not considered a “barrier” to contaminant transport. It provides a frame of reference to compare with the modeled maximum extent of the contaminant plume at the CWL (less than 0.1 mi).

*Comment 17-19-26**Location of SWEIS Revision(s): Summary*

Response: The word “ephemeral” has been changed to “intermittent.” The sentence has been reworded.

*Comment 17-20-26**Location of SWEIS Revision(s): None*

Response: The DOE agrees that storm water would typically evaporate or be absorbed in soils before reaching the Rio Grande. More detail on runoff is provided in Section 4.6.2.3. The statement in the Summary illustrates that a surface water pathway from SNL/NM facilities to the Rio Grande exists during major storm events and required analysis.

*Comment 17-21-27**Location of SWEIS Revision(s): None*

Response: Criteria pollutant emissions from the Steam Plant represent 90 percent of the total criteria pollutant emissions from stationary sources at SNL/NM. The electric power generation plant, a boiler and emergency generator in Building 701, a 600-kw-capacity generator in Building 870b, plus numerous insignificant sources not requiring permits throughout SNL/NM make up the remaining 10 percent of stationary sources. The total stationary source criteria pollutant emissions are within permitted limits. For clarification, the word “All” has been deleted from the sentence beginning “All emissions are within permitted... .” Actual emissions are those that are measured during a specific period. No distinction is intended between “actual” and “all” emissions.

Page	Section	Item	Suggestions/Concerns
		standards set to protect health with an ample margin of safety. <u>Actual emissions are only a fraction of permitted levels.</u> Hazardous chemical air emissions are small and are not required to be individually monitored Currently, 16 SNL/NM facilities emit radionuclides The maximum calculated total dose of radiation from atmospheric emissions at all SNL/NM facilities to an individual is 0.007 mrem/yr	What is the distinction between actual and all? <i>Are small in quantity? Few in number?</i> Can you support this statement? Not all facilities that have the potential to emit radionuclides are monitored. Facility monitoring is an area that needs strengthening at SNL. Can you support this statement? Since not all facilities that have the potential to emit radionuclides are monitored, how do you know emissions are only 0.007 mrem/yr?
S-11	Human Health and Worker Safety	The 1996 collective dose to the population within 50 mi is 0.14 person-rem. Based on current environmental monitoring data, radiation exposures would not be expected through media such as surface water, soil, groundwater, and natural vegetation.	Shift to the term <i>person-rem</i> without any explanation as to how it relates to <i>millirem</i> or <i>rem</i> Can you support this statement? Not all potential sources of air, surface water, or groundwater pollutants are measured.
S-11	Human Health and Worker Safety	<i>The average annual collective radiation dose to the entire group of radiation workers is 12 person-rem per year, based on 1992 through 1996 data. This dose is associated with a latent cancer fatality risk to the radiation worker population of 1 in 200. At this risk level, no additional fatal cancers would be likely to occur within the radiation worker population. SNL/NM's nonfatal injury/illness rate has ranged between 2.3 and 4.1 per 100 workers per year from 1992 through 1996.</i> <i>This is significantly less than national (7.4 to 8.9) or New Mexico (7.3 to 8.5) private industry rates. SNL/NM had no fatal occupational injuries from 1992 through 1996.</i>	What does this mean in terms of total millirem received by workers? What does this mean? If the changes are 1 in 200 of developing a fatal cancer, then why would there be risk of additional fatal cancers to this population? Are these stats for the same period? If cancer risks are latent, would effects from these risks be expected to occur during this four-year period?
S-11	Waste Generation	Waste generation activities consist of managing, storing, and preparing waste for offsite disposal	Isn't <i>waste generation</i> the creation of waste streams and <i>waste management</i> the managing, storing, and preparing of waste for disposal?
S-11	Waste Generation	Waste generated in 1996 included 25,600 ft ³ of radioactive waste, 48,000 kg of hazardous waste, 52,000 kg of PCBs, and 77,000 kg of asbestos	Is there a reason you did not present figures for solid waste or wastewater?

17-21-27, cont.

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Comment 17-22-27

Location of SWEIS Revision(s): None

Response: There are a large number of hazardous chemicals released to the atmosphere from the 12 facilities listed in Table 5.3.7–5. The quantity of these emissions is “small.” Each chemical is listed in Appendix D with its respective emission rate.

Comment 17-23-28

Location of SWEIS Revision(s): None

Response: Though not all facilities are monitored, all facilities that deal with radioactive materials that have the potential to emit radionuclides are evaluated; emissions are estimated or measured and are modeled to calculate the dose as a part of NESHAP compliance requirements. Based on such data from 1993 to 1996, 16 SNL/NM facilities have atmospheric radionuclide emissions resulting in a maximum dose of 0.007 mrem/yr to an individual. The emissions data from 1993 through 1996 are summarized in Section 4.9.2.

Comment 17-24-33

Location of SWEIS Revision(s): Summary and Section 4.10.3.2

Response: The term “person-rem” is used to express dose to a population. It associates dose to cancer risk within a population of a specific size. It is defined in the text box in Section 5.3.8. The number of person-rem multiplied by the risk estimator established by the International Commission on Radiological Protection determines the risk of number of latent cancer fatalities in that population. Person-rem does not relate to a specific rem or millirem dose per individual person in the population. A “person-rem” definition has been added to the Exposure to Radiation text box in the Affected Environment subsection of the Summary and in Section 4.10.3.2. See also the response to comment 17-50-28.

*Comment 17-25-33**Location of SWEIS Revision(s): None*

Response: The DOE believes that the analysis accurately calculated the collective dose to the population within 50 mi based on available data, including monitoring data. No new contamination should occur under any of the three alternatives. The sentence beginning “Based on current environmental monitoring data...” refers to all data reviewed for the SWEIS for each medium (air, water, and soil) considered for the years 1992 through 1996. The statement “would not be expected” is supported by monitoring data presented in Sections 5.3.3, 5.3.4, and 5.3.7, which discuss each medium, showing either no radiological contamination currently in that medium, or no pathway to human contact for any existing contamination in each medium. The analysis determined that the addition of new contamination to these media would not occur under the three alternatives.

*Comment 17-26-33**Location of SWEIS Revision(s): None*

Response: Table 4.10–1 provides information on the doses received by SNL/NM radiation-badged employees. The average worker dose in 1996 was 42 mrem/yr.

*Comment 17-27-33**Location of SWEIS Revision(s): Summary*

Response: Radiation risk to a population is interpreted as the total number of additional latent cancer fatalities (LCFs) in that population from the radiation dose. It is not a probability, as is defined for cancer risk to an individual. The SWEIS text was incorrect in describing a 1-in-200-LCF risk to the worker population; that text has been deleted. The Human Health and Worker Safety section now presents the number of LCFs and not a probability. The annual average collective dose increases the number of additional fatal cancers by 4.8×10^{-3}

The annual nonfatal injury and illness rate is the number of incidences reported per 100 employees. SNL/NM’s annual nonfatal injury/illness rate

ranged from 2.3 to 4.1 in the 5-year period reported in the SWEIS. These values were calculated from the number of reported incidents divided by the size of the worker population and, therefore, are not whole numbers.

Comment 17-28-33

Location of SWEIS Revision(s): None

Response: The information in Section 4.10.3.3 represents data from 1992 through 1996. For brevity, these years are not mentioned in each sentence that presents data.

Comment 17-29-33

Location of SWEIS Revision(s): None

Response: The latent period can be as little as 2 years, depending on the type of cancer, but is generally about 20 years. However, these numbers do not refer to cancer risk. They represent the number of reported nonfatal injuries or illnesses per year at SNL/NM and in other categories such as private industry. They are actual rates calculated from data collected during those years.

Comment 17-30-34

Location of SWEIS Revision(s): Summary and Section 4.12.1

Response: The commenter is correct that “waste generation” should be “waste management.” The sentences in the Summary and Section 4.12.1 have been changed to “Waste management activities... .”

Comment 17-31-34

Location of SWEIS Revision(s): None

Response: For a detailed discussion on solid waste and wastewater, see Sections 4.12, 5.3.10, 5.4.10, and 5.5.10, and Appendix H in Volume II. The Summary provides an overview and is not all-inclusive.

Page	Section	Item	Suggestions/Concerns
S-12	Noise and Vibration	In 1996, SNL/NM produced 1,059 impulse noise events, only a small fraction of which were of sufficient magnitude to be heard beyond the KAFB boundary. Offsite damage from vibrations associated with these noise events would be unlikely.	How about noise at the Coyote Test Range? Confusing shift from past to present tense. Damage from past noise events unlikely? Damage from present noise events unlikely?
S-12	Socioeconomics	For Fiscal Year (FY) 1997, the SNL/NM payroll in the local four-county region was \$417 million for 6,824 full-time personnel. SNL/NM spent approximately \$309 million in procurements in the region. The total operating and capital budget for SNL/NM for FY 1996 was approximately \$1.4 billion, of which an estimated \$877 million was spent in central New Mexico.	Since the four-county region is in central New Mexico, does the \$877 million spent in New Mexico include the \$417 million spent in the four-county region?
S-12	Environmental Justice	...requires identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of Federal programs, policies, and activities on minority and low-income populations. According to a 1990 report, <i>Poverty Thresholds</i> , from the U.S. Bureau of the Census, 49 percent of New Mexico's population was minority, and 21 percent was listed as in poverty or designated as having low income. Areas with greater than the state average of low-income populations border KAFB to the west and south.	Were the 49 percent minority and 20 percent poverty/low income categories exclusive? In other words, there was no overlap between minority and low-income categories? Page S-8 reports that lands bordering the west comprise the airport, city and country open space, and a large parcel of open space set aside for Mesa del Sol. It mentions no housing. How, then, can this area contain <i>greater than state average of low income populations</i> ?
S-12	Infrastructure	Electrical consumption would range from 185,000 MWh (Reduced Operations Alternative) to 198,000 MWh. For comparison purposes, a conservation scenario is provided under the No Action Alternative The Expanded Operations Alternative considered a 10-percent margin, which shows that utility systems supporting SNL/NM maintain adequate capacities.	Per month? Per Year? Per 10-year period? There are two scenarios reported under the No Action Alternative? What does this mean? What is a <i>margin</i> in relation to an <i>alternative</i> ?
S-13	Geology and Soils	Potential contaminants have not been detected at concentrations above background at current <i>testing levels</i> . These areas are not accessible to the general public.	The information in volume 1 seems to report a different picture? How does the second sentence relate to the first?
S-13	Water Resources and Hydrology	Groundwater contamination attributable to known SNL/NM activities is present at one site, the	The information presented in Volume 1 seems to present a different picture. Info presented in Chapter 3 conflicts with this

17-32-42

Comment 17-32-42

Location of SWEIS Revision(s): Summary

Response: The 1,059 impulse noise events that occurred during 1996 include those at Coyote Test Range. The text has been changed to indicate that no offsite damage from ground vibrations was associated with these events. Because the intensity of noise events is not projected to change, offsite damage from future (or present) noise events is not anticipated.

17-33-31

Comment 17-33-31

Location of SWEIS Revision(s): None

Response: The commenter is correct that the \$877 million figure includes the \$417 million (1997) from the SNL/NM payroll in the local four-county ROI. The \$877 million includes \$417 million (payroll), \$309 million (procurements), and \$151 million (benefits and taxes). Figure 4.14-3 shows the breakdown.

17-34-32

17-35-32

Comment 17-34-32

Location of SWEIS Revision(s): None

Response: Overlap occurs within the 49-percent minority population and 21 percent listed as living in poverty or designated as low income. Figure 4.15-1 shows block groups within 50 mi of SNL/NM that were identified as minority, and Figure 4.15-2 shows low-income block groups. A comparison of these figures shows where they overlap.

17-36-13

17-37-18

17-38-18

17-39-21

17-40-24

Comment 17-35-32

Location of SWEIS Revision(s): Summary

Response: The text has been revised to indicate that areas near KAFB with greater than the state average of low-income populations are located south and west.

*Comment 17-36-13**Location of SWEIS Revision(s): Summary*

Response: The words “per year” have been added at the end of the sentence.

*Comment 17-37-18**Location of SWEIS Revision(s): Summary*

Response: The sentence has been changed to reflect that the potential reduction, based on 1996 usage, is shown in Table 5.3.2–1.

*Comment 17-38-18**Location of SWEIS Revision(s): Summary*

Response: The sentence has been modified to include a reference to a 10-percent increase.

*Comment 17-39-21**Location of SWEIS Revision(s): Summary and Section 3.6.3*

Response: The DOE agrees that the sentence is misleading in comparison to the information presented in Volume I. The sentence has been deleted from the Summary and Section 3.6.3. Outdoor testing has led to soil contamination at several active testing areas, particularly from tests that took place before the institution of controls to minimize contamination potential. The ER Project has cleaned up contamination to standards that are protective of worker health and consistent with future land use designations developed by the Future Use, Logistics, and Support Working Group. SNL/NM continues to perform cleanups to comply with these standards on an as-needed basis.

*Comment 17-40-24**Location of SWEIS Revision(s): Various*

Response: See the response to comment 17-16-24.

Page	Section	Item	Suggestions/Concerns
		Chemical Waste Landfill (CWL) in TA-III	statement
	Water Resources and Hydrology	Under a no-cleanup scenario, the only contaminant exceeding EPA concentration limits in groundwater would be TCE, which occurs in a plume extending 410 ft from the CWL. <i>This would not impact drinking water supplies...Although the resulting impact is due to past waste management practices...</i>	Impact or no impact? Sentence above states there was none.
S-13	Water Resources and Hydrology	Potential sources of surface water contamination at SNL/NM would be storm water runoff from ER Project sites (including active testing areas) and runoff from developed areas. However, no contaminants attributable to SNL/NM activities have been detected in surface water samples collected onsite.	There are no surface water monitoring locations in Areas III and V. The only surface water monitoring locations are in Area I, II, and IV. Since Area V and the CWL are areas of greatest concern, why are there not monitoring stations in these areas? Note: Taking occasional surface water samples at the CWL does not provide the same level of assurance as provided by continuous monitoring. How can the statement <i>no contaminants attributable to SNL/NM activities have been detected in surface water samples collected onsite</i> be supported if the sampling is incomplete.
S-13	Biological and Ecological Resources	Beneficial impacts to biological and ecological resources would occur under all alternatives.	Is the quality of grasslands, the reintroduction of the gramma grass cactus, the siting of a raptor, and the absence of contaminant loads of radionuclides in rodents ample enough evidence to apply such a broad sweeping statement to the 60-odd species of plants and animals mentioned in the study?
S-14	Cultural Resources	Restricted access in association with activities at certain facilities would continue to have a beneficial effect on prehistoric and historic archaeological resources because it would protect the resources from vandalism, theft, or unintentional damage.	What are the activities at certain facilities that would benefit preservation of cultural resources? None of the people on the inside would resort to vandalism, theft, or cause unintentional damage to a cultural artifact? It's only us people on the outside?
S-14	Air Quality	Maximum concentrations of criteria pollutants from operation of the steam plant, electric power generator plant, boiler and emergency generator in Building 701, and 600-kw-capacity generator in Building 870b would represent a maximum of 96 percent of the allowable regulatory limits of several criteria pollutants (nitrogen dioxide, total suspended particulates, and particulate matter less than 10 microns in diameter) at a public access area.	Does this mean that if I were sitting at a bus station in downtown Albuquerque that 96 percent of the criteria pollutants I would be breathing come from the Sandia steam plant and generators?

17-40-24,
cont.

17-41-24

Comment 17-41-24

Location of SWEIS Revision(s): Summary

Response: The DOE believes there is no impact to drinking water from the CWL. The contamination at the CWL is an impact to water in the aquifer; that is, water in that portion of the aquifer is no longer available for use as potable water. However, there is no human health impact from ingestion of contaminated water because there are no drinking water supply wells in the contamination plume. To clarify this, the text has been revised to read, “Although the resulting contamination in the aquifer is due to past waste management practices... .”

17-42-26

Comment 17-42-26

17-43-26

Location of SWEIS Revision(s): None

17-44-29

Response: The DOE does not believe that TA-V and the CWL are the “areas of greatest concern” for surface water. Runoff from these areas is minimal and sporadic. There is no NPDES permit or monitoring requirement for TAs-III or -V because runoff evaporates or infiltrates. Surface water samples collected in these areas (Figure 4.6–7) have not contained levels of constituents of concern above background levels (Section 4.6.2.3).

17-45-30

17-46-30

Comment 17-43-26

17-47-27

Location of SWEIS Revision(s): None

Response: The DOE believes that the sampling program discussed in Section 5.3.4.3 provides the best available data and methods for determining the contribution of contaminants from SNL/NM facilities. SNL/NM does not perform continuous monitoring at all areas for the reasons discussed in the response to comment 17-42-26.

Comment 17-44-29

Location of SWEIS Revision(s): None

Response: The body of data collected from biological studies and surveys on KAFB and contiguous areas support the statement that the presence of

KAFB has “benefited biological resources at KAFB.” This is a summary discussion; Section 4.7 contains more detailed information on biodiversity; grassland quality; the status of grama grass cactus; the status of threatened, endangered, and sensitive species; and radionuclide and metal contamination in small mammals.

Comment 17-45-30

Location of SWEIS Revision(s): None

Response: At certain facilities, access is more restricted during certain activities, such as an outdoor testing activity. The restriction of access, not the activity itself, benefits the prehistoric and historic archaeological resources, as explained in the response to comment 17-46-30.

Comment 17-46-30

Location of SWEIS Revision(s): None

Response: Restricting access to an area reduces the number of people who have access to the cultural resources in that area. Reducing the number of people who have access to cultural resources reduces the potential for vandalism, theft, or unintentional damage to the resources. Anyone entering KAFB is subject to prosecution for violating laws protecting cultural resources. In addition, the DOE provides training to heighten awareness of the value of these resources.

Comment 17-47-27

Location of SWEIS Revision(s): Summary

Response: The National Atomic Museum is the public access area closest to the SNL/NM site boundary. The SWEIS analysis modeled maximum criteria pollutant concentrations to this location and beyond. The modeled concentration was 96 percent of the allowable regulatory limits. The percentage of criteria pollutants attributable to the Steam Plant decreases with distance from the facility. For clarification, the text has been changed from “...at a public access area.” to “...at the National Atomic Museum, which is the closest public access area to the SNL/NM boundary.”

Page	Section	Item	Suggestions/Concerns
S-14	Air Quality	With the exception of one chemical (chromium trioxide), concentrations of noncarcinogenic chemicals emitted from 12 facilities on SNL/NM were projected to be below screening levels based on occupational exposure limit (OEL) guidelines generally referenced to determine human health impacts. Concentrations of carcinogenic chemical emissions would pose little cancer risk (less than 1 in 1 million) to onsite workers or the general public.	Are these 12 facilities representative of all facilities? How many facilities are in the sampling? Were the facilities chosen as representative chosen by random sampling? If the facilities were not chosen by random sample, can the statement that <i>concentrations of carcinogenic chemical emissions would pose little cancer risk (less than 1 in 1 million) to onsite workers or the general public</i> be supported?
S-14	Air Quality	The calculated collective dose to the population within 50 mi of SNL/NM from the annual radiological air emissions due to the SNL/NM operations under each alternative would be 5.0 person-rem per year under the No Action Alternative; 15.8 person-rem per year under the Expanded Operations Alternative; and 0.80 person-rem per year under the Reduced Operations Alternative. <i>The collective dose would be much lower than the collective dose of 263,700 person-rem to the same population from background radiation.</i>	Again, person-rem not defined. What does it represent?
S-14	Air Quality	<i>The collective dose would be much lower than the collective dose of 263,700 person-rem to the same population from background radiation.</i>	Aren't those who are receiving the Sandia collective dose also receiving the background dose?
S-14	Air Quality	The levels of exposure to chemicals and radionuclides were assessed for each environmental medium determined to be a pathway for these releases. The SWEIS impact analyses identified air as the primary environmental pathway having the potential to transport hazardous material from SNL/NM facilities to receptors in the SNL/NM vicinity.	When attempting to decipher this statement, I first thought that a <i>medium</i> was air, water, soil, and the like. However in the next sentence you say air is a pathway. So what is a medium?
S-15	Human Health	The total composite cancer health risk is the sum of potential chemical and radiation exposures, calculated from the radiation cancer health risk to the MEI, plus the upper bound chemical cancer health risk from a hypothetical worst-case exposure scenario. This very conservative estimate of maximum health risk is greater than any of the individual health risks based on more likely exposure estimates at specific receptor locations.	I do understand this, I think. If the MEI represents the bounding limit risk, then isn't it intuitive that this bounding limit risk is greater than individual risk?
S-15	Human Health	Both the composite cancer health risk estimate of 1 in 385,000, and the cancer health risk estimates for specific receptor locations are below levels that regulators consider protective of public health. No adverse health effects would	I know for sure I am lost here. If the composite risk already takes in account the dose rate to the MEI, then why does the MEI have an additional <u>increased</u> risk over the composite risk?

17-48-27

*Comment 17-48-27**Location of SWEIS Revision(s): None*

17-49-33

Response: The 12 facilities are representative of all SNL/NM facilities. They are all the facilities that purchased chemicals during 1996, based on data from the Chemical Information System, Hazardous Chemical Purchases Inventory, and CheMaster database. Section 2.3.2 describes the framework of this analysis.

17-50-28

*Comment 17-49-33**Location of SWEIS Revision(s): None*

17-51-28

Response: The selection of facilities was not by random sampling, which

17-52-27

would have resulted in an even lower risk because facilities with no air emissions would have been part of the process. See the response to comment 17-48-27.

17-53-33

The statement that “concentrations of carcinogenic chemical emissions would pose little cancer risk” is supported by the SWEIS analysis (Section 5.3.8), which screened facilities and identified the main sources of hazardous chemical air emissions, and by the health assessment, which compared potential health effects to projected release amounts of these chemicals. The calculated cancer risk was less than 1.0×10^{-6} (less than 1 in 1 million), which is the level regulators consider to be protective of human health.

17-54-33

*Comment 17-50-28**Location of SWEIS Revision(s): None*

Response: See the response to comment 17-24-33. In this case, the collective dose to the population within 50 mi of SNL/NM is the sum of individual doses received during a given period by a specified population from exposure to a specified source of radiation within 50 mi of SNL/NM.

*Comment 17-51-28**Location of SWEIS Revision(s): None*

Response: The calculated collective dose to the population within 50 mi of SNL/NM is due to SNL/NM annual operations. This dose is above the background radiation dose that the total population within 50 mi of SNL/NM would normally receive. Based on an estimated population of 732,523 within 50 mi of SNL/NM and assuming that every individual receives a background radiation dose of 360 mrem/yr results in a total annual population dose of 263,700 person-rem. Those who receive the Sandia collective dose also receive the background radiation dose.

*Comment 17-52-27**Location of SWEIS Revision(s): Summary and Section 3.6.8*

Response: Air is the primary environmental medium with the potential to transport hazardous material from SNL/NM facilities to receptors in the vicinity by way of an inhalation pathway. The medium is air; the pathway is inhalation. The text in the Summary and in Section 3.6.8 has been revised to differentiate a pathway from a medium.

*Comment 17-53-33**Location of SWEIS Revision(s): None*

Response: The commenter is correct that the bounding risk is greater than the individual risk. The total composite cancer health risk (MEI risk from radiation plus cancer risk from chemicals) is greater than the radiation cancer health risk to the MEI. The Composite Cancer Risk subsections of Sections 5.3.8.1, 5.4.8.1, and 5.5.8.1 contain this information.

*Comment 17-54-33**Location of SWEIS Revision(s): None*

Response: The MEI does not have an additional risk over the composite cancer risk. The MEI cancer risk is 1 chance in 434,000 and the composite risk at the MEI location is 1 chance in 385,000. The composite risk is higher because it consists of the MEI risk from radiation plus the cancer risk from chemicals. See the response to comment 17-27-33.

Page	Section	Item	Suggestions/Concerns
		be expected from any of the three alternatives for SNL/NM. The small amounts of chemical carcinogens and radiation released from	
S-15		SNL/NM facilities would <u>increase</u> the MEI lifetime risk of cancer by less than 1 chance in 434,000 under the No Action Alternative Noncancer health effects would not be expected based on hazard index values of less than 1	Where does the hazard index value of 1 for noncancer effects come from and why is it included in a paragraph on cancer risk?
	Transportation	However, the SNL/NM truck traffic would comprise less than 0.03 percent of the total traffic, including all types of vehicles entering and leaving the Albuquerque area by way of interstate highways [Expanded Operations Alternative.] ...The total local traffic on roadways would be expected to increase by a maximum of 3.6 percent overall under the Expanded Operations Alternative.	So which is it: 0.03 or 3.6?
S-15	Waste Generation	Storage capacity for all anticipated waste types would be adequate.	Storage capacity for mixed waste would be adequate?
	Waste Generation	Limited onsite hazardous and mixed waste treatment capacity would be within current permit limits	Has all MW treatment been permitted? It's my understanding that some of the those permits have been applied for but not yet granted?
S-15	Waste Generation	Shaded box Low-Level Mixed Waste--Waste that contains both hazardous waste regulated under the RCRA	Low-Level Mixed Waste--Waste that contains both hazardous waste regulated under the RCRA and WHAT OTHER WASTE?
	Waste Generation	Radioactive material management practices would be required to reduce quantities of material that could inadvertently become contaminated.	Sandia does have excess radioactive materials taking up storage that if declared as waste could be moved to offsite TSDs. However, I have never known Sandia's waste management practices to be any less than extremely protective of health and environment. I cannot envision a scenario in which a material at Sandia would become <i>inadvertently</i> contaminated.
S-16	Waste Generation	Low-level waste (LLW) and low-level mixed waste (LLMW) (see text box) would increase by a maximum of 198 and 69 percent, respectively, under the Expanded Operations Alternative. One new operation, the Medical Isotopes Production Project, would be the major contributor to this increase	Can Sandia justify the increased burden of LLW and LLMW that will be caused by manufacturing medical isotopes that are rarely used, if at all, and decay in less than a week?
	Waste Generation	New procedures and recycling for the solid waste and process wastewater would have similar impacts on the <i>nonhazardous</i> waste volumes being generated.	Sandia will be treating and recycling wastewater for potable use? Wastewater is not considered hazardous? Or wastewater does not meet RCRA definition of hazardous waste?

Comment 17-55-33

Location of SWEIS Revision(s): None

17-55-33

Response: This summary paragraph includes information on both cancer and noncancer impacts. The Hazard Index is based on potential exposures to noncancer-causing hazardous chemical air releases, and 1 is the lower limit for the potential for adverse health effects, based on reference doses. For detailed information, see the text box "Measures of Nonradiological Health Risks," in Section 5.3.8.1.

17-56-43

Comment 17-56-43

Location of SWEIS Revision(s): None

17-57-34

Response: Both are correct. The 0.03 percent is SNL/NM's truck traffic as a percentage of total traffic (see Table 5.4.9-3). The 3.6 percent refers to the increase to total local (KAFB) traffic resulting from the increase in commuters under the Expanded Operations Alternative (see Table 5.4.9-4).

17-58-34

17-59-13

Comment 17-57-34

17-60-34

Location of SWEIS Revision(s): None

Response: The storage capacity for mixed waste would be adequate. In Sections 5.3.10.1, 5.4.10.1, and 5.5.10.1, the subsections on Current Capacity state that there is sufficient capacity to accommodate anticipated increases in radioactive wastes because only 4.2 percent of the total available capacity is being used.

17-61-7

17-62-34

17-63-34

Comment 17-58-34

Location of SWEIS Revision(s): Table 4.12-2

Response: The commenter is correct in stating that not all options for mixed waste treatment have been approved. Mixed waste issues probably will not be resolved for several years. In the future, the DOE expects permit amendments to include proposed treatment technologies identified in the Site Treatment Plan. The DOE and SNL/NM will continue to manage all wastes in accordance with appropriate agreements, orders, and permit

criteria and with the RODs for the Waste Management Programmatic Environmental Impact Statement (DOE 1997i). Table 4.12–2 lists the mixed waste treatment options and quantity limits; its footnotes identify the Site Treatment Plan and approved treatment options.

Comment 17-59-13

Location of SWEIS Revision(s): Summary

Response: The text box was cropped incorrectly. The missing information has been added to match the information provided in Sections 2.3.5.8 and 4.12.3.

Comment 17-60-34

Location of SWEIS Revision(s): Summary

Response: The sentence has been deleted because it was confusing.

Regarding the excess radioactive materials issue, SNL/NM has significantly reduced its radioactive and chemical inventories. Chapter 11 of Volume II of the EID contains a detailed discussion (SNL/NM 1998f). The EID discusses the reduction in material inventories, by material type, for waste avoidance and pollution prevention.

Comment 17-61-7

Location of SWEIS Revision(s): None

Response: The DOE described its rationale for siting the MIPP at SNL/NM in the MIPP EIS ROD (61 FR 48921) and in Chapter 2 of the MIPP EIS (DOE 1996b). A brief discussion is provided in Section 1.8.3 of the SNL/NM SWEIS.

Chapter 5 of the SWEIS discusses waste generation and related infrastructure impacts of the MIPP. SNL/NM has sufficient capability and capacity for handling the waste projections for each alternative (see Sections 5.3.2, 5.4.2, and 5.5.2).

Comment 17-62-34

Location of SWEIS Revision(s): Section 5.6.11

Response: SNL/NM is not planning to recycle wastewater for reuse as potable water; however, as discussed in the EID (SNL/NM 1998f), SNL/NM, along with KAFB, is exploring using MDL and cooling tower wastewater for reuse in irrigating the golf course. At present, the golf course uses potable water for irrigation. Specific information on water conservation projects, including MDL, has been added to Section 5.6.11.

Comment 17-63-34

Location of SWEIS Revision(s): Summary and Section 4.12.1

Response: “Nonhazardous” is a commonly used term for wastes not defined as RCRA hazardous waste. A text box has been added to Section 4.12.1 and the Summary to describe the terms “hazardous waste” and “nonhazardous waste.”

Sanitary wastewater and industrial wastewater subject to the provisions of the *Clean Water Act* (33 U.S.C. §1251) are specifically excluded from RCRA regulation. The sentence has been changed to read, “New procedures and recycling for the solid waste and process wastewater would have similar reduction results on volumes being generated.”

Page	Section	Item	Suggestions/Concerns
	NOISE AND VIBRATION	Only a small fraction of these tests would be loud enough to be heard or felt beyond the site boundary. The vast majority of tests would be below background noise levels for locations beyond the KAFB boundary and would be unnoticed in neighborhoods bounding the site. Ground vibrations would remain confined to the immediate test area.	Have there been any surveys of residents regarding noise levels in areas bordering these tests?
S-17	Environmental Justice	Based on the analyses of other impact areas, the DOE would not expect any environmental justice-related impacts from the continued operation of SNL/NM under any of the alternatives. Resource areas of potential concern were evaluated on an individual basis with respect to minority populations and low-income populations, as appropriate.	What do other impact areas mean in this context? What does resource areas of potential concern mean in this context.
	ACCIDENTS	The potential also exists in TA-I for a catastrophic accident, such as an airplane crash into a facility or an earthquake, in which multiple dangerous chemicals could be released and expose onsite individuals to harmful or fatal chemical concentrations	If this is the case, shouldn't there be some discussion as to what these chemicals are and how they could have such widespread effect on individuals working at Sandia?
S-16	ACCIDENTS	The potential for accidents would exist in TA-V that would cause the release of radioactive materials, causing injury to workers, onsite individuals, and the public. The magnitudes of impacts for the worst-case accident, an earthquake, would be minimal for all alternatives.	Since mandated seismic soil studies have not been conducted and mandated seismic monitors have not been installed, on what is this conclusion arrived at? Volume I says there has been no movement along base faults in 10,000 years. In contradiction, another section indicates a recent earthquake at 4.7 on the Richter scale. Also, it has been reported that springs on base have shut down or sprung up on the basis of recent seismic activity. Thus, can the statement "no movement for 10,000 years be supported?" This is a topic that begs additional, serious study. Also, air dispersion paths and rates for radioactive materials have not been reported in this study. In a catastrophic failure of facilities in TA-V, how much would get released and what direction would it most likely head?
S-17	CUMMULATIVE EFFECTS	Other DOE Facilities	Why is the air pathway the only pathway considered under accident scenarios? For instance, for some years ITRI buried irradiated animal carcasses, contaminating soils and possibly groundwater. Are you

17-64-42

Comment 17-64-42

Location of SWEIS Revision(s): None

Response: No surveys of residents regarding noise levels in areas bordering the site have been undertaken. Noise impacts were determined from modeling results performed at each noise-producing area. Figure 5.3.11-1 and Section 5.3.11.1 describe noise from continuous sources and impulse noise events that might be a community nuisance.

17-65-32

Comment 17-65-32

Location of SWEIS Revision(s): Summary

Response: In the Environmental Justice section of the Environmental Consequences section of the Summary, the word "impact" has been replaced by "resource." The phrase "Resource areas of potential concern..." has been changed to read "Resource areas of potential concern, as indicated by the resource-specific analysis (such as water resources)..."

17-66-33

17-67-37

17-68-21

For a summary comparison by alternative, see Table S-2 in the Summary. See Sections 5.3.13, 5.4.13, and 5.5.13 for details.

17-69-37

Comment 17-66-33

Location of SWEIS Revision(s): None

Response: Chemical inventories, the hazards of the chemicals in those inventories, and the impacts from a catastrophic accident are discussed in the accident analysis sections of the SWEIS. The Summary is an overview of the entire document and does not present that level of detail.

Sections 5.3.8.2, 5.4.8.2, and 5.5.8.2, along with Appendix F of Volume II, provide the detail related to a site-wide earthquake, facility hazards, explosion accidents, radioactive accidents, chemical accidents, and aircraft accidents.

Comment 17-67-37

Location of SWEIS Revision(s): Summary

Response: The analysis assumed the earthquake would cause complete destruction of TA-V facilities not designed to meet Uniform Building Code (UBC)-design

earthquake parameters. The DOE has revised the text in the Accidents section of the Environmental Consequences section of the Summary to indicate that impacts from releases of radioactive materials from TA-V due to the worst-case accident would be minimal for all alternatives. Sections 5.3.8.2, 5.4.8.2, and 5.5.8.2 discuss potential releases of radioactive materials.

Comment 17-68-21

Location of SWEIS Revision(s): None

Response: The earthquake mentioned was not associated with faults on KAFB (see the response to comment 17-12-21). The DOE is unaware of reports of springs shutting down or springing up on the basis of seismic activity. Based on the best available data, there is no evidence of movement along KAFB faults over the last 10,000 years (Section 4.5.3.1).

Comment 17-69-37

Location of SWEIS Revision(s): None

Response: Appendix F.2 of Volume II describes the amount of material at risk, facility by facility, accident scenario by accident scenario (also see Table 5.2–17). For example, the ACRR/MIPP configuration could release 57 fuel elements and 38 targets. The Sandia Pulsed Reactor could release 2.469×10^{-5} g of uranium-235. The *MELCOR Accident Consequences Code System, Version 2*, computer code samples the various combinations of wind directions, wind speeds, and stability classes to calculate the impact of a given accident. Meteorological data are discussed in Section F.2.3.2 of Volume II. Actual site-specific meteorological data were used. TA-V meteorological data are visualized in the form of a wind rose for Tower A21 in Figure D.1–3 of Volume II.

Air is the only medium considered because it could affect the public immediately. Other mediums would take longer periods to reach the public. Sandia has plans (for example, the Spill Prevention Counter-Measures and Control Plan) in place to evaluate and clean up, if necessary, accidental releases onto the soil, thereby mitigating or eliminating the impact of the spill. Potential sources of groundwater contaminants (for example, above-ground storage tanks) still exist. However, these must meet regulatory requirements for construction and monitoring.

The burial of irradiated animal carcasses is not an accident scenario. The radiological consequences to the public from contamination from irradiated animal carcasses would be bounded by the analyses of radiological impacts in the SWEIS.

Page	Section	Item	Suggestions/Concerns
			implying that there are no longer any potential sources of groundwater contamination at Sandia. For instance, are there no longer any fuel storage tanks at Sandia that could accidentally leak, contaminating groundwater?
S-17	CUMMJULATIVE EFFECTS	The counties surrounding SNL/NM have numerous existing and planned industrial facilities and residences with permitted air emissions and discharges to surface waters.	What percent of Bernalillo County residences have permits for air and surface water discharge?
S-18	CUMMJULATIVE EFFECTS	Analysis Results Cumulative effects to water resources would be <i>small</i> . Total SNL/NM withdrawal of groundwater would be approximately 1 percent of basin-wide withdrawal and 12 percent of local withdrawal.	On page S-13 it is stated that <i>SNL/NM's contribution of drawdown in the aquifer . . . is consider to be adverse</i> . Does <i>adverse</i> mean <i>small</i> ? If drawdown is adverse, can SNL/NM justify expending critical water resources for programs such as those conducted at the Microelectronics Development Laboratory?
S-18	MITIGATION MEASURES	The regulations promulgated by the Council on Environmental Quality to implement the procedural provisions of NEPA require that an environmental impact statement include a discussion of appropriate mitigation measures. . . . <i>The mitigation measures in this SWEIS are built into the alternatives.</i>	The only mitigation measure that appears to be built into the alternatives is "minimizing the impacts by limiting the degree of magnitude [no action, expanded operations, reduced operations] of an action and its implementation." I see nothing built into the alternatives that includes CEQ mitigation measures such as preservation and maintenance operations, substitution of resources or environments, rectifying or repairing an impact. Does not the DOE plan to take any of these latter measures?

17-69-37,
cont.

17-70-27

17-71-24

17-72-20

17-73-44

Comment 17-70-27

Location of SWEIS Revision(s): Summary

Response: Residences do not normally have air permits. The sentence has been clarified to read "and residential development (greater than ¾ acres)... discharges to surface waters including storm water control."

Comment 17-71-24

Location of SWEIS Revision(s): None

Response: As stated in the Summary and Section 3.6.4, SNL/NM's impact from groundwater withdrawal is adverse. The sentence provides context to SNL/NM's contribution to aquifer drawdown by expressing it as a percentage of total withdrawal in the Albuquerque-Belen Basin, which is approximately 1 percent. This impact is considered negative (adverse), but small.

Comment 17-72-20

Location of SWEIS Revision(s): None

Response: The MDL provides a unique capability. It is a state-of-the-art microelectronics research and development facility that provides custom and radiation-hardened microelectronics—a critical capability to the nuclear weapons stockpile maintenance program.

The DOE understands the importance of protecting all resources, including water. Due, in part, to the signing of the water conservation Memorandum of Understanding with the city of Albuquerque and KAFB, the MDL began a series of projects to reduce water use. In 1996, work began on improving the MDL's reverse osmosis water treatment system. The modifications included conversion to a high-surface reverse osmosis membrane. The efforts resulted in an annual reduction of 38 million gallons of water use. The MDL is currently researching a water-recycling project funded by SEMATECH, a semiconductor industry consortium, to reduce water consumption by 70 percent to 80 percent (approximately 55 million gallons per year). This process would use a recycle loop and eliminate the single-pass system currently in use. Another project originally designed in 1996

would take some of the process wastewater at the MDL and pump it to an adjacent cooling tower, resulting in saving approximately 12 million gallons per year. For further information see Sections 3.3.1.2 and 3.6.10 of the SWEIS.

Comment 17-73-44

Location of SWEIS Revision(s): Summary and Section 5.6.1

Response: The sentence has been deleted from the Summary. A similar sentence was also deleted from Section 5.6.1. The sentence in the Summary beginning “The following list contains...” has been modified to better recognize ongoing SNL/NM efforts to reduce impacts.

Because the analysis shows minimal adverse impacts from any of the alternatives analyzed and because of existing programs and controls, the DOE plans no new mitigation measures at this time. The DOE and SNL/NM will continue ongoing programs and controls as discussed in Section 5.6. If any TCPs are identified on DOE-administered land in the future, access to those sites could be restricted, as discussed in Section 5.6.7.

May 24, 1999
 Ms. Julianne Levings, EIS PO
 Albuquerque Operations Office
 US Department of Energy
 P.O. Box 5400
 Albuquerque, NM 87185-5400

Dear Ms. Levings:

Attached are comments covering Chapters 1 and 2 of Volume 1 of the SWEIS. As with the Summary, comments made in black print are for editorial consideration and are not intended for NEPA comment. Comments in red print *are intended* for NEPA response.

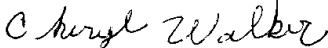
I am curious as to why the document did not undergo a Level 3 edit? Level 3 is normally recommended for a document of this prominence. Level 2 edits cover punctuation, style consistency (e.g., onsite versus on site), grammar (e.g., subject verb agreement), formatting (consistency of heading and document elements), all of which have been rendered very professionally. In fact, I am amazed at how well your editors *have* handled the myriad of level 2 edit details in this multi-volumed document (they have rarely missed a beat!).

18-1-6

A level 3 is critical, however, when a document is large and the materials in the document have been cut and paste from a variety of different sources. This edit deals with all the nitty gritty *writing* tasks that bring a document into consistent voice, tone, and usage. At this level, the technical writer focuses on eliminating redundancy between sections and chapters, ensuring that terms are used consistently throughout the document, excising the gobbledygook, and even more importantly, bringing the writing voices of the many different authors into a consistent voice. If there is still time, you may find tasking your editors to perform a level 3 edit will pay huge dividends when it comes to the readability of the SWEIS and the accuracy of the information reported. Just a suggestion!

In the time remaining, I promise to leave the language stuff alone and concentrate on the NEPA comments.

Cordially,


 Cheryl-Lynn Walker

Inclusions: 2 copies of comments

Comment 18-1-6

Location of SWEIS Revision(s): None

Response: All chapters and appendixes of the SWEIS received a Level 3 (paragraph) or Level 4 (document consistency or organization) edit during the preparation, review, and revision process. Every attempt has been made to do a thorough edit on the Final SWEIS.

Page	Section	Item	Suggestions/Concerns
VOLUME I-CHAPTER 1			
	INTRODUCTION	SNL is one of the largest laboratories in the world, with an annual budget of approximately \$1.4 billion and a workforce of approximately 7,500 (DOE 1998j).	<p>What does this workforce of 7500 include?</p> <p>Full-time employees? All Sandia employees? SNL employees and contractors?</p> <p>On S-16 the workforce is reported as 7,652 full-time employees On S-8, the workforce is 7970 On S-12, the workforce is 6,824 It also varies at other places throughout the SWEIS</p> <p>Were Air Force personnel working in immediate vicinity included?</p> <p>If contractors were not included, why?</p> <p>What number of workers was used for calculating doses to onsite workers?</p> <p>Why wasn't the total population inside the fence taken into consideration in risk calculations instead of just Sandia personnel?</p>
1-3	INTRODUCTION	Programs The DOE is organized into Program Offices. Each has a primary responsibility within one of the four DOE mission lines. The Program Offices provide funding and direction for activities at DOE facilities. Similar, coordinated sets of activities that meet Program Office responsibilities are referred to as programs. Programs are usually long-term efforts with broad goals or requirements.	The "organization" referred to here is hard to envision without a graphic. How about including in this section a copy of that nifty graphic you have published on S-3 of the Summary
1-5	1.7 PUBLIC...	The objectives of the scoping process are to notify interested persons, agencies, and other groups about the proposed action and the alternatives being considered;	<p>What actions were taken to notify the public?</p> <p>Did notices appear in the newspaper legal sections? Were scoping and public comment meetings advertised on TV?</p> <p>Is mailing a notice to Will Keener's list of 300 persons adequate notification of the public?</p>
1-6		1.8.1 The DOE prepared the . . . and evaluated stockpile stewardship activities required to maintain a high level of confidence in the safety, reliability, and performance of nuclear weapons in the absence of underground testing and to be prepared to test weapons if directed by the President (DOE 1996a).	What is meant here?
	Table 1.7-1	Table 1.7-1	

18-2-31

Comment 18-2-31

Location of SWEIS Revision(s): None

Response: The 7,500 refers to SNL/NM employees; the reference for this number is the *Economic Impact of Sandia National Laboratories on Central New Mexico and State of New Mexico* (DOE 1997j). In Fiscal Year 1996, the number of SNL/NM employees was 7,652. For a breakdown by major sponsor, see Chapter 9 of the *Institutional Plan FY 1998-2003* (SNL 1997b) (includes Sandia National Laboratories/California, Waste Isolation Pilot Plant, and Pantex Plant); Table 9.5 of that document provides data for Fiscal Years 1996 through 2000.

18-3-13

Comment 18-3-13

Location of SWEIS Revision(s): None

Response: The 7,652 represents the number of SNL/NM employees in Fiscal Year 1996, as reported in the *Economic Impact of Sandia National Laboratories on Central New Mexico and State of New Mexico* (DOE 1997j). The 7,970 represents the approximate number of SNL/NM employees by TA in Fiscal Year 1997, as reported in a Risk Management database, which double counts personnel who support more than one TA. This is the best available information for employment by TA. The 6,824 represents the reported total SNL/NM workforce on April 13, 1997, as noted in Table 4.14–2.

18-4-31

The number of 7,652 employees was used as the baseline for analysis purposes when comparing the impacts of the alternatives, and is from the *Economic Impact of Sandia National Laboratories on Central New Mexico and State of New Mexico* (DOE 1997j).

18-5-31

Comment 18-4-31

Location of SWEIS Revision(s): None

Response: USAF personnel were not included in the 7,500 employees; however, KAFB/DoD employees are included in Table 6.4–1 (8,963 persons). If the commenter is referring to workforce totals, USAF personnel are included in the socioeconomic ROI's total labor force (see Chapter 6). If the commenter is referring to human health-related impacts, the accident

18-6-33

18-7-33

18-8-13

18-9-4

18-10-13

and human health analyses included noninvolved workers, an MEI at KUMMSC, and other persons at public-related locations (for example, base housing).

Comment 18-5-31

Location of SWEIS Revision(s): None

Response: Contractors were not included in the SNL/NM workforce because the focus of the SWEIS is SNL/NM. However, the socioeconomic analysis discussed in Chapter 5 includes contractors in indirect and induced employment figures. Refer to Tables 3.6–2 and 5.3.12–1.

Comment 18-6-33

Location of SWEIS Revision(s): None

Response: In the base year (1996), 258 persons recorded doses of more than 10 mrem, out of nearly 800 persons in the radiation badge program. The workers in this program are SNL/NM employees who work near or with radioactive materials. The No Action Alternative, Expanded Operations Alternative, and Reduced Operations Alternative calculations estimated that 360, 400, and 220 persons, respectively, would each receive a radiation dose greater than 10 mrem/year. These dose estimates apply only to the population of “radiation badged workers,” which the SWEIS defines as the number of workers with dosimetry badge doses reading above 10 mrem. If those with zero readings and those with less than 10 mrem were included in the calculation, the average worker dose would be much less and would apply to a larger worker population.

Comment 18-7-33

Location of SWEIS Revision(s): None

Response: The methods used to analyze human health and radioactive air quality included analyzing impacts to receptor locations (16 and 38, respectively). Receptor locations consisted of elementary schools, hospitals, base housing, and other public areas, including the National Atomic Museum.

For accident analysis, a “noninvolved worker” is defined as an SNL/NM worker not associated with the operation of the facility; a member of the “public” could be any non-SNL employee on KAFB. Regardless of the impacts, the MEI is assumed to be a hypothetical member of the general public, to whom, because of location, the impacts would be greater than to any other member of the public on or off the site (see Sections 5.3.7.2 and 5.3.8.1).

Comment 18-8-13

Location of SWEIS Revision(s): None

Response: The figure appears both in the Summary and in Chapter 2 (Figure 2.1–2).

Comment 18-9-4

Location of SWEIS Revision(s): None

Response: Information regarding the public scoping meetings was printed in three display advertisements in the *Albuquerque Journal* and the *Albuquerque Tribune*, and one advertisement was printed in *El Hispano*. Twelve radio advertisements were aired on KUNM during the week before the scoping meetings. Letters offering briefings on the upcoming SWEIS were sent to stakeholders. Telephone calls were made to key Congressional stakeholders, tribal groups, advocacy groups, neighborhood associations, and business associations, alerting them to the public scoping meetings and the preparation of the SWEIS. Flyers notifying people of the scoping meetings were distributed at an SNL/NM Citizens Advisory Board meeting. Mailings were made to 900 SNL/NM stakeholders, alerting them to the SWEIS and the public scoping meetings. Finally, a Notice of Intent to prepare the SWEIS and to hold the public scoping meetings was published in the *Federal Register* on May 30, 1997 (62 FR 29334).

Information on the public hearings and the availability of the Draft SWEIS for review was advertised on radio and in the newspaper. Public service announcements were made available to 19 English-language and 4 Spanish-language radio stations, some of which aired the announcements as news stories to attract more attention. Four announcements were placed in the *Albuquerque Journal*—one appeared in the legal section, one in the

classifieds, and two as advertisements in the body of the newspaper. Newsletters containing information about the public hearings were sent to more than 2,300 individuals, agencies, and organizations who had expressed interest in the SWEIS or other DOE activities at SNL/NM. A formal Notice of Availability for the Draft SWEIS appeared in the *Federal Register* on April 16, 1999. Finally, personal contacts by telephone or through meetings were made with local organizations and elected officials.

Comment 18-10-13

Location of SWEIS Revision(s): Section 1.8.1

Response: The sentence has been clarified to read “...and to be prepared to resume underground testing of nuclear weapons if... .”

Page	Section	Item	Suggestions/Concerns
		All of these comments have been reviewed and considered at various stages during the preparation of the SWEIS. <i>Many are explicitly addressed in the pertinent sections of the first seven chapters of the SWEIS.</i>	In Table 1.7-1, it would be most helpful if you added a column to the table and gave the page numbers in the SWEIS where each of the comments have been addressed.
VOLUME I CHAPTER 2			
2-3	<u>2.1.1 SNL/NM Support for DOE's National Security Mission Line</u>	SNL/NM's principal DOE assignments under this mission line focus on the nuclear stockpile and reducing the vulnerability of a reduced stockpile; managing nonnuclear components of every weapon in the U.S. nuclear weapons stockpile; and reducing the vulnerability of the U.S. to threats of proliferation and to the use of weapons of mass destruction, nuclear incidents, and environmental damage.	SNL/NM's principal DOE assignments under this mission line focus on reducing the vulnerability of a reduced stockpile; managing nonnuclear Can every be truly supported? Promiscuous noun: weapons Weapons of nuclear incidents? Weapons of environmental damage?
2-3	<u>2.1.2 SNL/NM Support for DOE's Energy Resources Mission Line</u>	SNL/NM supports DOE assignments under this mission line to enhance the safety, security, and reliability of energy, focusing on implications for our nation's security related to the increasing interdependencies among domestic elements and global resources	What does this mean?
2-6		SNL/NM supports DOE assignments under this mission line with onsite operations and developing technology for national environmental problems.	What are you saying here?
2-6		The Hazardous Waste Management Facility (HWMF) and Radioactive and Mixed Waste Management Facility (RMWMF) manage a variety of wastes in accordance with applicable laws, permits, and regulations.	How about the Solid Waste Facility?
2-6		Of the previously mentioned R&D projects in 1997, about 24 percent had applications that were environmental quality-related.	projects operating in 1997? I can't find any R & D projects mentioned in this Section 2.3. To what R&D projects is this sentence referring?
2-7		Universities and others can use SNL/NM facilities to conduct research.	Who are the others that can use SNL facilities? Do these others include the Public?
2-7		To accomplish this objective, the DOE used the results of a detailed questionnaire distributed throughout SNL/NM to develop a database containing pertinent information about the approximately 670 buildings in the 5 technical areas (TAs) and structures in the Coyote Test Field.	Information gathered through a questionnaire? What percentage of the questionnaires were returned? As stated in the public meeting at Manzano, if all building/facilities were covered in the SWEIS, why are all these 670 facilities not mentioned in Section FD?

18-11-13

Comment 18-11-13

Location of SWEIS Revision(s): None

Response: All public scoping comments were considered during the preparation of the Draft SWEIS. Because much of the SWEIS, including methodologies used in resource area analyses, was based on public scoping comments, such an addition to Table 1.7-1 would not be useful.

18-12-13

18-13-1

18-14-13

18-15-13

18-16-13

Comment 18-12-13

Location of SWEIS Revision(s): Section 2.1.1

Response: This sentence has been changed to read “the nuclear stockpile, including reducing...”

18-17-13

18-18-34

Comment 18-13-1

Location of SWEIS Revision(s): Section 2.1.1

Response: Regarding nuclear weapons, SNL/NM is responsible for the design of nonnuclear components and related systems engineering. To clarify, “every” has been changed to “nearly every,” because Sandia National Laboratories/California is not part of the SWEIS.

18-19-13

18-20-1

18-21-13

18-22-15

Comment 18-14-13

Location of SWEIS Revision(s): None

Response: See clarifications in the responses to comments 18-12-13 and 18-13-1.

Comment 18-15-13

Location of SWEIS Revision(s): Section 2.1.1

Response: This sentence has been changed from, “...proliferation and to the use of weapons of mass destruction, nuclear incidents, and environmental damage” to “...proliferation and the use of weapons of mass destruction, to nuclear incidents, and to environmental damage.” See the responses to comments 18-12-13 and 18-14-13.

*Comment 18-16-13**Location of SWEIS Revision(s): Sections 2.1.2*

Response: The sentence has been split into two sentences as follows: “...safety, security, and reliability of energy supplies. This work focuses on our nation’s security....”

*Comment 18-17-13**Location of SWEIS Revision(s): Sections 2.1.3*

Response: The sentence has been clarified to read “...with onsite waste operations and developing technology (TRU waste containers) for national environmental problems.”

*Comment 18-18-34**Location of SWEIS Revision(s): None*

Response: The Solid Waste Transfer Facility manages a variety of wastes in accordance with applicable permits, laws, and regulations. This facility is described in Chapter 14 of Volume II of the EID (SNL/NM 1998f). The Solid Waste Transfer Facility was not part of the selected infrastructure group because similar capabilities were identified in the Hazardous Waste Management Facility (Section 2.3.4). Section 4.12.3.6 identifies the Solid Waste Transfer Facility as managing nonhazardous trash. The amounts of solid waste projected for management at SNL/NM are addressed in Sections 5.3.10, 5.4.10, and 5.5.10.

*Comment 18-19-13**Location of SWEIS Revision(s): Sections 2.1.2, 2.1.3, and 2.1.4*

Response: Similar paragraphs appear at the ends of Sections 2.1.2, 2.1.3, and 2.1.4. To clarify the text, each paragraph has been changed to reflect the following wording of the last paragraph of Section 2.1.1: “Of the previously mentioned Research and Development projects in 1997...” has been changed to “Of the 218 Research and Development projects undertaken by the DOE in 1997... .”

*Comment 18-20-1**Location of SWEIS Revision(s): Section 2.2*

Response: SNL and the DOE have a broad range of programs designed to encourage a strong partnership between the national laboratories, industry, and universities. The primary forms of partnership include Cooperative Research and Development Agreements, licensing, joint projects using DOE laboratory facilities, and technical assistance to small business enterprises. Since 1991, 275 cooperative agreements between SNL/NM and industry have been approved, with a total value of more than \$650 million. In addition, SNL/NM has completed more than 800 technical assistance projects for small businesses in 40 states during the same period. SNL/NM spends approximately \$22 million per year with universities for Research and Development services supporting the Laboratories' core research foundations. University research is typically conducted by individual investigators and small teams of graduate students. In Fiscal Year 1995, SNL/NM sponsored more than 400 research contracts at more than 80 universities in 32 states. In addition, universities are significant participants at many of SNL/NM's user facilities and are crucial team members of many Cooperative Research and Development Agreements involving SNL/NM and industry. The text of the SWEIS will be modified to say that representatives from universities and other research organizations may request use of SNL/NM facilities.

*Comment 18-21-13**Location of SWEIS Revision(s): Section 2.3*

Response: The DOE assumes the commenter is questioning the use of the term "questionnaires" as it relates to the collection of data. The sentence has been changed to read "detailed survey," which correctly describes the manner in which the information was collected. One hundred percent of the surveys were completed and the information is provided in Attachment 1-1 of Chapter 1 of the FSID (SNL/NM 1998ee).

*Comment 18-22-15**Location of SWEIS Revision(s): None*

Response: As discussed in Section 2.3, the SWEIS analysis of SNL/NM facilities focused on selected facilities. The criteria used in the final screening process are described in Section 2.3 and illustrated in Figure 2.3–1. As a result, the 670 buildings, 5 TAs, miscellaneous structures, utilities and roads, and outdoor test areas are bounded in all SWEIS impact analyses and described in varying levels of detail in the EID (SNL/NM 1998f), FSID (SNL/NM 1998ee), and the 1998 *Sites Comprehensive Plan* (SNL 1997a). Facility descriptions (between Chapters 2 and 3) were provided for all facilities identified in Chapter 2 as “selected facilities.” The facility descriptions briefly discuss the capabilities and processes associated with the individual selected facilities.

Section 4.4, Infrastructure, discusses SNL/NM buildings (see Table 4.4–2), SNL/NM services and maintenance, roadways, and utilities.

Page	Section	Item	Suggestions/Concerns
2-7		<p>The operations within these facilities or facility groups are the basis for differentiating <i>between</i> the three alternatives analyzed in the SWEIS. Taken together these facilities represent the majority of <u>exposure risks</u> associated with continuing operation at SNL/NM.</p> <p>They represent</p> <ul style="list-style-type: none"> • Over 99 percent of all radiation doses to SNL/NM personnel • Over 99 percent of all radiation doses to the public • From 81 to 99 percent of stationary source criteria pollutants • All <u>radioactive waste</u> volumes, including medical isotopes, <u>ER wastes</u>, and <u>hazardous wastes</u>, which are accounted for in analyses of infrastructure, radiological air quality, transportation, as waste generation 	<p>and the structures</p> <p>Among?</p> <p>Confusing use of the term radioactive. ER wastes not reported in SWEIS as radioactive. Hazardous wastes are not radioactive wastes.</p> <p>Main Point Why are certain facilities that meet the criteria specified in the column to the left not been chosen to be part of the list of items in this column. Take, for instance, Infrastructure Facilities. You include the HWMF, the RMWMF, and the Thermal Treatment Facility, but you do not mention High Bay storage, Manzano Storage, the Auxiliary Hot Cell, or the myriad of make-shift storage areas that pose as greater, or greater risk than the facilities that were mentioned.</p> <p>What are these other facilities not included?</p>
2-13			
2-9		<p>Because of their importance, potential environmental impacts from the selected facilities are described and evaluated in greater detail than other SNL/NM facilities</p>	<p>than other SNL/NM facilities</p> <p>POTENTIAL MAJOR DESIGN FLAW</p> <p>The representative facilities were chosen through the screening process. Instead of sticking with representative facilities, the SWEIS appears to add and subtract facilities to the sampling. How can the resultant statistics be valid?</p>
2-9		<p>The DOE <u>examined all nuclear/radiological facilities and hazardous nonradiological facilities</u> and associated DOE-approved safety documents . . .</p>	<p>Were checklists used? What criteria did you evaluate? How did you determine which hazards and safety concerns were captured in the accident analysis?</p> <p>Could a table summarizing which facilities were examined be included here?</p>
2-13		<p>Following are the major infrastructure facilities at SNL/NM that have environmental permits and that have</p>	<p>MAJOR CONCERN</p> <p>Facilities that could produce critical</p>

Comment 18-23-34

Location of SWEIS Revision(s): Section 2.3

Response: The first part of this sentence has been reworded to read “All wastes, including radioactive, ER, and hazardous, which are accounted... .”

Comment 18-24-15

Location of SWEIS Revision(s): None

Response: The other facilities mentioned by the commenter were included in the impact analyses. The Hazardous Waste Management Facility, Radioactive and Mixed Waste Management Facility, and Thermal Treatment Facility were analyzed for three levels of operation. For completeness of analysis, the DOE also gathered information on the balance of operations at SNL/NM (see Section 2.3.2).

18-23-34

18-24-15

Section 4.12 provides information on other infrastructure facilities including High Bay Waste Storage Facility, Manzano waste storage bunkers, Interim Storage Site, CWL and the associated Corrective Action Management Unit, and the Solid Waste Transfer Facility. Also, Section 4.4 discusses selected infrastructure facilities.

18-25-15

See the response to comment 18-22-15 on the focus of the SWEIS analysis on selected facilities. For a discussion of impacts, see Sections 5.3.2 and 5.3.10.

18-26-15

18-27-15

Comment 18-25-15

Location of SWEIS Revision(s): None

Response: See the response to comment 18-22-15 on the focus of the SWEIS analysis on selected facilities.

If additional facilities and analyses were determined to be necessary, those facilities were added to the individual resource areas for completeness. As stated in Section 2.3.2, Framework for Analysis, “For completeness of analysis, the DOE also gathered information on the balance of operations at SNL/NM. Information regarding other facilities...were incorporated into the analysis.” The section also states: “In addition, some aspects of the impact analysis considered individual facility operations, regardless of

whether the entirety of the facility met the criteria for detailed analysis. These aspects included evaluating chemical air emissions... .”

Comment 18-26-15

Location of SWEIS Revision(s): None

Response: See the response to comment 18-22-15 on the focus of the SWEIS analysis of selected facilities.

The screening of facilities for accident analysis is presented in Appendix F, Section F.1.3, in Volume II. Data sources are discussed in F.1.9. Table F.1-1 lists the documents reviewed.

Comment 18-27-15

Location of SWEIS Revision(s): None

Response: See the response to comment 18-22-15 on the focus of the SWEIS analysis of selected facilities. See the response to comment 18-24-15 on SNL/NM waste facilities.

Page	Section	Item	Suggestions/Concerns
		been selected for evaluation: <i>Steam Plant in TA-I— HWMF in TA-I— RMWMF in TA-III— Thermal Treatment Facility (TTF) in TA-III—</i>	environmental impacts have been left off this list. Having a permit should not be the basis for inclusion or exclusion of facilities on this list. Nonpermitted facilities can be a greater danger than permitted facilities because they potentially receive less study and NMED inspection.
2-13		2.3.5 In general, these balance of operations activities involve little or no toxic materials, are of low hazard, and are usually categories of actions excluded from analysis by DOE's NEPA regulations.	How do DOE's NEPA regulations differ from general NEPA regulations? Does the DOE accept only a portion of the total NEPA regulations? And if so, which regulations are not followed?
2-14		SNL/NM's research foundation in materials and process science develops SNL/NM's research foundation in computational and information sciences develops Et al.	What are the names of these research foundations? Who provides funding for foundation work?
2-14		Appendix A contains information regarding the responsible organizations, regulatory requirements, and types and quantities of material at SNL/NM	MAJOR CONCERN Appendix A appears to exclude legacy materials, which should have been a major concern to those evaluating site-wide environmental impacts.
2-15		Other radioactive material (less than 1 percent by mass) located at SNL/NM is not tracked through this tracking system	CONCERN Why not? Mass is not necessarily the critical factor. Can't a small mass of high activity material be potentially dangerous?
		The ER Project is a phased project designed to identify, assess, and remediate contaminated DOE-owned or -operated facilities that have contamination from <i>disposal sites</i> , releases, or spills.	Recursion What if the facility is a disposal site, such as the Chemical Waste Landfill?

18-27-15,
cont.

18-28-1

18-29-31

18-30-34

18-31-34

18-32-13

Comment 18-28-1

Location of SWEIS Revision(s): Section 2.3.5

Response: DOE NEPA regulations follow very closely general NEPA regulations. The general NEPA regulations require each agency of the Federal government to review its policies in light of the Act's national environmental objective and to revise internal policies to ensure full compliance. The DOE accepts all of the NEPA regulations for implementing NEPA and provides them in DOE Order 451.1A.

The DOE complies with all NEPA regulations. The reference, 10 CFR Part 1021, has been added to Section 2.3.5.

Comment 18-29-31

Location of SWEIS Revision(s): Section 2.3.5.1

Response: The sentences have been changed to read "SNL/NM's research expertise...."

Comment 18-30-34

Location of SWEIS Revision(s): None

Response: Appendix A in Volume II contains material inventories for special nuclear materials, radioactive materials, source material, spent fuel, chemicals, and explosives. Legacy wastes are discussed in Sections 5.3.10, 5.4.10, and 5.5.10. The transportation of legacy wastes is discussed in Sections 5.3.9, 5.4.9, and 5.5.9.

Comment 18-31-34

Location of SWEIS Revision(s): Section 2.3.5.6

Response: The sentence was deleted because "radioactive material (less than 1 percent by mass)" is a definition of miscellaneous radioactive material (see Chapter 11, EID) and does not pertain to the tracking statement. Miscellaneous radioactive material is tracked.

Comment 18-32-13

Location of SWEIS Revision(s): Section 2.3.5.8

Response: This sentence will be corrected; “...contamination from disposal sites, releases...” will be changed to “...contamination at disposal sites from releases”

May 28, 1999

Ms. Julianne Levings, EIS PO
Albuquerque Operations Office
US Department of Energy
PO Box 5400
Albuquerque, NM 87185-5400

Dear Ms. Levings,

Enclosed are comments for the FD section and Chapter 3 of the SWEIS. As promised, I ignored the language stuff (which I know your editors will catch). I addressed some of the internal inconsistencies that erode the credibility of the document in my Chapter 3 comments. Examples are as follows:

Chapter 3-Soil contamination does not currently exist and any of the testing facilities.
Chapter 4-Soil contamination does exist at some active SNL/NM outdoor test facilities.

19-1-21

Chapter 3-Groundwater contamination is present at one site. Chapter 4-Groundwater contamination is present at several sites.

19-2-24

Chapter 3-Contaminants have not been detected in surface water samples onsite
Chapter 4-Several contaminants have been detected in surface water samples onsite.

19-3-26

Also there are inconsistencies between information reported in the document and information stated or published elsewhere.

The Moly 99 expert at the Manzano meeting said no mixed waste would be generated by the Moly 99 program. Chapter 3 says LLW and LLMW would increase by 198 percent and that the Moly 99 program would be a major contributor to that increase.

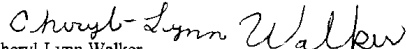
19-4-34

The most recent annual monitoring report states that the offsite MEI will receive a dose of 0.00033 mrem/yr. The SWEIS states the dose to the MEI under the No Action Alternative is 0.15 mrem/yr. Although neither represents a threat to the public, the later dose rate would exceed NESHAP cutoffs and trigger the stack monitoring requirement.

19-5-28

Inconsistencies are typical in a draft document of this size. When you work on a document for a long time, you stop seeing these inconsistencies and start reading into the document what your mind tells you *should be there* (happens to me all the time). The good news is that there is still time to resolve these inconsistencies.

Respectfully submitted by


Cheryl-Lynn Walker

Comment 19-1-21

Location of SWEIS Revision(s): Section 3.6.3

Response: The statement in Chapter 4 is correct. The statement from Section 3.6.3 has been deleted.

Comment 19-2-24

Location of SWEIS Revision(s): None

Response: The full sentences in the Draft SWEIS are as follows:

Section 3.6.4: “Groundwater contamination *attributable to known SNL/NM activities* [italics added] is present at one site, the [CWL] in TA-III.”

Section 4.6.1.3: “Sites with potential or known groundwater contamination at SNL/NM are Sandia North (an ER Project designation for groundwater investigations of sites in TA-I and TA-II), the Mixed Waste Landfill, locations in TA-V, Lurance Canyon Burn Site, and the CWL (SNL 1997d) (Figure 4.6-4).”

These sentences were not inconsistent because the first referred to the areas of contamination known to have resulted from SNL/NM activities, and the second was inclusive of areas of known contamination, some of which have not been attributed to SNL/NM activities. However, groundwater monitoring data published in 1999 (see the response to comment 17-16-24) have been incorporated into the SWEIS, requiring revision to this sentence (in Section 3.6.4) to add TA-V and the Lurance Canyon Burn Site.

Comment 19-3-26

Location of SWEIS Revision(s): None

Response: The full statement from Chapter 3 is as follows: “No contaminants *attributable to SNL/NM activities* [italics added] have been detected in surface water samples collected onsite.”

Chapter 4 discusses constituents detected in onsite surface water samples, but concludes that concentrations are consistent with background levels.

Therefore, the statements are consistent. Refer to the discussion of background concentrations in the response to comment 6-10-26.

Comment 19-4-34

Location of SWEIS Revision(s): Section 3.6.10

Response: The Medical Isotope Production Project (MIPP) would rely on two facilities, the ACRR and the HCF. ACRR molybdenum-99 LLW generation would increase from 56 ft³ in the base year to 1,090 ft³ under the Expanded Operations Alternative (Table 3.6-1). MIPP is expected to be a major contributor to the increase in SNL/NM LLW generation.

The MIPP is expected to generate LLMW at the HCF, which would process the medical isotope targets. LLMW generation would increase from 7 ft³ in the base year to 40 ft³ under the Expanded Operations Alternative (Table 3.6-1). This is not considered a “major” contribution.

The sentence in Section 3.6.10 has been clarified to reflect that the MIPP is a major contributor to the LLW increase. SNL/NM has sufficient capacity to handle the increases in LLW and LLMW.

Comment 19-5-28

Location of SWEIS Revision(s): None

Response: The commenter is correct that a recent annual monitoring report states the MEI would potentially receive a much smaller dose than the dose presented for the MEI under the No Action Alternative. A comparison of the reported value and the No Action Alternative value shows the MIPP greatly increasing the estimated potential dose to the MEI.

The No Action Alternative assumes the ACRR and HCF are processing as many as 375 medical isotope targets and resulting wastes, which previous annual reports do not include because the MIPP is not yet operational.

The NESHAP threshold for stack monitoring of 0.1 mrem/yr applies to individual facilities. As shown in Tables 5.3.7-8 and 5.4.7-5, the HCF would potentially exceed the 0.1 mrem/yr threshold.

Page	Section	Item	Suggestions/Concerns
VOLUME I-Facility Descriptions			
FD-1 through		Facility Descriptions	The organization presented on 2-9 as 10 facilities/facility groups and on 2-13 through 2-15 as 5 groups is confusing. To add to this confusion, the number of facilities sampled varies throughout the SWEIS. This variation gives the appearance that you are adding and subtracting the facilities at will (which, as you are already aware, is not a valid research design).
FD-3		Facilities Description	The descriptions themselves are wonderful They give the outsider a bird's eye view of some of the great work that goes on at Sandia.
FD1-68			Some facility descriptions have two headings and some have three: (1) Function and Description (2) Specific Processes, Activities, and Capabilities (3) Potential Hazards Whether or not the third heading exists, the information that would rightfully belong under the third heading is usually presented in the last paragraph. So why not be consistent and add the third heading to those that are missing the heading? Would you consider adding a fourth heading? (4) Hazard Mitigation
VOLUME I-Chapter 3			
3-2 to 3-8		Summary of Activity Level Tables	These tables are great!
3-9 to 3-21		Sections 3.2 through 3.4	These sections contain vast quantities of redundant information. Why not combine the information on the three alternatives for each facility in to one paragraph? Or better yet, simply dump all the redundant text and put the info in those neat Summary of Activity Level Tables you have presented earlier.
3-23		New SNL/NM facilities, expansions, and upgrades would be limited and would not require changes to current land ownership or classification status because these activities would be planned in or near existing facilities, within already disturbed or developed areas, or on land already under DOE control.	Are you stating here that (1) facilities could be constructed outside the current area bounded by the base? (2) Facilities could be constructed inside the base in areas where no current facilities exist? (3) How close to the KFAB borders is Sandia allowed to construct facilities?
3-23		Projected water usage would range from 416 M gal to 495 M gal per year.	Percentage? How much did water use increase between

19-6-15

Comment 19-6-15

Location of SWEIS Revision(s): None

Response: Pages 2-13 through 2-15 in the Draft SWEIS describe “Activities Common to All Alternatives.” The DOE assumes that the commenter is referring to Section 2.3.4 and Subsections 2.3.4.1 through 2.3.4.6. Subsection 2.3.4.1 discusses five selected facilities that do manufacturing, laboratory research and development, and testing. Subsection 2.3.4.2 through 2.3.4.6 each discuss a selected group containing several SNL/NM facilities.

19-7-13

See the response to comment 18-22-15 on the focus of the SWEIS analysis of selected facilities.

Comment 19-7-13

19-8-6

Location of SWEIS Revision(s): Facility Descriptions

19-9-13

Response: For consistency, the heading “Accelerator Hazards” has been removed from all facility descriptions. However, some facility descriptions discuss hazards, where relevant.

19-10-16

Comment 19-8-6

Location of SWEIS Revision(s): None

19-11-18

Response: Comment noted.

Comment 19-9-13

Location of SWEIS Revision(s): None

Response: The reviewer’s comment is acknowledged. The structure of the SWEIS was established to present information by alternative rather than by facility so each alternative could be reviewed independently. The trade-off was the introduction of redundancy in several sections.

*Comment 19-10-16**Location of SWEIS Revision(s): None*

Response: Future SNL/NM construction probably would occur in areas already owned by the DOE. As discussed in Section 4.3, the DOE owns 2,938 acres of land, of which all but approximately 86 acres are within KAFB. The 86-acre parcel is adjacent to KAFB on the west side of Eubank Blvd. The DOE could use this area outside KAFB for future construction; in fact, SNL/NM is studying this land for potential development as a technology research park.

In addition, SNL/NM could build facilities inside the KAFB boundary in areas where there are no facilities on land owned by the DOE. Several locations in each TA are vacant and could be used as building sites.

There are no known SNL/NM construction restrictions based on proximity to KAFB borders.

*Comment 19-11-18**Location of SWEIS Revision(s): None*

Response: Water usage from 1985 through 1996 at KAFB (including SNL/NM) declined by 33 percent (Table 6.4-3). SNL/NM's estimated portion of the KAFB total usage is one-third.

Page	Section	Item	Suggestions/Concerns
3-23		No activities planned for any of the alternatives would present a potential for slope destabilization. Slope instability has not been an issue in past SNL/NM operations and would likely not be a concern in the future.	1988 and 1998? Slope stabilization studies for earthquake scenarios, as required by DOE guidance, are typically missing from facility SARs. Structural analyses are common in SARs and characterization of geological structures under facilities is also included. However, where are the soil liquefaction and other earthquake-induced ground motion studies? Slope instability should be an issue!
3-23		3.6.3 Geology and Soils Under the Expanded Operations Alternative, there would be the potential for increased deposition of soil contaminants in outdoor testing areas. Potential contaminants would include DU fragments, explosive residue, and metals contained in weapons that are used in the tests. SNL/NM performs periodic sampling and radiation surveys in these testing areas. DU fragments are collected after tests. <i>Potential contaminants have not been detected at concentrations above background at current testing levels.</i>	This section mentions soils only at testing sites. Why are not the various areas with contaminated soil at Sandia spelled out in this section? Information appear in italics to the left later contradicted on page 4-29, paragraph 4, which reads, "Soil contamination also exists at some active SNL/NM outdoor test facilities." Isn't there Cs-137 in the soils at the Burn Site test area? How about the soils at the Mixed Waste Landfill, which are contaminated with tritium resulting from the disposal of reactor coolant water?
3-23		Groundwater contamination attributable to known SNL/NM activities is present at <i>one site</i> , the Chemical Waste Landfill (CWL) in TA-III. Under a no-cleanup scenario, the only contaminant exceeding U.S. Environmental Protection Agency concentration limits in groundwater would be trichloroethene (TCE), which occurs in a plume extending 410 ft from the CWL.	Is the CWL truly the only site? Are there not VOCs and TCE in groundwater in the TA-V area? Elevated nitrates in groundwater at the Burn Site? And TCE and nitrates in the perched aquifer under TA-I and TA-II? Also, is TCE truly the only contaminant at the CWL? Other Sandia publications show that, in addition to TCE, the groundwater under the CWL is contaminated with thallium, antimony, iron, and nickel.
		Groundwater contamination continued	Gross alpha has exceeded MCL at Well SFR Potassium-40 has recently been over the DOE guideline in four wells Radium-226 exceeded MCL at SFR-2s And so forth!
3-23		The estimated SNL/NM portion of local (in the immediate vicinity of KAFB) aquifer drawdown from 1998 to 2008 would range from 11 to 12 percent for all alternatives. Local drawdown would range from less than 1 to 28 ft across KAFB during this period. The potential consequence is	Why the shift from percent to feet? What does 1 to 28 ft in drawdown across KAFB represent in terms of 11 to 12 percent local drawdown? If the impacts are already adverse, can we afford the additional drawdown caused by water thirsty programs such as those

19-11-18, cont.
19-12-1
19-13-21
19-14-21
19-15-21
19-16-24
19-17-24
19-18-24
19-19-24
19-20-20
19-21-20

Comment 19-12-1

Location of SWEIS Revision(s): None

Response: Section 5.3.3.2 of the SWEIS presents an analysis of slope stability. The conclusion of the analysis is that slope failure is unlikely at SNL/NM facilities. See also the response to comment 17-13-21.

Comment 19-13-21

Location of SWEIS Revision(s): None

Response: SNL/NM is investigating or cleaning up soil contamination at inactive sites, as discussed in Section 5.3.3.1. The selection of the Expanded Operations Alternative would not affect this process. The SWEIS analyzes the potential for soil contamination resulting from projected increased levels of testing activity under the Expanded Operations Alternative.

Comment 19-14-21

Location of SWEIS Revision(s): Summary and Section 3.6.3

Response: See the response to comment 17-39-21. The sentence in question has been deleted in the Final SWEIS.

Comment 19-15-21

Location of SWEIS Revision(s): None

Response: Cesium-137 has not been a constituent of concern at the Lurance Canyon Burn Site. It has been detected at concentrations slightly above statistical background levels established for that portion of KAFB, but those concentrations appear unrelated to operations at the facility (SNL/NM 1998ff). In addition, the concentrations are below risk-based action levels. Refer to the text box "What is Background Concentration" in Section 5.3.7.1. See also the response to comment 6-10-26.

*Comment 19-16-24**Location of SWEIS Revision(s): None*

Response: Tritium has been detected in soils at the Mixed Waste Landfill as a result of the disposal of neutron generator tubes and neutron targets. Risk assessments show little exposure potential and risk from exposure. A cap is planned for the Mixed Waste Landfill that will mitigate tritium releases and provide a barrier to infiltration of rainwater. This action is subject to New Mexico Environment Department approval.

SNL/NM contamination is the result of past waste disposal practices; projected SNL/NM activities under each alternative would manage waste in accordance with Federal, state, and DOE regulations and guidelines, and with applicable permits and agreements.

*Comment 19-17-24**Location of SWEIS Revision(s): Various*

Response: See the response to comment 17-16-24. The text has been updated in the Summary and Sections 3.6.4, 4.6.1.3, and 5.3.4.1 to reflect these data.

*Comment 19-18-24**Location of SWEIS Revision(s): None*

Response: The presence of iron and nickel in groundwater samples from the CWL is believed to indicate either background concentrations or the dissolution of stainless-steel well screens (Section B.1.1.1 of Volume II). Thallium and antimony are at background concentrations in groundwater. Further, investigations of the CWL, particularly the Unsaturated Zone Contaminant Characterization Report (SNL/NM 1993f), have found no evidence of thallium or antimony contamination in soils. The presence of these metals is consistent with background concentrations.

*Comment 19-19-24**Location of SWEIS Revision(s): Various*

Response: Although several SNL/NM testing facilities are in the general area of these wells, no activities at these facilities have been connected with the constituents detected at the wells, which were not put in place to monitor SNL/NM facilities. Potassium-40 is a long-lived radioisotope that is almost ubiquitous in groundwater samples at KAFB because of the high concentrations found in granite terrains. The DOE believes that other constituents are also naturally occurring at the concentrations detected (see the discussion of background concentrations in the response to comment 6-10-26). Related text has been updated in the Summary and Sections 3.6.4, 4.6.1.3, and 5.3.4.1, as mentioned in the response to comment 17-16-24.

*Comment 19-20-20**Location of SWEIS Revision(s): None*

Response: The estimate of drawdown as a percentage provides a perspective on the relative impact of SNL/NM's water consumption, whereas presenting the drawdown in feet is a more concrete measure of potential impacts, as discussed in Section 5.3.4.2. SNL/NM's portion of drawdown at KAFB would range from near zero to a maximum of about 3 ft (depending on location) over the 1998-to-2008 period.

*Comment 19-21-20**Location of SWEIS Revision(s): None*

Response: See the response to comment 7-35-20 on water conservation.

Page	Section	Item	Suggestions/Concerns
		considered adverse.	conducted at the Microelectronics Lab (44 M gal of water a year).
3-23		No contaminants attributable to SNL/NM activities have been detected in surface water samples collected onsite.	The two important areas, III and V have no routine surface water monitoring or surface water monitoring stations. This statement is misleading. Contaminants cannot be detected unless sites are monitored. What period of time is this statement intended to cover? In 1997, the year when the majority of SWEIS info was gathered, total suspended solids, zinc, and iron exceeded permit limits at storm water monitoring Stations 4 and 5
3-14		SNL/NM has little effect on the quantity of surface water in arroyos or the Rio Grande.	Is this the real issue? Very little surface runoff from Sandia reaches the Rio Grande. However, surface water from various areas at Sandia is running into the soil in the areas surrounding Sandia facilities, carrying contaminants from those facilities into the nearby soils. The NUS person who talked to me at the Manzano meeting told me that contamination of Sandia soils didn't matter as ER would come by and clean it up. At what price tag to the tax payers? On page 4-2, the authors state DOE P 430 governs DOE's management of its land and facilities as valuable natural resources, based on the principles of ecosystem management and sustainable development. Is draining contaminants into Sandia soils in line with this policy?
3-24		Beneficial impacts to biological and ecological resources would occur under all alternatives. Restricted access and limited development and use have benefited biological resources at the KAFB.	Could you include a table listing studies that the DOE has financed that support this statement? Can the limited studies cited (raptor study and sacrificed rodents in two areas not centered on major radiological facility activity) support such a far reaching conclusion?
2-24		3.6.6.Cultural Resources	Check Summary comments for important changes to this section.
2-24		3.5.7 Air Quality Based on the analysis of stationary and mobile source emissions, carbon monoxide emissions from SNL/NM would be less than 1996 emissions under any alternative.	Am I reading this right? For the next 10 years, carbon monoxide emissions will remain below those of 1996?
		With the exception of one chemical (chromium trioxide), concentrations of noncarcinogenic chemicals emitted from 12 facilities on SNL/NM were projected to be below screening levels	How do these 12 facilities work into the original 10 or 5 sampling groups?
		The calculated radiological dose to an MEI would be 0.15 mrem/yr under the	Are you sure? These dose rates are two to three orders of magnitude higher than Sandia

19-21-20,
cont.

Comment 19-22-26

19-22-26

Location of SWEIS Revision(s): None

Response: See the response to comment 17-42-26.

19-23-26

Comment 19-23-26

Location of SWEIS Revision(s): Section 4.6.2.3

Response: See the response to comment 6-10-26. Section 4.6.2.3 has been updated to include 1997 monitoring data.

19-24-21

Comment 19-24-21

Location of SWEIS Revision(s): None

Response: The sentence referenced by the commenter summarizes the results of the surface water quantity analysis (described in Section 5.3.4.4 and Appendix B.3 of Volume II). Surface water quality was analyzed separately and is discussed in Section 5.3.4.3. The conclusion of the surface water quality analysis, as stated in the previous sentence in Section 3.6.4, is that no contaminants attributable to SNL/NM activities have been detected in surface water samples collected on the site. SNL/NM does not discharge wastewater to onsite arroyos, nor does it conduct activities at its facilities that would lead to surface water contamination. SNL/NM complies with RCRA and other Federal and state regulations that govern the discharge of hazardous materials. No uncontrolled releases are occurring. To clarify the response provided at the hearing, accidental spills would be cleaned up immediately in accordance with SNL/NM's Spill Prevention Control and Countermeasures Plan and, therefore, were not considered in the surface water quality analysis.

19-25-29

Comment 19-25-29

Location of SWEIS Revision(s): Section 4.7.3.1

Response: Section 3.6 presents a concise expression of the environmental effects of each alternative in a format that facilitates a comparative assessment of the alternatives. Studies and reports used in arriving at the

19-26-27

19-27-15

19-28-28

conclusion that “Beneficial impacts to biological and ecological resources would occur under all alternatives” were prepared by several agencies, including the DOE, SNL/NM, the USAF, and the USFS. These sources are cited in the more extensive discussions of the affected environment in Section 4.7, and are listed in the reference section (Chapter 8). Some studies were funded directly by the DOE, some were funded indirectly by the DOE through SNL/NM, and others were funded by the U.S. Department of Defense and U.S. Department of Agriculture. Additional sources, such as the KAFB Grassland Biodiversity Study (Parmenter and Chavez 1995), Raptor Survey and Management Strategies (USAF 1997b), and Ecological Monitoring for 1996 (SNL/NM 1997u) have been added in the Final SWEIS. Because the sources of information used in the preparation of the SWEIS are identified in relevant discussions, there is no need for a table specifically demonstrating studies financed by the DOE. The bulk of available information, combined with observation and professional judgment, supports the conclusions that beneficial impacts to biological and ecological resources would occur under all alternatives, and that restricted access and limited development and use have benefited biological resources at the KAFB.

Comment 19-26-27

Location of SWEIS Revision(s): Section 3.6.7

Response: Projected emissions of carbon monoxide from stationary sources at SNL/NM will remain unchanged for the next 10 years. Projected emissions of carbon monoxide from mobile sources (commuters and on-base vehicles) will decrease from 1996 levels for the next 10 years (SNL 1996c). To clarify this, the sentence in Section 3.6.7 has been revised to read “...annual carbon monoxide emissions...” See the response to comment 11-14-27.

Comment 19-27-15

Location of SWEIS Revision(s): None

Response: These 12 facilities are listed in Table 5.3.7–5 and in the text box in Appendix D (near Table D.1–4) in Volume II. Eleven of the 12 are selected facilities identified in Section 2.3; they are the NGF, MDL,

Advanced Manufacturing Processes Laboratory, Integrated Materials Research Facility, Explosive Component Facility, three accelerator facilities (Repetitive High Energy Pulsed Power I, Repetitive High Energy Pulsed Power II, and SPHINX), one reactor facility (HCF), and two infrastructure facilities (Steam Plant and RWMWF). The only additional facility was the CSRL, Building 893.

As stated in Section 2.3.2, “...some aspects of the impact analysis considered individual facility operations, regardless of whether the entirety of the facility met the criteria for detailed analysis. These aspects included evaluating chemical air emissions... .” The CSRL, while not specifically identified as a selected facility, was added to the air quality analysis because it purchased chemicals in the base year (1996). See Section 5.3.7.1

Comment 19-28-28

Location of SWEIS Revision(s): None

Response: The calculated radiological doses to an MEI under the three alternatives are based on the projected atmospheric radionuclide emissions (refer to Table D.2-1 in Volume II) for each alternative. Comparing the projected emissions to those of the base year, 1996 (Table 4.9-5), the HCF would have by far the highest radionuclide emissions, resulting in the highest dose to an MEI (refer to Tables D.2-7, D.2-8, and D.2-9 in Volume II). HCF radionuclide emissions are based on projected future medical isotope production operations. Therefore, the calculated doses in the SWEIS are much higher than the doses reported thus far by SNL/NM because the HCF is not yet processing medical isotope targets.

Page	Section	Item	Suggestions/Concerns
		No Action Alternative: <u>0.51 mrem/yr</u> under the Expanded Operations Alternative; and <u>0.02 mrem/yr</u> under the Reduced Operations Alternative.	normally reports. Although these new dose rates would be of no significance to worker or public health, two of these rates exceed the NESHAP cutoff of 0.1 mrem/yr. Therefore stack monitors would be required at some facilities at Sandia (which are expensive items to retrofit, at best).
3-26		The goal of the review was to determine the adequacy of existing onsite and offsite storage, treatment, and disposal capabilities. <u>Storage capacity for all anticipated waste types would be adequate.</u> Limited onsite hazardous and mixed waste treatment capacity would be within current permit limits	Are you saying that Sandia could safely store all its mixed waste generated over the next 10 years at current Sandia storage facilities?
3-26		LLW and LLMW would increase by a maximum of <u>198 percent</u> (from 3,322 ft ³ to 9,897 ft ³ per year, Table 3.6-2) and 69 percent (from 153 ft ³ to 258 ft ³ per year, Table 3.6-2), respectively, under the Expanded Operations Alternative. <u>One new operation, the Medical Isotopes Production Project would be the major contributor to this increase</u>	The Sandians I spoke to at the Manzano public meeting said the Moly 99 program would not generate mixed waste. Here you say it will generate LLMW. Will Sandia receive enough in return for produced isotope to justify a 200 percent increase in waste production?
3-27		3.6.1.4 Accidents	The Accidents section is not sufficient. Sandia works very hard to monitor and control routine emissions, discharges, and the like. I do not believe that these emissions/discharges will ever become a threat to the public. Also, small accidents, such as spills and leaks, receive good and effective response, thus mitigating damage to the environment Accidents/Natural Phenomna events (e.g., operator error, crane or forklift accidents, or earthquakes), on the other hand, do pose a real threat of releasing "bad stuff" to the public and the environment. It is in this area that I feel vigilance, and the discussion in the SWEIS, has been woefully inadequate. These catastrophic events are typically swept under a pile of statistics (e.g., the chances are 1/100,000 that Catastrophic event/accident A or C or Z would occur). Therefore, the thinking goes, we need not trouble ourselves further about these matters. At the same time, the DOE has published a whole bunch of new orders and guidance that says we should trouble ourselves further. For whatever reason, GOCOs aren't reading these orders and guidance carefully enough, and the DOE is not enforcing these very

19-28-28, cont.

19-29-28

19-30-34

19-31-34

19-32-7

19-33-37

19-34-6

19-35-37

Comment 19-29-28

Location of SWEIS Revision(s): None

Response: NESHAP regulations (40 CFR Part 61, Subpart H) require that the cumulative dose to the MEI member of the public from exposure to all site-wide radionuclide releases (all facilities) not exceed 10 mrem/yr. NESHAP regulations require monitoring for any source or facility that has the potential of contributing 0.1 mrem/yr or more to the MEI. Based on the calculated doses presented for each alternative from each source to each receptor in Appendix D of Volume II (Tables D.2-7, D.2-8, and D.2-9), stack monitoring could be required for the HCF for medical isotope production operations because those operations could contribute more than 0.1 mrem/yr to the total MEI dose under the No Action and Expanded Operations Alternatives. At this time, no other SNL/NM facility exceeds the 0.1-mrem/yr threshold that would require stack monitoring.

Comment 19-30-34

Location of SWEIS Revision(s): None

Response: In Sections 5.3.10.1, 5.4.10.1, and 5.5.10.1, the subsections on current capacity state that there is sufficient capacity to accommodate anticipated increases in radioactive wastes because only 4.2 percent of the total available capacity is in use.

Comment 19-31-34

Location of SWEIS Revision(s): Section 3.6.10

Response: See the response to comment 19-4-34.

Comment 19-32-7

Location of SWEIS Revision(s): None

Response: The DOE provided justification for the MIPP in the MIPP EIS ROD (61 FR 48921) and in Chapter 2 of the MIPP EIS. The brief discussion in Section 1.8.3 of the SWEIS does not revisit the decision in the MIPP EIS ROD.

Chapter 5 of the SWEIS discusses waste generation and related infrastructure impacts of the MIPP. SNL/NM has sufficient capability and capacity for handling the waste projections described for each alternative (see Sections 5.3.2, 5.4.2, and 5.5.2).

Comment 19-33-37

Location of SWEIS Revision(s): None

Response: See the response to comment 19-35-37, below.

Comment 19-34-6

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 19-35-37

Location of SWEIS Revision(s): None

Response: The DOE disagrees with the statements made by the commenter about the SWEIS accidents analysis. The DOE has made every effort to portray accurately the potential results for each accident analyzed. Presenting the results numerically provides the statistical likelihood that a specific accident could occur. Without such quantification, a reader might incorrectly think that the likelihood of a specific accident is far greater than it actually might be. Further, demonstrating the low probability of an accident (1 chance in 100,000) shows that safety is part of the design of specific facilities and the extensive effort to reduce the level of potential hazards to ensure the safety and health of workers and the general public. It is not the intent of the SWEIS to say that “we need not trouble ourselves further” about any issue, but to point out the low probability of a particular accident while also identifying the consequences.

Changes to DOE guidelines and orders were designed to make contractors, in general, more responsible for their actions and improve their performance. In the area of environment, safety, and health, the DOE published new guidelines on May 27, 1999, for the Integrated Safety Management System (DOE G 450.4-1A) that define the functions, responsibilities, and authorities in DOE contracting. Foremost in the

Page	Section	Item	Suggestions/Concerns
			<p>same directives.</p> <p>When it comes to public safety and the environment, an ounce of prevention costs millions, and sometimes billions, less than the pound of cure.</p>

I 19-35-37,
cont.

revisions to these guidelines is the requirement to provide a means for the DOE to evaluate contractors based on their performance. Known as “Performance Based Contracting,” these new guidelines describe performance requirements in terms of results rather than on the methods of doing work. Environment, safety and health is integrated into performance based contracting by evaluating the contractor’s ability to perform work safely; conducting work in a manner that ensures adequate protection for employees, the public, and the environment; proving that the contractor has exercised the appropriate degree of care commensurate with the work and associated hazards; and ensuring that management of environment, safety, and health functions and activities become an integral part of the contractor’s work planning and work execution. These terms and conditions are required of all DOE contractors and subcontractors. In this case, SNL is responsible for compliance with the requirements of its contract with the DOE, regardless of who performs the work. This means that SNL is responsible for providing these safety and health provisions to subcontractors at any tier to which it determines appropriate.

The release of hazardous chemicals and radioactive materials and the associated impacts to the environment and public are evaluated in Appendix F of Volume II. The results of the accident impacts are presented in Sections 5.3.8.2, 5.4.8.2, and 5.5.8.2. A summary of the results is presented in Section 3.6.14 and in the Summary.

June 12, 1999

Ms. Julianne Levings, EIS PO
Albuquerque Operations Office
US Department of Energy
PO Box 5400
Albuquerque, NM 87185-5400

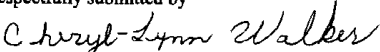
Dear Ms. Levings,

Below is my final comment on the SWEIS.

The information printed in the Environmental Information Document (EID) in many cases does not match the information reported in the SWEIS. The information reported in the EID appears to be more current than that reported in the SWEIS. Will the information in the SWEIS be updated to match that found in the EID?

20-1-14

Respectfully submitted by


Cheryl-Lynn Walker

Comment 20-1-14

Location of SWEIS Revision(s): None

Response: The commenter is correct that in some cases the information presented in the SWEIS does not agree with the draft EID (SNL/NM 1998f). This is because the EID is a working document that SNL/NM initially published in 1997. Since the publication of the EID, additional data and information have been collected that were not available at the time the EID was published. The information presented in the Draft SWEIS was more current than that in the EID. The EID will be modified to reflect incorporation of the more recent data.

1 PUBLIC COMMENT HEARING ON THE
2 SANDIA NATIONAL LABORATORIES/NEW MEXICO DRAFT SITE-WIDE
ENVIRONMENTAL IMPACT STATEMENT

3
4
5
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8
9
10

11 MAY 19, 1999

12 1:10 PM

13 UNM CONTINUING EDUCATION BUILDING
14 1634 UNIVERSITY BOULEVARD, NORTHEAST
15 ALBUQUERQUE, NEW MEXICO 87102

16
17
18
19

20 FACILITATOR:

21 MR. STEVE WILKES

22 FOR THE DEPARTMENT OF ENERGY:

23 MS. JULIANNE LEVINGS

24 MR. EARL WHITEMAN

Response to Comments Made at the Public Meetings

No comments identified.

1 MR. WILKES: Good afternoon.
2 My name is Steve Wilkes, and I've been asked
3 by the Department of Energy -- notice I did not say
4 DOE, this is to be an example for everyone so that we
5 all say the words -- I've been asked by the Department
6 of Energy to serve as the moderator for today's
7 meeting on the Sandia National Laboratory Site-Wide
8 Environmental Impact Statement.
9 This is the kind of work I do, run various
10 kinds of meetings. Because I'm not a DOE employee,
11 I'm seen as more of a -- I have no vested interest in
12 the outcome of this, I just want to keep the meeting
13 moving.
14 Just so you know, we have two desired
15 outcomes for today's session. One is to get public
16 input to the draft Environmental Impact Statement -
17 that's one of the objectives, that's what this room is
18 about; and in the next room, there is another desired
19 outcome that we hope is achieved, and that is to raise
20 public awareness around this whole area of the
21 Environmental Impact Statement, the different sites,
22 different issues and so forth.
23 Any displays and people who know a lot about
24 those topics are in the room next door. So that's
25 where you can get a lot of questions answered. This

No comments identified.

1 is the room where you can give your input.
2 Although this session is not set up as a
3 question/answer session, it's truly to get comments on
4 this draft statement, so that then the folks can know
5 what they need to be addressing.
6 If questions come up, both Earl Whiteman and
7 Julianne Levings will be happy to answer them, if
8 there is something that is just an informational
9 piece.
10 So I told you about the two rooms. I'd like
11 to now introduce the Project Manager for the
12 Department of Energy's Environmental Impact Statement
13 Project Office, and that's Julianne Levings.
14 MS. LEVINGS: Please let me know if you
15 can't hear me and I can use the mike. Just if I'm
16 starting to speak too softly, raise your hand or
17 something.
18 Okay. Anyway, good afternoon and welcome.
19 My name is Julianne Levings. I'm the Department of
20 Energy Project Manager who is responsible for the
21 preparation of the draft Sandia National Laboratories/
22 New Mexico Site-Wide Environmental Impact Statement.
23 The purpose of today's meeting is to collect
24 public comments on this draft Site-Wide EIS, and these
25 will serve as the basis -- the EIS and the comments we

No comments identified.

1 receive will serve as the basis for DOE's decision on
2 the future of Sandia National Laboratories here in New
3 Mexico.
4 The Department of Energy proposes to
5 continue operations at Sandia National Laboratories,
6 and we have identified and assessed three alternatives
7 for operation of the laboratory.
8 The three alternatives are the no action
9 alternative, the expanded operations alternative and
10 the reduced operations alternative.
11 Under the no action alternative, the
12 Department of Energy would operate Sandia Labs at
13 planned levels as reflected in current Department of
14 Energy management plans.
15 In the expanded operations alternative, the
16 Department of Energy would increase activity at Sandia
17 to the highest reasonable level that could be
18 supported by current facilities, and also includes the
19 potential expansion or construction of new
20 facilities.
21 Under the reduced operations alternative,
22 the Department of Energy would operate Sandia National
23 Laboratories at the minimum levels of activity
24 necessary to maintain facilities and equipment in an
25 operational readiness mode.

No comments identified.

1 In fact, this last alternative was added as
2 a result of comments that we received from several
3 members of the public during the public scoping period
4 for this EIS.
5 The draft Environmental Impact Statement
6 evaluates each of these alternatives and their
7 potential impact to the environment. Under all of the
8 alternatives, the affected environment is primarily
9 the area within 50 miles of the laboratory.
10 The draft EIS was completed and was sent to
11 the public on Friday, April 9th, 1999. The formal
12 Notice of Availability appeared a week later in the
13 Federal Register on Friday, April 16th, 1999, and that
14 was the formal start of our public comment period.
15 This comment period extends for 60 days, until June
16 15th.
17 Looking forward in terms of what it is we're
18 going to be doing, the current plans for the
19 Department of Energy are to review all of the public
20 comments that we receive during the comment period, to
21 respond to those comments in a comment and response
22 volume to the Site-Wide EIS, to make any necessary
23 updates to the main volumes of the EIS, and to publish
24 a final EIS in late fall of this year, 1999.
25 Following the completion and distribution to

No comments identified.

1 the public of the final EIS, a Record of Decision will
2 be issued by the Department no sooner than 30 days
3 following publication in the Federal Register of the
4 Notice of Availability of the final.
5 This is the first in a series of five
6 meetings. There will be a second meeting held here
7 tonight between 6:00 and 9:00. There will be two more
8 meetings held tomorrow at Manzano High School at their
9 library, one in the afternoon and one in the evening;
10 and there will be a fifth meeting, which will be held
11 Saturday afternoon, at the South Broadway Cultural
12 Center, and that meeting runs from 1:00 until 4:30.
13 The Department of Energy will accept
14 comments through Tuesday, June 15th, 1999, on this
15 draft EIS.
16 In addition to making oral comments at this
17 meeting, comments will also be accepted by a variety
18 of other means. There are comment cards available at
19 the registration desk out in the hall, and they can be
20 handed in today, if you want to write your comments
21 down, or they can be mailed to the Department of
22 Energy. The comment forms have a mailing address on
23 them, all you have to do is put your comments down,
24 fold it up and stamp it and throw it in the mail.
25 We also have an EIS hotline, and the phone

No comments identified.

No comments identified.

1 number for that -- I'm going to give you some
2 specifics here, but they are available on these little
3 three-by-five cards, so you don't need to write
4 anything down, all you have to do is get one of these
5 if you need one.
6 We have a hotline number, which is --
7 MR. WILKES: It's right over here.
8 MS. LEVINGS: I didn't see that. Thank
9 you. And it's also on the wall.
10 Okay. 1-888-635-7305. That hotline is
11 available 24 hours a day. Between 9:00 AM and 5:00 PM
12 --it will be manned during business hours and you
13 can call and leave your comments orally, they will be
14 recorded by the person that answers the phone, if
15 you'd like to leave your comments that way.
16 After business hours, we do have sort of a
17 menu on the phone line and you just follow the
18 instructions on the menu and you can record your
19 comments that way as well.
20 If you want to mail comments in, you can
21 mail them to me at Julianne Levings, US Department of
22 Energy, Albuquerque Operations Office, which is Post
23 Office Box 5400, Albuquerque, New Mexico, 87185.
24 That's also on this little card.
25 You can fax comments to area code

1 National Laboratories, there is a poster-board session
2 that is available next door, and it is staffed by
3 Sandia Laboratory people who are very familiar with
4 the operations at their various facilities.
5 The displays and fact sheets in the other
6 room are intended to provide you with additional
7 information and they are not a part of the official
8 public meeting.
9 At this time, I'd like to introduce
10 Mr. Michael Zamorski, who is seated at my left. He's
11 the Area Manager for the Department of Energy Kirtland
12 Area Office, which is the office responsible for
13 day-to-day oversight of Sandia National Laboratories.
14 In his role as Area Manager, Mr. Zamorski is
15 responsible for assuring the satisfactory performance
16 of Sandia National Laboratories and the performance of
17 safety, environmental compliance and security.
18 His office is also responsible for oversight
19 of the construction projects, the medical isotope
20 program, the environmental restoration project and
21 waste management program.
22 Further, Mr. Zamorski's office is also the
23 administrator of the prime contract between the
24 Department of Energy and Lockheed Martin for operation
25 of Sandia National Laboratories.

No comments identified.

1 stockpile management and stockpile stewardship
2 functions performed here in Albuquerque. He also has
3 the overall responsibility for technical management of
4 the activities that were covered in the Stockpile
5 Stewardship and Management Programmatic Environmental
6 Impact Statement, or PEIS.

7 Mr. Whiteman has worked for the Department
8 of Energy, and its predecessor agencies, since 1972
9 and has extensive experience in nuclear weapons
10 development, production and program management.

11 Mr. Whiteman.

12 MR. WHITEMAN: I'd like to welcome you all
13 this afternoon.

14 I don't think I have anything to add to what
15 Steve and Julianne have offered. We're here to hear
16 your comments, and please provide them.

17 MR. WILKES: Okay. Today's meeting will be
18 structured to allow the maximum number of speakers to
19 provide their comments on the draft Sandia National
20 Labs Site-Wide Environmental Impact Statement.

21 If you wish to speak, as Julianne said,
22 would you please fill out one of these cards? The
23 reason is just to make sure that your name gets in the
24 record as an official public comment. They are up
25 here, if you want one, or they are out on the table.

No comments identified.

1 As I said, this will allow us to appropriately
2 identify each commenter in the transcript of today's
3 meeting.
4 Speakers representing themselves, if we have
5 a lot -- many speakers, will be allowed five minutes
6 if you represent an individual. If you represent an
7 entire organization, it would be ten minutes, if we
8 get into that situation.
9 It doesn't look like we have that number of
10 people here to comment, but if it does, I'll try to
11 keep track -- if we do have that number of people,
12 I'll try to keep track of the time.
13 Would you please limit your comments to this
14 meeting, which is about the Sandia National
15 Laboratories Environmental Impact Statement. There
16 are many other Department of Energy related issues
17 that people may be interested in and you may want to
18 make a comment about, but those comments will not -
19 are not relevant to this meeting.
20 The only comments, if I understand it
21 correctly, that are going to be used in this meeting
22 are the ones relevant to the Sandia National Labs
23 Environmental Impact Statement.
24 You'll hear "EIS" a lot from people, that is
25 Environmental Impact Statement.

No comments identified.

1 We do have a court stenographer here, Kathy
2 Townsend, and she's here to record today's events for
3 the official record, so please speak clearly when
4 making your comments. We can bring one of these
5 remote mikes out to you if people can't hear. I'll
6 ask you, Kathy, if you can't hear, we'll get a mike to
7 somebody.
8 Please raise your hand if you wish to make a
9 comment.
10 Si necesario interprete, Senior Arturo
11 Sandoval -
12 MR. TABER: He stepped out.
13 MR. WILKES: If you need an interpreter,
14 please, we do have someone. In fact, would you mind
15 seeing if he's there?
16 If you wish to hand in a written copy of
17 your comments while providing additional supporting
18 materials, they'll be accepted for the record as
19 well.
20 In the event there are no new speakers
21 wishing to make formal comments during this time
22 period this afternoon, we will temporarily adjourn the
23 meeting for 30 minutes, give people a chance to look
24 next door, see if new people arrive which simply
25 couldn't make it during the first part of the meeting,

No comments identified.

1 and we'll reconvene in about 30 minutes just to see if
2 there are more people who wish to make comments.
3 This meeting will be available to accept
4 comments until 5:00 PM this afternoon; and, of course,
5 as you heard from Julianne, there will be another
6 meeting from 6:00 to 9:00, so if you know of people
7 who want to make comments, they can come to that.
8 Remember, there are two desired outcomes:
9 one is to get a clear, accurate record of your public
10 comments; second is to raise people's awareness of
11 what's being considered, the kinds of areas and so
12 forth, and that's next door.
13 I will be using a flip chart here simply to
14 note key words of comments that are made so that
15 others who may walk in later or people here will know
16 what kinds of comments have been made.
17 What I note up here is not the official
18 record, it's simply to keep the conversation moving.
19 So the official record will go here and on whatever
20 you submit in the written comments.
21 So with that, are there public comments on
22 the draft Environmental Impact Statement?
23 MR. JEKOWSKI: I have a question. I'm John
24 Jekowski, J-e-k-o-w-s-k-i. I'm president of
25 Technology Industries Association of New Mexico.

No comments identified.

1 My question is, is there any plan to publish
2 the public comments that are made in a timely fashion
3 so that those could be reviewed by individuals? 21-1-1

4 MS. LEVINGS: You mean in addition to the
5 comment and response volume where there are answers to
6 the comments, you would like to review the comments
7 prior to seeing the answers?

8 MR. JEKOWSKI: I don't have a preference. I
9 was just wondering what that process was. And what
10 you're saying is there will be some publishing of
11 responses? 21-2-1

12 MS. LEVINGS: Yes. There will be another
13 volume to this EIS. There will be a fourth volume for
14 the final, and that's the comment and response volume,
15 and we'll take all of the comments that we receive
16 today, and through all of the channels that we talked
17 about, and we will develop responses for them, and
18 they will be responded to individually in the comment
19 and response volume.

20 MR. JEKOWSKI: Okay. That answers my
21 question.

22 MS. LEVINGS: And that publication date
23 we're estimating to be late fall of this year.

24 MR. JEKOWSKI: Okay.

25 MR. WILKES: Any other comments people would

Comment 21-1-1

Location of SWEIS Revision(s): None

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript.

Comment 21-2-1

Location of SWEIS Revision(s): None

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript.

1 like to make?
2 Arturo is here. I just want to point out
3 Arturo Sandoval. Any comments for Arturo?
4 MR. SANDOVAL: I was actually out talking to
5 a Spanish man, but they were at the wrong meeting.
6 MR. WILKES: Any other comments for the
7 record on the draft Environmental Impact Statement?
8 No comments?
9 Not hearing any, would you like to give
10 people a few minutes to look next door and then check
11 again?
12 Shall we set a time when we will reconvene?
13 MR. WHITEMAN: 2:00.
14 MR. WILKES: 2:00, we will reconvene to get
15 any other public comments. Remember all the different
16 ways, E-mail, phone and written here are all ways
17 comments can get into the process on this
18 Environmental Impact Statement.
19 2:00, we will reconvene. Next door, help
20 yourselves to the information.
21 (Recess held from 1:22 PM to 2:00 PM.)
22 finish your sentences and we'll reconvene.
23 This is the public meeting to get comments
24 from the public on the Sandia National Laboratories

No comments identified.

1 Draft Environmental Impact Statement.
2 We convened this meeting at 1:00 and had one
3 comment and we said we'd meet again -- reconvene at
4 2:00, and it is that time.
5 I announced in the room next door if you
6 folks have comments to come over here and so we'd like
7 to reconvene.
8 Are there any comments that people would
9 like to go into the public record on the draft
10 Environmental Impact Statement?
11 Would you please say your name so we can get
12 it in the record?
13 MR. KINNEY: I'm Harry Kinney, K-i-n-n-e-y.
14 I worked at Sandia Lab from '56 through
15 '73. Later, I was the mayor of Albuquerque for about
16 ten years. I have been in Albuquerque for 55 years,
17 so I have watched Sandia and watched its development,
18 and since my retirement in 1973, have been very
19 closely associated with it and realize that some of
20 the cleanup problems that I see you're still working
21 with are some of them that I may have helped leave
22 there, but I think they've been handled very well.
23 When I look at the emphasis on safety, that
24 was true even 25, 30 years ago. I have participated
25 in some of the full-scale tests where we would bring

21-3-6

*Comment 21-3-6**Location of SWEIS Revision(s): None*

Response: Comment noted.

1 back exposed material into Sandia Area 3 and
2 disassemble certain things, clean it up and photograph
3 it and inspect it and test it and send some of the
4 residue up to Los Alamos.

5 I realize -- and I know that we were very
6 careful about the environment then, it was some very
7 farsighted people who had an effect on that, and I
8 realize that throughout the total environment of New
9 Mexico, Sandians have always been concerned.

21-4-6

10 Just the other day, Mr. Richard Beese, who
11 was the former vice-president of Sandia, was honored
12 as a member of the Senior Hall of Fame, and they
13 mentioned several great things he'd done, mainly in
14 the archeological and other things, but I remember
15 clear back in the '50's when Dick Beese was part of -
16 as an employee of Sandia, really, was the first one to
17 recognize the long-time water problem the City of
18 Albuquerque had and really -- and temporarily solved
19 it, and he knew at that time it was a temporary
20 solution, spent a lot more money for pumps and things
21 like that.

22 Since then, Sandians have participated in
23 the environmental community in helping this be a
24 better place to live.

21-5-6

25 Mr. Bill Kingsley, who used to be head of

Comment 21-4-6

Location of SWEIS Revision(s): None

Response: Comment noted.

Comment 21-5-6

Location of SWEIS Revision(s): None

Response: Comment noted.

1 environmental health at Sandia, was very much
2 instrumental in the city and county passing -- and it
3 was the county who passed the first air quality
4 ordinance in the State of New Mexico -- and he is a
5 volunteer and helped write the ordinance and make sure
6 it would do its job.
7 Later on -- a few years later when the city
8 had its air quality ordinance, he and others
9 participated in that. I just think that their
10 leadership has been invaluable to our community.
11 One thing that the people who haven't been
12 around in sort of the depression times of -- prior to
13 World War II, and even right after World War II, when
14 jobs were scarce and there was very little
15 opportunities for people from small communities of New
16 Mexico -- it's different now. Now, you come to
17 Albuquerque and Los Alamos or White Sands and places
18 and find decent jobs. It's made a world of difference
19 in the quality of life for many young people.
20 We think that the growth, which causes
21 problems and traffic problems and pollution, is bad,
22 but it also -- and having grown up in a small
23 community, in Raton, New Mexico, where all we had was
24 the railroad, and I worked for the railroad right at
25 the beginning of World War II and left for World War

21-6-6

*Comment 21-6-6**Location of SWEIS Revision(s): None*

Response: Comment noted.

1 II, and I realized that was a dead-end job, I had to
 2 do something else, so I came to Albuquerque, as many
 3 others.

4 So that has made New Mexico a lot better
 5 place to live, and young people who have good academic
 6 records previously to these opportunities would have
 7 very little to do, they'd stay at home and they'd work
 8 for the railroad or the highway department or be in
 9 ranching or something like that, but now with Sandia
 10 and Kirtland and the other related -- they have really
 11 made this a healthier place, New Mexico, because there
 12 is good jobs, good opportunity for medical care and
 13 education that makes us a better state.

14 So anybody that complains a little bit
 15 about, well, particles that may have been buried 50
 16 years ago -- and we thought at that time it was a safe
 17 -- a safe way to do it, and still we have not had any
 18 -- any adverse effect.

19 I was in the Navy during the Korean War, and
 20 about the time that -- after years of using -- the
 21 Navy used carbon tetrachloride to clean up the various
 22 electrical and mechanical parts, and two sailors were
 23 in the bottom of ships someplace using carbon
 24 tetrachloride and they died of the fumes immediately.
 25 This was probably 1952. Ah-oh, we can't use that,

21-7-6

21-8-8

*Comment 21-7-6**Location of SWEIS Revision(s): None*

Response: Comment noted.

*Comment 21-8-8**Location of SWEIS Revision(s): None*

Response: Past material management practices at SNL/NM have resulted in an adverse impact to groundwater quality, as discussed in Section 5.3.4. The DOE and SNL/NM are working with the New Mexico Environment Department to characterize the vertical and lateral extent of the impact, especially where the source of the contamination is in question. When the characterization is complete, the DOE, SNL/NM, and New Mexico Environment Department will agree on appropriate measures to address the impacts.

1 let's use try trichloroethylene, it's great stuff,
 2 it's the safest stuff in the world, can do
 3 everything.
 4 Of course, prior to that, I was a mechanical
 5 engineer, I had the decency to get a lot of grease on
 6 me, and I used carbon tetrachloride to practically
 7 take a bath in, but after that trichloroethylene was
 8 the great stuff, we had no worries about it, and now a
 9 lot of our cleanup effort in hazardous waste is
 10 directed to stuff that we practically drank back there
 11 in the '50's, and I'm sure there is some medical
 12 evidence that shows that we did take the right steps,
 13 but to be overly concerned is not to be too wise.
 14 I just want to congratulate the continued
 15 management of the Department of Energy and Sandia Labs
 16 for the leadership they've had in making New Mexico -
 17 all of New Mexico a better place to live.
 18 Thank you.
 19 MS. LEVINGS: Thank you.
 20 MR. WILKES: Thank you, Mr. Mayor.
 21 Are there other comments?
 22 We did have one question back here, how can
 23 people get a copy of the draft?
 24 MR. TABER: We have copies here, if they'll
 25 just see me.

21-9-6

*Comment 21-9-6**Location of SWEIS Revision(s): None*

Response: Comment noted.

1 Who would like it?
2 MR. WILKES: Right over here. The woman
3 over here wanted a copy.
4 MR. TABER: I'll get that for you right
5 now.
6 MR. WILKES: Are there any other comments on
7 the Environmental Impact Statement, the draft?
8 MR. KINNEY: I should have talked longer.
9 MR. WILKES: Well, not hearing any comments,
10 we are here -- this meeting is scheduled to go from
11 1:00 until --
12 MS. LEVINGS: 5:00.
13 MR. WILKES: -- 5:00, thank you.
14 Would you like to adjourn for another period
15 of time --
16 MS. LEVINGS: I think we should.
17 MR. WILKES: -- see if other people can
18 arrive and reconvene?
19 How long would you like?
20 MS. LEVINGS: I don't know. Quarter to
21 3:00? That's about 35 minutes.
22 If there are other people who have arrived who have
23 comments to make.
24 Thank you.
25 We are adjourned until then.

No comments identified.

No comments identified.

1 (Recess held from 2:06 to 2:45 PM.)
2 MR. WILKES: Please finish your sentences
3 and we will reconvene.
4 We said we'd reconvene about quarter to
5 3:00. It is that time.
6 Is there anyone who has a comment for the
7 Sandia National Laboratories Draft Environmental
8 Impact Statement at this time?
9 Let the record show we waited a good ten
10 seconds here.
11 I don't see anyone, so, Julianne, what would
12 you like to do?
13 MS. LEVINGS: I don't know. 3:30, 45
14 minutes?
15 MR. WILKES: Okay.
16 MS. LEVINGS: Adjourn until 3:30.
17 MR. WHITEMAN: Works for me.
18 MR. WILKES: We'll reconvene at 3:30 to see
19 if any people have arrived at that time.
20 We are now adjourned.
21 (Recess held from 2:46 to 3:30 PM.)
22 MR. WILKES: This is the formal reconvening
23 of this meeting. You don't need to move anywhere
24 right now, I don't think.
25 I don't think -- I announced next door,

No comments identified.

- 1 there was no one next door who was here to make a
2 comment.
3 Is there anyone in this room who would like
4 to make a comment on the draft Environmental Impact
5 Statement?
6 No hands went up. No comments.
7 So we will adjourn until 4:15, is that
8 correct?
9 MS. LEVINGS: Yes.
10 MR. WILKES: And then we'll reconvene.
11 (Recess held from 3:31 to 4:15 PM.)
12 MR. WILKES: It is 4:15.
13 Is there anyone here for a comment, to make
14 a comment about the draft Environmental Impact
15 Statement?
16 Not seeing anyone -- not seeing anyone or
17 hearing any voices, we will adjourn then, and we will
18 check right before the end of this meeting, which will
19 be about five minutes to 5:00, to check to see if
20 anyone has shown up.
21 If anyone comes in the meantime, we will
22 reconvene when they get here; is that right?
23 MS. LEVINGS: Exactly. (Recess held from 4:16 to 4:56 PM.)
24 MR. WILKES: We will reconvene.
25 It is five

1 til -- in fact, it's four to 5:00.
2 Is there anyone here with a comment, public
3 comment, comment from the public on the draft
4 Environmental Impact Statement?
5 No responses.
6 So we will adjourn and reconvene for the
7 evening meeting at 6:00, 6:00 to 9:00, same place.
8 MS. LEVINGS: Yes.
9 MR. WILKES: Okay.
10 (Adjourned at 5:00 PM.)
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No comments identified.

1 STATE OF NEW MEXICO)
2)ss.
3 COUNTY OF BERNALILLO)
4 I, Kathy Townsend, the officer before whom the
5 foregoing proceedings were taken, do hereby certify
6 that I personally recorded the proceedings by machine
7 shorthand; that said transcript is a true record of
8 the proceedings; that I am neither attorney nor
9 counsel for, nor related to or employed by any of the
10 parties to the action in which this matter is taken,
11 and that I am not a relative or employee of any
12 attorney or counsel employed by the parties hereto or
13 financially interested in the action.

15

16 _____
16 NOTARY PUBLIC
CCR License Number: 23
17 Expires: 12/31/99
18 My Commission Expires: 9/12/01

19

20

21

22

23

24 KATHY TOWNSEND COURT REPORTERS (505) 243-5018 110
25 TWELFTH STREET, NW, ALBUQUERQUE, NM 87102

No comments identified.

No comments identified.

1 PUBLIC COMMENT HEARING ON THE
2 SANDIA NATIONAL LABORATORIES/NEW MEXICO
3 DRAFT SITE-WIDE ENVIRONMENTAL IMPACT STATEMENT

4
5
6
7
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9
10

11 MAY 19, 1999

12 6:14 PM

13 UNM CONTINUING EDUCATION BUILDING
14 1634 UNIVERSITY BOULEVARD, NORTHEAST
15 ALBUQUERQUE, NEW MEXICO 87102

16
17
18

19 FACILITATOR:

20 MR. STEVE WILKES

21 FOR THE DEPARTMENT OF ENERGY:

22 MS. JULIANNE LEVINGS

23 MR. MIKE ZAMORSKI

1 MR. WILKES: Let me officially announce that
2 since we have only two people who were not here this
3 afternoon, they've decided they would be willing to
4 wait a few minutes to see if anybody else shows up,
5 and then the next room is available, also, for
6 displays and so forth during that time, and regardless
7 of who shows up or doesn't show up, we will convene at
8 6:30 to hear the comments from you folks, but
9 otherwise you'll be the only ones, and they said
9 they'd be happy to wait just so they could hear what
10 the other comments were.
12 We won't formally convene at this point, and
13 we'll wait until 6:30 to see if anyone else is here.
14 6:30, folks.
15 (Recess held from 6:15 to 6:33 PM.)
16 MR. WILKES: Please finish your sentences,
17 have a seat, and we will convene.
18 Good evening. Welcome. My name is Steve
19 Wilkes.
20 I've been asked by the Department of Energy
21 to serve as the moderator for this input session, this
22 public meeting on the Sandia National Laboratories
23 Site-Wide Environmental Impact Statement. I have no
24 vested interest in the outcome of these meetings, I'm
25 not an employee of Sandia or the Department of

No comments identified.

1 Energy.
2 You folks probably have found already where
3 the restrooms are in this place and the exits and so
4 forth, but obviously they are out that door, all
5 right, and to your left.
6 Coffee, I think -- do we have coffee here?
7 If you would like some of that.
8 We have two rooms, as you probably noticed,
9 one in here for the public comments, one next door for
10 information.
11 Now, let me introduce the Project Manager
12 for the Department of Energy's Environmental Impact
13 Statement Project Office, Julianne Levings.
14 MS. LEVINGS: This time I'm going to use the
15 mike. Some people had trouble hearing me before.
16 So good evening and welcome. My name is
17 Julianne Levings. I'm the Department of Energy
18 Project Manager who is responsible for the preparation
19 of the draft Sandia National Laboratories Site-Wide
20 Environmental Impact Statement.
21 The purpose of today's meeting is to collect
22 public comments on this EIS. This EIS will then serve
23 as the basis for Department of Energy's decision on
24 the future of Sandia National Laboratories in New
25 Mexico.

No comments identified.

1 The Department of Energy proposes to
2 continue operations at Sandia. The DOE has identified
3 and assessed three alternatives for the operation of
4 the laboratory. Those alternatives are the no action
5 alternative, the expanded operations alternative and
6 the reduced operations alternative.
7 Under the no action alternative, the
8 Department of Energy would operate at planned levels
9 as reflected in current DOE management plans.
10 In the expanded operations alternative, the
11 DOE would increase activity at Sandia to the highest
12 reasonable level that could be supported by current
13 facilities, and it also includes the potential
14 expansion or construction of new facilities.
15 Under the reduced operations alternative,
16 the Department of Energy would operate Sandia/New
17 Mexico at the minimum level of activity necessary to
18 maintain facilities and equipment in operational
19 readiness mode.
20 In fact, this last alternative was added as
20 a result of public comments that were received from
21 several members of the public during the public
23 scoping period for this EIS.
24 The draft Environmental Impact Statement
25 evaluates each of these alternatives and their

No comments identified.

No comments identified.

1 potential impact to the environment. Under all of the
2 alternatives, the affected environment is primarily
3 the area within 50 miles of the laboratory.
4 The draft EIS was completed and sent to the
5 public on Friday, April 9th, 1999. The formal Notice
6 of Availability appeared in the Federal Register a
7 week later on Friday, April 16th, 1999, which was the
8 start of the formal public comment period. This
9 comment period extends for 60 days, until June 15th,
10 1999.
11 Looking forward, the current plans are for
12 the Department of Energy to review all of the public
13 comments that are received during the comment period,
14 including those here at the meeting, and to respond to
15 those comments in a comment and response volume to the
16 Site-Wide EIS, to make any other necessary updates to
17 the main volumes of the document, and then to publish
18 a final EIS in late fall of this year, 1999.
19 Following the completion and distribution to
20 the public of the final EIS, a Record of Decision will
21 be issued by the Department not sooner than 30 days
22 following formal publication of a Notice of
23 Availability of the final EIS in the Federal
24 Register.
25 This is the second in a series of five

1 meetings that is being held here today. This session
2 will run from 6:00 until 9:00 this evening. There
3 will be two more meetings that will be held tomorrow
4 at the Manzano High School. There will be one in the
5 afternoon and another in the evening. Finally, we
6 will hold a fifth meeting this coming Saturday
7 afternoon at the South Broadway Cultural Center from
8 1:00 until 4:30 PM.

9 The Department of Energy will accept
10 comments through Tuesday, June 15th.

11 In addition to making oral comments at this
12 meeting, comments will be accepted in a variety of
13 methods. There are comment cards available out by the
14 registration desk that can be handed in today, if you
15 want to write your comments, or you can mail them back
16 to the Department of Energy. The comment cards have
17 an address preprinted on them, you can just fold up
18 the cards and put a stamp on them and send them in the
19 mail.

20 You can also make comments by calling the
21 Department of Energy's EIS hotline, and that number is
22 up on the wall right over here. That hotline is
23 available 24 hours a day, and during business hours
24 between 9:00 AM and 5:00 PM, there will be a live
25 person who will answer the line, and you can record

No comments identified.

1 your comments -- they'll have a recorder and you can
2 record your comments to them, or after hours and on
3 the weekends, there is a recorded message on the line
4 with a menu and you can just follow the instructions
5 and leave your message on a recorded line.
6 If you want to mail in your comments, you
7 can mail them to me, and my address is Julianne
8 Levings, US Department of Energy, Albuquerque
9 Operations Office, PO Box 5400, Albuquerque, New
10 Mexico, and the ZIP code is 87185.
11 You can also fax them to this telephone
12 number: 505 845-6392.
13 And last of all, you could send us an
14 E-mail, for those of you that are on the Web, and the
15 E-mail address is inforequest, all one word, at
16 nepanet.com.
17 This information is available on some little
18 three-by-five cards, like the one I have up here, that
19 are available out by the registration desk, and it has
20 all of the information I just stated.
21 So if you're interested in commenting in one
22 of these other forms, please be sure to take one of
23 these with you.
24 If you're interested in further information
25 about some of the experimental facilities at Sandia

No comments identified.

1 National Laboratories, there is a poster-board session
2 that is available next door, and it is staffed by
3 Sandia Laboratory people who are very familiar with
4 the operations at their various facilities.
5 The displays and fact sheets in the other
6 room are intended to provide you with additional
7 information and they are not a part of the official
8 public meeting.
9 At this time, I'd like to introduce
10 Mr. Michael Zamorski, who is seated at my left. He's
11 the Area Manager for the Department of Energy Kirtland
12 Area Office, which is the office responsible for
13 day-to-day oversight of Sandia National Laboratories.
14 In his role as Area Manager, Mr. Zamorski is
15 responsible for assuring the satisfactory performance
16 of Sandia National Laboratories and the performance of
17 safety, environmental compliance and security.
18 His office is also responsible for oversight
19 of the construction projects, the medical isotope
20 program, the environmental restoration project and
21 waste management program.
22 Further, Mr. Zamorski's office is also the
23 administrator of the prime contract between the
24 Department of Energy and Lockheed Martin for operation
25 of Sandia National Laboratories.

No comments identified.

1 Mr. Zamorski.
2 MR. ZAMORSKI: Thank you, Julianne.
3 On behalf of the Department of Energy, and
4 particularly on behalf of my office, the Kirtland Area
5 Office, I'd like to welcome everyone to this evening's
6 session for public comments on the Sandia Site-Wide
7 Environmental Impact Statement.
8 My office is a group of about 50 people.
9 We're located on site at the lab with Sandia. We
10 interact with them on a lot of operational activities
11 from day to day.
12 We're looking forward to receiving the
13 comments this evening. We welcome them. This is the
14 part of the meeting where we're going to hear
15 comments, but at a break, if anyone has any questions
16 about my office or about the Department of Energy, in
17 general, I'd be happy to engage in discussions with
18 you or try to answer questions.
19 Thank you.
20 MR. WILKES: Today's meeting has been
21 structured to allow everyone a chance to give their
22 input.
23 Since we have just a few folks, it may not
24 be that necessary, but if more people show up, I want
25 to make sure people are clear on the process.

No comments identified.

1 If you wish to speak, please fill out a
2 speaker's registration card to make sure your name
3 gets into the record. If you're representing
4 yourself, you have five minutes to speak. If there
5 are people representing entire organizations, it will
6 be ten minutes.
7 If you would, please, limit your comments to
8 the Sandia National Labs Site-Wide Environmental
9 Impact Statement. There are many other issues that
10 may be related to the Department of Energy, but that's
11 what this session is about.
12 We have a court stenographer here, Kathy
13 Townsend, to record tonight's events for the
14 Department of Energy's records. If you would speak
15 clearly and give your name, it would be helpful to
16 her.
17 We have portable microphones, and if people
18 feel a need to use them or if Kathy can't hear, we'll
19 get one to you.
20 You can just raise your hand if you want to
21 make a comment.
22 Si necesario interprete, Mr. Arturo
23 Sandoval. Arturo.
24 If you wish to hand in a written copy of
25 your comments, I think Julianne has already told you

No comments identified.

1 how you can do that, and they will be accepted for the
2 record.
3 In the event there are no new speakers
4 wishing to make formal comments, we will temporarily
5 adjourn the meeting for approximately 30 minutes or
6 so, see if other people show up during that time
7 period who were not able to make it at the beginning,
8 and we will reconvene to see if there are other
9 additional comments.
10 In the interim, we hope that people will
11 spend their time in the next room if you have
12 questions about the individual operations.
13 We'll be able to accept comments until 9:00
14 tonight.
15 We have two desired outcomes: one is a
16 complete and accurate record of the public comments
17 for the draft Environmental Impact Statement, and the
18 second is increased public awareness of the different
19 topics and specific areas which the next room is
20 about.
21 If there are a number of comments, I'll try
22 to note key words from those comments up here simply
23 to keep the conversation moving. They are not the
24 official record, the official record is here. This is
25 just so people will know what comments have been noted

No comments identified.

1 already.
2 Unless there is anything else, we'll take
3 comments.
4 Does anyone in the audience have a comment?
5 Yes. You can just speak from where you
6 are.
7 MR. FAICH: Sure. I've got a card here,
8 too.
9 My name is Ron Faich, and I want to comment
10 primarily on the socioeconomic and the environmental
11 justice sections of the draft.
12 By way of background, I prepared the first
13 one or two drafts of the socioeconomic and the
14 environmental justice, or EJ, sections for both the
15 Pantex SWEIS and the LANL SWEIS. So, more or less, my
16 reading of this draft document comes largely from
17 those experiences.
18 I'm sure that some of my comments may seem
19 to be quibbling in some respects; I think that maybe
20 they are a little bit more than quibbling if you, you
21 know, get into it.
22 For example, on page 4-107, where there is a
23 map of the socioeconomic region of influence, I really
24 have to seriously question the use of four full
25 counties as the area which is impacted

21-10-31

Comment 21-10-31

Location of SWEIS Revision(s): None

Response: The response to comment 14-1-31 discusses the reasonableness of the four-county ROI and the resulting socioeconomic analysis.

1 socioeconomically by the Sandia Lab.
2 Certainly, parts of Sandoval County, Rio
3 Rancho and Bernalillo, for example, should be included
4 in that socioeconomic ROI, but not the northwestern
5 part of the county, which is Counselor and Cuba, New
6 Mexico. I can't believe that, you know, those
7 communities and that entire area of the county are
8 substantially impacted by having the entire Sandoval
9 County in there.
10 Similarly, you have all of Torrance County
11 included. The same kind of reasoning. I'm sure
12 people from Moriarty and Estancia drive into the lab
13 to work every day. I can't see where it makes much
14 sense to include all of Torrance County.
15 And then in a slightly different vein,
16 you've excluded the southernmost part of Santa Fe
17 County, which includes the community of Edgewood, and
18 I know -- I personally know people who work at the lab
19 who live and commute from Edgewood.
20 So this notion of full county ROI - four
21 county ROI for socioeconomic analysis doesn't seem to
22 me the best way to do it. You're including areas that
23 shouldn't be included and you're excluding some that
24 should be.
25 I recognize that to use an entire county in

21-10-31,
cont.

1 your ROI makes it easier, because then when you draw
 2 other data from the census files, you just have to
 3 look at the county records, but there are subcounty
 4 data files available, it just requires a little bit
 5 more legwork to get that data together.
 6 A few things that I'll probably include in
 7 my written remarks, they are sort of minor points, but
 8 on page 4-109, it is said here, "The Pueblos of Acoma,
 9 Cochiti, Isleta, Jemez, Laguna, San Felipe, Sandia,
 10 Santa Ana, Santo Domingo, Zia, and Zuni are important
 11 centers of these Native American populations," but the
 12 Acoma, Laguna and Zuni Pueblos are not in the ROI
 13 that's been described on the previous page. So little
 14 kinds of inaccuracies like that.
 15 And then if you look on page 4-113, you see
 16 that there are -- apparently, what is here is that
 17 there are 311 lab employees who reside in Sandoval
 18 County, and that represents, according to the diagram
 19 here, Figure 4.14-4, that represents less than one
 20 percent -- the 311 employees of the lab who live in
 21 Sandoval County are less than one percent of the total
 22 employment in Sandoval County. I have to wonder,
 23 then, whether Sandoval County should be included at
 24 all in this ROI.
 25 Similarly, Valencia County. Apparently,

21-10-31,
cont.

21-11-31

21-12-31

*Comment 21-11-31**Location of SWEIS Revision(s): Section 4.14.3.1*

Response: The listing of the additional Pueblos was for informational purposes. The sentence in Section 4.14.3.1 has been changed to read: "The Pueblos of Cochiti, Isleta, Jemez, San Felipe, Sandia, Santa Ana, Santo Domingo, and Zia, and the Cañoncito Navajo Reservation are important centers of these Native American populations (Census 1995) within the ROI."

*Comment 21-12-31**Location of SWEIS Revision(s): None*

Response: The response to comment 14-1-31 discusses the reasonableness of the four-county ROI and the resulting socioeconomic analysis. See also Sections 4.14.2 and 5.2.12.

1 there are 336 lab employees living in Valencia County,
 2 and that represents less than 1.4 percent of the total
 3 employment of Valencia County, and I have to wonder
 4 whether that's significant enough to even include
 5 Valencia County in the socioeconomic region of
 6 influence.

7 So I guess it's mainly a geographic quibble
 8 that I have here with the socioeconomic section.

9 in, my concern is much more serious. The
 10 threshold for defining whether an area is
 11 EJ sensitive

12 here that is used is 49 percent of the population -
 13 in other words, if more than 49 percent of the
 14 nority,

15 then that area is considered worthy of being examined
 16 closely for any EJ-type concerns.

17 One thing that bothers me is that's a
 18 terribly high figure. I know where it comes from.

19 Apparently, 49 percent of the New Mexico population in
 20 1990 was minority, so they are saying, well, then
 21 anything up to 49 percent is just sort of typical - I
 22 mean, the entire state is 49 percent or something like
 23 that. So if it's more than 49 percent, then we'll
 24 have to pay closer attention to it.

25 My concern is several. The Pantex EIS used

21-12-31,
 cont.

21-13-32

Comment 21-13-32

Location of SWEIS Revision(s): None

Response: The response to comment 14-3-32 discusses the minority and low-income thresholds used in the environmental justice analysis.

1 25 percent as the threshold and the LANL SWEIS also
 2 used 25 percent as the threshold. I don't understand
 3 why, out of the same Department of Energy operations
 4 office, a lab -- a facility that is, you know,
 5 controlled from the Albuquerque area, should, in fact,
 6 use such a different threshold -- almost twice the
 7 threshold that was used in the SWEISs for those other
 8 two facilities. I think that it's just a little - a
 9 little too insensitive, as far as I'm concerned, for a
 10 state of this nature.

11 If you look on page 4-115, the paragraph --
 12 the first paragraph under the heading 4.15.3.1,
 13 "Identifying Minority and Low-Income Populations,"
 14 there is a sentence here, "Slightly more conservative
 15 than 51 percent."

16 I think the use of the word "conservative"
 17 is very, very questionable. I mean, the way I read
 18 it, I would say "slightly more liberal."

19 So I mean there is a word there that I think
 20 is conveying an impression. It's sort of like the
 21 glass half full or half empty notion. I really think
 22 that's the wrong word there.

23 But to illustrate my point, Figure 4.15-1 on
 23 page 4-116 -- 4-116, you show a map with a 50-mile
 24 radius circle around the lab, and the areas that are

21-14-32

21-15-32

*Comment 21-14-32**Location of SWEIS Revision(s): Section 4.15.3.1*

Response: To avoid confusion, the phrase, "slightly more conservative than 51 percent," has been removed.

*Comment 21-15-32**Location of SWEIS Revision(s): Figure 4.15-3*

Response: The caption on Figure 4.15-3 has been changed to read "Five block groups (see inset) with potential high environmental justice concern are located near KAFB." This change better reflects the information in the legend.

See the response to comment 14-3-32 on how the five block groups were identified and used in the environmental justice analysis.

1 shaded are the areas that are more than 49 percent
2 minority. It shows it right here, okay, two pages
3 farther down -- I think it's page -- yeah, 4-118, it
4 shows a more detailed map of the lab area and the
5 neighborhood around the lab.
6 According to the 49 percent criteria, there
7 are only five block groups just north of the lab,
8 south of Central Avenue between Louisiana and Wyoming
9 Boulevard, that according to this analysis, using the
10 49 percent threshold criteria, deserve special
11 attention because maybe there are adverse - high
12 adverse impacts on this population.
13 The reason why I'm so concerned about this
14 level of analysis is when I was working on the Pantex
15 SWEIS, the Manzano Storage Area in the Four Hills, the
16 bunkers, that was one of the alternative sites for
17 where the pits could be stored, so we looked at the
18 Manzano site as one of the alternatives and we did an
19 EJ demographic analysis for that site.
20 So even though the center of the circle is
21 slightly farther east than would be used for Sandia on
22 the 50-mile radius circle, still by color coding the
23 block groups, you can see what a difference the 25
24 percent threshold makes compared to the 49 percent
25 threshold.

21-15-32,
cont.

1 This is a color-coded detail area map of
 2 Albuquerque's block groups, and you can see, except
 3 for a few block groups in the far Northeast Heights
 4 and in southern -- southern Sandoval County and Rio
 5 Rancho, every block group -- every census track around
 6 the lab is at least 25 percent minority.
 7 Again I say since those two other SWEISS
 8 used the 25 percent, I think 25 percent should be used
 9 here, and then, of course, the entire neighborhood
 10 around Sandia, north of Sandia, particularly, you
 11 know, should be scrutinized for any potential high and
 12 adverse environmental impacts affecting minority
 13 people.
 14 So that's, I guess, the main concern I have
 15 there, but there is an another thing. Jumping ahead
 16 to Chapter 5, page 105, under the section labeled
 17 "Environmental Justice," 5.3.13, there is a faulty
 18 reasoning here that I think ignores the entire
 19 rationale for the Environmental Justice Executive
 20 Order.
 21 Let me just paraphrase the first paragraph
 22 here -- a portion of the first paragraph in this
 22 section. Essentially it says there are no discernible
 23 adverse impacts to land, soil, biological,
 24 socioeconomic resources in the ROI; thus, no

21-16-32

21-17-32

Comment 21-16-32

Location of SWEIS Revision(s): None

Response: The response to comment 14-3-32 discusses the methodology for the environmental justice analysis. See also Section 5.2.14.

Comment 21-17-32

Location of SWEIS Revision(s): None

Response: The response to comment 14-4-32 discusses the logic for determining environmental justice impacts. See also Sections 5.2.14 and 5.3.13.

1 disproportionately high and adverse impacts to
2 minority or low-income communities are anticipated.
3 The whole rationale -- the whole reason over
4 a 20-year period for the -- for arguing for the
5 Environmental Justice Executive Order was the fact
6 that you could have a large area that didn't appear to
7 be particularly heavily minority or low income in its
8 population, but that you could have pockets of
9 minority people or poor people around a facility, and
10 those people, as it turned out historically, lived,
11 you know, immediately adjacent to the refinery or
12 immediately adjacent to the nuclear plant or something
13 like that.
14 If you look at the overall population in a
15 four-county-wide ROI, no concern, but if you look at
16 these little block groups, then, in fact, you find
17 reason for concern.
18 So even though logic -- the reasoning here
19 that's applied is that since there are no adverse
20 impacts across the ROI, well, then, therefore, how
21 could there be adverse impacts within the ROI on
22 minority or low- income people, and that misses the
23 entire rationale for the executive order.
24 I'll try to make that a little bit more
25 clearly stated in my written comments, but that's a

21-17-32,
cont.

1 real concern of mine, and I think essentially what it
 2 does is it shows that you're not focusing as you
 3 should on the neighborhoods, let's say, immediately
 4 north of the lab, which are, indeed, you know, 25
 5 percent or more minority and about 20 percent, 21
 6 percent of low income.

7 And I guess maybe to illustrate my point
 8 with one last reference here -- in the Appendix,
 9 Volume II, Appendix F, Section 2, the appendix labeled
 10 "Accidents" -- "Radiological Accidents," you have a
 11 population distribution table, and it shows that in
 12 any particular direction, like due north or northeast
 13 or north/northeast and east/northeast, et cetera, in
 14 one-and-a-half miles north of TA-1, I guess it is,
 15 Technical Area 1, you have a population of 657, and in
 16 two -- within two miles of TA-1, you have a population
 17 of 1,071, but this is -- these are total population
 18 numbers.

19 Where are the minority population numbers?
 20 It's like an EJ analysis that isn't an EJ analysis.
 21 There is not enough focus on the target populations.
 22 So those are my main comments.

23 Thank you.

24 MR. WILKES: Thank you.

25 MS. LEVINGS: Thank you.

21-18-32

*Comment 21-18-32**Location of SWEIS Revision(s): None*

Response: Table F.2-1, Appendix F, Volume II, was prepared for the purpose of accident analysis and is based on sectors and not environmental justice-related block groups. See also the response to comment 14-4-32.

1 MR. WILKES: Any questions or
2 clarification?
3 MS. LEVINGS: I noticed you held up some
4 charts, Mr. Faich. I wonder if, when you turn in your
5 written comments, you will give us a copy of those as
6 well.
7 MR. FAICH: I will include it. It's
8 actually in the Pantex SWEIS.
9 MS. LEVINGS: Okay.
10 MR. FAICH: It's under the Manzano storage
11 analysis as one of the alternative sites for storage
12 of pits.
13 I will copy this and I'll color it orange
14 for you.
15 MS. LEVINGS: You don't have to do it if you
16 don't want.
17 MR. FAICH: It's much more dramatic if it's
18 colored.
19 MS. LEVINGS: Thank you very much.
20 MR. WILKES: Any other comments?
21 Not hearing any, it's about 7:00, would you
22 at -
23 MS. LEVINGS: 7:30.
24 MR. WILKES: -- 7:30 and see if other people
25 have arrived?

No comments identified.

1 So we will do that, we'll reconvene at
2 7:30.
3 MS. LEVINGS: Thanks.
4 (Recess held from 7:00 to 7:30 PM.)
5 MR. WILKES: It is 7:30, and let me just
6 interrupt your conversations for a moment to make sure
7 we officially reconvene this meeting.
8 Is there anyone in the room who would like
9 to make comments on the draft Environmental Impact
10 Statement?
11 Not hearing any, would you like to -- do you
12 want to go a half hour, 45 minutes?
13 MS. LEVINGS: Somewhere between 8:00 and
14 8:15. If nobody is here by 8:00, let's try 8:15.
15 MR. WILKES: We'll do a visual check at 8:00
16 and we'll make an official announcement at 8:15.
17 (Recess held from 7:31 to 8:15 PM.)
18 MR. WILKES: For the record - please
19 forgive my interruption, but we need to make sure we
20 do a formal reconvening of this public meeting.
21 It is 8:15. We said we would check at 8:00
22 to see if anyone was here, we did do that, no one new
23 was here.
24 It is 8:15 now for a formal reconvening of
25 this meeting.

No comments identified.

1 Is there anyone here with a comment to make
2 for the draft Environmental Impact Statement?
3 Not hearing any response, I assume we will
4 adjourn until --
5 MS. LEVINGS: Quarter to 9:00.
6 MR. WILKES: Quarter to 9:00, okay.
7 MS. LEVINGS: If we don't see anybody here
8 anywhere, then we'll reconvene just before the end
9 and --
10 MR. WILKES: Quarter to 9:00, we'll
11 reconvene and see if anyone new has shown up.
12 (Recess held from 8:16 to 8:55 PM.)
13 MR. WILKES: Consider this the reconvening
14 of the last notice for public input to the Sandia
15 National Labs Site-Wide Environmental Impact Statement
16 draft.
17 MS. LEVINGS: Do we want to give an actual
18 time?
19 MR. WILKES: I have five minutes to 9:00.
20 Is that close enough?
21 MS. LEVINGS: Close enough.
22 MR. WILKES: I have five minutes to 9:00.
23 Is there anyone here with input? Any
24 comments?
25 No?

No comments identified.

1 Then we will adjourn the public meeting
2 officially.
3 MS. LEVINGS: Thank you.
4 (Adjourned at 8:55 PM.)
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No comments identified.

No comments identified.

1 STATE OF NEW MEXICO)
2) ss.
3 COUNTY OF BERNALILLO)
4 I, Kathy Townsend, the officer before whom the
5 foregoing proceedings were taken, do hereby certify
6 that I personally recorded the proceedings by machine
7 shorthand; that said transcript is a true record of
8 the proceedings; that I am neither attorney nor
9 counsel for, nor related to or employed by any of the
10 parties to the action in which this matter is taken,
11 and that I am not a relative or employee of any
12 attorney or counsel employed by the parties hereto or
13 financially interested in the action.
14
15
16 NOTARY PUBLIC
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17 Expires: 12/31/99
18 My Commission Expires: 9/12/01
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PUBLIC COMMENT HEARING
ON THE
SANDIA NATIONAL LABORATORIES/NEW MEXICO
DRAFT SITE-WIDE ENVIRONMENTAL IMPACT STATEMENT

MAY 20, 1999
3:42 PM
MANZANO HIGH SCHOOL LIBRARY
12200 LOMAS, NORTHEAST
ALBUQUERQUE, NEW MEXICO

FACILITATOR:
MS. MARGARET MONTOYA
FOR THE DEPARTMENT OF ENERGY:
MS. JULIANNE LEVINGS
MR. MIKE ZAMORSKI

No comments identified.

No comments identified.

- 1 MS. MONTTOYA: Buenas tardes.
- 2 Bienvenidos a esta reunion para recibir sus
- 3 comentarios sobre el reporte del impacto ambiental
- 4 preparado por el Laboratorio Nacional de Sandia.
- 5 We're here this afternoon to receive your
- 6 comments on the Site-Wide Environmental Impact Statement
- 7 that has been prepared by Sandia National Laboratory.
- 8 I'm Margaret Montoya. I'm a law professor at
- 9 the University of New Mexico. I've been a moderator for
- 10 this kind of meetings, including meetings that seek
- 11 public impact -- public input in order to -- for the
- 12 process of policy making. Excuse me.
- 13 Let me take care of some housekeeping.
- 14 There's bathrooms around the corner here, and
- 15 there's coffee, and there's water at a water fountain
- 16 just alongside the back side of these temporary walls.
- 17 Let me now introduce the project manager for
- 18 the Department of Energy Environmental Impact Study.
- 19 This is Julianne Levings.
- 20 MS. LEVINGS: Good afternoon, welcome.
- 21 My name is Julianne Levings, and I'm the
- 22 Department of Energy's project manager that's responsible
- 23 for preparation of the draft Site-Wide Environmental
- 24 Impact Statement for Sandia National Laboratories.
- 25 The purpose of today's meeting is to collect

No comments identified.

1 public comments on this draft EIS, and this EIS will then
2 serve as the basis for DOE's decision on the future of
3 Sandia National Laboratories, New Mexico.
4 The Department of Energy proposes to continue
5 operations at Sandia National Laboratories in New Mexico.
6 We have identified and assessed three alternatives for
7 operation of the laboratory, the no action alternative,
8 the expanded operations alternative and the reduced
9 operations alternative.
10 Under the no action alternative, the Department
11 of Energy would operate at planned levels as reflected in
12 current DOE management plans.
13 In the expanded operations alternative, the
14 Department of Energy would increase activity at Sandia to
15 the highest reasonable level that could be supported by
16 current facilities, and also includes the potential
17 expansion or construction of new facilities.
18 Under the reduced operations alternative, the
19 Department of Energy would operate Sandia National
20 Laboratories at the minimum level of activity necessary
21 to maintain facilities and equipment in an operational
22 readiness mode.
23 In fact, this last alternative was added as a
24 result of public comments that we've received from
25 several members of the public during the public scoping

No comments identified.

1 period for this EIS.
2 The draft Environmental Impact Statement
3 evaluates each of these alternatives and their potential
4 impact to the environment. Under all of the
5 alternatives, the affected environment is primarily the
6 area within 50 miles of the laboratory.
7 The draft EIS was completed and it was sent to
8 the public on Friday, April 9th, 1999. A week later
9 there was a formal notice of availability that appeared
10 in the Federal Register on Friday, April 16th, 1999, and
11 that kicked off the start of the public comment period.
12 The comment period extends for 60 days, until June 15th.
13 Looking forward, the current plans are for the
14 Department of Energy to review all of the public comments
15 that we receive during the 60-day period, not just here,
16 but any way that we get our comments. And I'll talk
17 about those in just a minute.
18 We will respond to those comments in a comment
19 and response volume to the EIS. And then we'll make any
20 necessary updates to the main volumes and then publish a
21 final EIS in the late fall of this year, 1999.
22 Following completion and distribution to the
23 public of the final EIS, a Record of Decision will be
24 issued by the Department not sooner than 30 days
25 following publication in the Federal Register of a Notice

No comments identified.

1 of Availability of the final EIS.
2 This is the third meeting in a series of five
3 public meetings. Two meetings were held yesterday at UNM
4 Continuing Education Center. We will be holding this
5 meeting until 5:00 p.m. and another in this same location
6 beginning at 6:00 and going until 9:00 this evening. And
7 then our last meeting will be on Saturday at South
8 Broadway Cultural Center from 1:00 to 4:30 on Saturday
9 afternoon.
10 The Department of Energy will accept comments
11 through Tuesday, June 15th. In addition to making oral
12 comments at this meeting, comments will also be accepted
13 by a variety of other methods.
14 There are comment cards available out at the
15 registration desk, and you can write your comments on
16 those and hand them in today if you want, or you can mail
17 them to the Department of Energy. They're actually
18 preprinted with a mailing address so you can just fold
19 them up and put a stamp on them and send them in the
20 mail.
21 There are also other ways, and I'm going to
22 read them for the record, but I just wanted to point out
23 that there is a card so you don't need to write this
24 down. There's a card you can take with you.
25 You can make comments by calling our hotline,

No comments identified.

- 1 and that number is right up here, 1-888-635-7305. That
- 2 hotline is available 24 hours a day.
- 3 During business hours Monday through Friday,
- 4 from 9:00 to 5:00, there will be somebody that's manning
- 5 the line. So if you call in, you'll get to talk to a
- 6 live person, and they have a recorder, and they'll record
- 7 your comments if you'd like to do that.
- 8 After business hours, you can call, there is
- 9 sort of a menu and a recording message, and you can
- 10 follow the instructions on the message and leave your
- 11 comments any time of the day.
- 12 If you want to mail in your comments, you can
- 13 send them to me, and my address is Julianne Levings, US
- 14 Department of Energy, Albuquerque Operations Office, PO
- 15 Box 5400, Albuquerque, New Mexico, 87185.
- 16 If you want to fax us comments, the fax number
- 17 is 505-845-6392.
- 18 And last of all, you can E-mail comments to us
- 19 if you'd like, and the E-mail address is
- 20 inforequest@nepanet.com.
- 21 These little three-by-five cards are available
- 22 out by the registration desk, and they have all of that
- 23 information on them, so be sure to take one of these with
- 24 you if you want to give comments some other way.
- 25 If you're interested in further information

No comments identified.

1 about some of the experimental facilities at Sandia Labs,
2 there is a poster board session that's available just
3 outside the doors here, that is staffed by Sandia
4 Laboratory people who are very familiar with the
5 operations of their facilities and would be happy to
6 answer your questions.
7 The displays and fact sheets in the other room
8 are intended to provide you with additional information
9 and are not a part of the official public meeting.
10 At this time I'd like to introduce Mr. Mike
11 Zamorski, who is the area manager of the Department of
12 Energy, Kirtland Area Office, which is the office
13 responsible for day-to-day oversight of Sandia National
14 Laboratories.
15 In his role as area manager, Mr. Zamorski is
16 responsible for assuring the satisfactory performance of
17 Sandia Laboratories in the performance of safety,
18 environmental compliance and security. His office is
19 also responsible for oversight of construction projects,
20 the medical isotope program, the environmental
21 restoration projects and the waste management programs.
22 Further, Mr. Zamorski's office is also the
23 administrator of the prime contract between the
24 Department of Energy and Lockheed Martin for operation of
25 Sandia National Laboratories.

No comments identified.

1 Mr. Zamorski.
2 MR. ZAMORSKI: Thank you, Julianne.
3 On behalf of the local Department of Energy
4 office, the Albuquerque Operations Office, I'd like to
5 welcome all of you here this afternoon. I thank you for
6 coming to this meeting. We are anxious to get your
7 input, your comments on the draft Site-Wide Environmental
8 Impact Statement.
9 As Julianne said, my office, the Kirtland Area
10 Office, is a subset of the Albuquerque Operations Office.
11 I manage a group of about 50 people that are located
12 on-site with Sandia. We're involved in a lot of the
13 day-to-day operations and interaction with Sandia.
14 The purpose of this part of the meeting right
15 now is to get public input, public comments on the draft
16 EIS, but if you would like to discuss my office or have
17 questions for me about my office or about the Department
18 in general, I'd be happy to engage in those discussions
19 at a break or at the end of the meeting.
20 Thank you again and welcome.
21 MS. MONTIYA: Today's meeting is being
22 structured to allow the maximum number of comments on the
23 draft Site-Wide EIS, the Environmental Impact Study. And
24 I'm going to probably start using the acronym EIS, since
25 I've now heard it several times.

No comments identified.

1 If you wish to speak, we're going to ask you to
2 fill out speaker registration cards. That's to make sure
3 that we have your name correctly so that they can be
4 entered into the record.
5 When you speak, we will ask you to give your
6 name so that we can begin by entering that into the
7 record.
8 What we're asking is that speakers who are here
9 on their own behalf limit their comments to five minutes.
10 If you're here representing an organization, you can
11 speak for ten minutes. These are just guidelines, and
12 we don't need to restrict any comments, but just to give
13 you an idea of how we're hoping to run the meeting.
14 The court stenographer is here to record
15 today's events for purposes of creating a record for the
16 Department of Energy. So we'll ask you to speak clearly.
17 We're not going to use a microphone this
18 afternoon because we think that the space is adequate for
19 everyone to be heard.
20 There's also a Spanish language interpreter
21 here in the event that anyone feels more comfortable
22 speaking in Spanish. Mr. Arturo Sandoval will be the
23 Spanish language interpreter.
24 Comments, questions.
25 MS. DAYTON: I have a question.

1 MS. MONTOYA: Okay.

2 MS. DAYTON: Would you like me to state my
3 name?

4 MS. MONTOYA: Sure, please.

5 MS. DAYTON: It's Sue Dayton, D-A-Y-T-O-N.

6 MS. MONTOYA: Thank you.

7 MS. DAYTON: And what I wanted to ask was -- I
8 basically looked at the summary from the summary EIS from
9 the web site, and it briefly described the role of the
10 tribal liaison, and I'm wondering what activities is the
11 liaison involved with, with the tribes, and which tribes
12 are actually going to work with the tribal liaison.

13 MS. MONTOYA: Okay.

14 Julianne.

15 MS. LEVINGS: This was in the summary, the
16 tribal liaison, or was that the public participation
17 plan?

18 MS. DAYTON: Which section of the summary,
19 you're asking?

20 MS. LEVINGS: Yeah. Just the name liaison is
21 holding me up.

22 MS. DAYTON: Well, from what I understand is a
23 tribal liaison working with tribes specifically. You
24 have a specific person --

25 MS. LEVINGS: We have a person on the

22-1-30

*Comment 22-1-30**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment in the public hearing, as noted in the transcript. For clarification purposes, the Public Involvement Plan for the SNL/NM SWEIS identified a DOE Tribal Liaison. Tracy Loughhead, in the DOE Albuquerque Operations Office, Office of Public Affairs, serves as the Tribal Liaison for the SWEIS. Based on consultations with the New Mexico State Historic Preservation Office and the Maxwell Museum of Anthropology at the University of New Mexico, 15 tribes from New Mexico, Texas, and Arizona were selected for consultation to determine tribal concerns for cultural resources that could be affected. The consultation process involved one to three stages, depending on the interest and response of the consulted tribes. The list of tribes consulted and a detailed description of the consultation process are presented in Appendix C of Volume II, Section C.3.2.

No comments identified.

1 contractor staff who worked with the cultural resources
2 people, advisory teams and groups at several of the
3 pueblos. There is a lady by the name of Kathy Roxlau who
4 works for Tetra Tech NUS that was the -- our subject
5 matter expert in that area.
6 I'm not sure I'm answering your question.
7 MS. DAYTON: I'm going to look through this,
8 I'm sorry, and get back with you. Okay?
9 MS. LEVINGS: Okay.
10 MS. DAYTON: I had a sheet of comments.
11 Unfortunately, it didn't make it with me today, so I'm
12 going to have to ad-lib here.
13 MS. LEVINGS: Okay.
14 MS. MONTTOYA: So there were several parts to
15 your question.
16 Were they answered?
17 MS. DAYTON: No. But I'll ask it again.
18 MS. MONTTOYA: So I'll come back to you. Okay.
19 All right. There was another question,
20 comment.
21 MS. WALKER: My name is Cheryl Walker. I'm
22 representing myself.
23 I've already submitted some -- some comments,
24 and so I'm essentially just continuing and working
25 into -- I did the summary first, as she did, and I'm

1 working into Volume 1. I hope I never see Volume 2.
 2 I wanted to ask some questions about the basic
 3 design. I understand the difficulties in talking about
 4 programs and why you chose facilities, and I thought that
 5 that was a good compromise, but I am concerned about why
 6 some facilities were chosen and others were not.
 7 And taking a paragraph from the very beginning,
 8 you say that taken together the facilities you have
 9 chosen represent the majority of exposure risk, over 99
 10 percent of all radiation doses, over 99 percent of all --
 11 to Sandia personnel, over 99 percent of all radiation
 12 doses to the public, from 81 to 91 percent of stationary
 13 source criteria pollutants. And then you go on to list
 14 five categories of facilities.
 15 However, also on the same few pages, you talk
 16 about 10 categories of facilities. Later on in SR14 you
 17 talk about 12 categories of facilities. In S10 you talk
 18 about 16 groups of facilities.
 19 And I am totally lost in your sampling
 20 structure. It seems to me that you -- you know, if you
 21 pick a set sample and you build your statistics off that
 22 set sample, then we're talking about good validity and
 23 reliability of that sample. But when you change your
 24 sampling for each thing that you're discussing, then it
 25 seems, to me, the statistics all go to pot.

22-2-15

22-3-13

22-4-15

*Comment 22-2-15**Location of SWEIS Revision(s): None*

Response: See the response to comment 18-22-15 regarding the focus of the SWEIS analysis on selected facilities.

*Comment 22-3-13**Location of SWEIS Revision(s): Summary*

Response: The "10 categories of facilities" mentioned by the commenter appear as "DOE selected 10 facilities or facility groups" in the Summary subsection "SNL/NM Facilities." These selected facilities include NGF, MDL, Advanced Manufacturing Processes Laboratory, Integrated Materials Research Facility, Explosive Component Facility, Physical Testing Facilities (contains four individual facilities), Accelerator Facilities (contains 10 individual facilities), Reactor Facilities (contains six individual facilities), Outdoor Test Facilities (contains 5 individual facilities), and Selected Infrastructure Facilities (contains four individual facilities). These are discussed in Sections 2.3.4.1 through 2.3.4.6.

The "12 categories of facilities" mentioned by the commenter appears as "12 facilities on SNL/NM" in the text of the Summary. As noted in the response to comment 19-27-15, 11 of the 12 facilities are selected facilities (three of which are accelerators), the 12th, known as CSRL, was added to the air quality analysis for completeness. Section 5.3.7.1 identifies these 12 facilities. (See Table 5.3.7-5 for a discussion of the framework for analysis; Section 2.3.2 includes how the DOE gathered additional information beyond the selected facilities for completeness of analysis.)

The "16 groups of facilities" mentioned by the commenter appears in the text as "16 SNL/NM facilities," which are individual SNL/NM facilities that emit radionuclides. These 16 facilities, identified in Section 4.9.2.1 (see Table 4.9-6), include the selected facilities NGF, Integrated Materials Research Facility, Explosive Component Facility, two accelerator facilities, three reactor facilities, and one selected infrastructure facility. The remaining eight individual facilities were added to the radiological air quality analysis for completeness. The wording in the Summary has been changed to "17 SNL/NM facilities."

*Comment 22-4-15**Location of SWEIS Revision(s): None*

Response: The SWEIS framework for analysis used criteria to bound environmental impacts as stated in Section 2.3. The list of selected facilities was not compiled with random statistical analysis. See the responses to comment 18-22-15 regarding the focus of the SWEIS analysis on selected facilities and comment 18-25-15 on completeness of the analysis.

1 I wanted to ask again about that and about the
 2 choice of facilities.
 3 For instance, under Infrastructure Facilities,
 4 you include the Hazardous Waste Management Facility, the
 5 HWMF, and the TTF, and you say that this represents 99
 6 percent of all radiation doses, but you do not talk about
 7 the Manzano facilities, the High Bay and the myriad of
 8 other makeshift facilities, the Auxiliary Hot Cell.
 9 So I'm going why were certain facilities left
 10 out of the sampling that represents 99 percent and others
 11 were put in the sampling?
 12 MS. LEVINGS: For me to answer your question in
 13 full, I don't think I could do that here, Cheryl, without
 14 looking at all the references you're talking about. But
 15 I can -- and so I'm hoping you will write this down so
 16 that we can respond to you.
 17 MS. WALKER: Okay.
 18 MS. LEVINGS: But there -- I think, first of
 19 all, we need to just make it clear that all facilities at
 20 Sandia were covered. Some were covered in a
 21 significantly greater amount of detail. Okay.
 22 And you happened to mention the Auxiliary Hot
 23 Cell Facility. There are some documents as backup to
 24 this Site-Wide EIS that are called Information Documents
 25 that were put together by Sandia National Laboratories,

22-5-15

*Comment 22-5-15**Location of SWEIS Revision(s): None*

Response: See the response to comment 18-24-15. See also the response to comment 18-22-15 regarding the focus of the SWEIS analysis on selected facilities.

No comments identified.

1 and in the description of the Hot Cell Facility, the
2 Auxiliary Hot Cell Facility was included. Okay.
3 But you wouldn't know that unless you had those
4 documents, which are, incidentally, available in the
5 public reading rooms.
6 And we have three public readings rooms around
7 Albuquerque. We normally have one, but during this
8 60-day period we've added two others to make it easy for
9 people, if they want to go into that level of detail, to
10 go and find that information.
11 And those reading rooms are at T-VI Montoya
12 Campus, up off of Montgomery and Morris, Montgomery and
13 Eubank, I think; the T-VI Main Campus at Buena Vista,
14 just a little north of Gibson, where the main campus is;
15 and then at Zimmerman Library, which is sometimes
16 difficult to get to because of parking. Zimmerman
17 Library is our public reading room.
18 So first of all, we did cover all facilities,
19 number one.
20 So what we had to try to do, we wanted to
21 gather some more detailed information on certain
22 facilities that met the five criteria that, I think, was
23 one of the things you were referring to in your comment.
24 And so we sat down and spent quite a bit of
25 time going through an initial screen of facilities and

1 various factors related to them and from that determined
 2 a smaller group that we could handle of facilities that
 3 we went and got very detailed information on.
 4 And that's in two thick volumes called the
 5 Facilities Safety Information Document that's available
 6 in the public reading rooms. The two of them together
 7 are about that thick. Okay.
 8 Beyond that, I think I'll have to respond when
 9 I get your comment in writing and can look at your
 10 references.
 11 MS. WALKER: May I ask one question related to
 12 what you just have said?
 13 Are your stats that you ran that are in Volume
 14 2, that I'm trying to avoid -- are they based on all the
 15 facilities, these sampling groups, these ten facilities
 16 or five facilities?
 17 MS. LEVINGS: There is a separate chapter
 18 for -- I'm trying to think of the exact number. There is
 19 a separate chapter for each one of the facilities that
 20 was identified in the EIS.
 21 MS. WALKER: In the original groupings?
 22 MS. LEVINGS: I believe there's a separate
 23 chapter for each one.
 24 Am I correct about that, Paul?
 25 Yeah. Okay.

22-6-15

*Comment 22-6-15**Location of SWEIS Revision(s): None*

Response: Volume II contains appendixes of technical details supporting the environmental analyses in Volume I, based on methodologies presented in Section 5.2. Selected facilities were described and evaluated in greater detail than other SNL/NM facilities. For completeness, the DOE also gathered information on the balance of operations at SNL/NM. Information regarding selected facilities, other facilities, site-support services, water and utility use, and waste generation was incorporated into the analysis from the FSID and EID (SNL/NM 1998ee, SNL/NM 1998f)

The DOE examined all nuclear/radiological facilities and hazardous nonradiological facilities and associated DOE-approved safety documents. In addition, facility walk-throughs and interviews were performed to ensure that all hazards and safety concerns were properly captured in the accident analysis.

1 MS. WALKER: I think it would help to go
2 through the EIS, for those of us who don't have adequate
3 background, and check back to be sure that you're talking
4 about the same facilities or that -- so that this
5 confusion doesn't exist.

6 As I'm working through this document, I get a
7 different sampling all along, and yet I see these
8 wonderful facilities grouped up front, and I'm assuming
9 that that is my sampling. So it's confusing, I think, to
10 the reader to keep getting all these different sampling
11 numbers and so forth.

12 MS. LEVINGS: Okay. I appreciate your comment.
13 And we will take a look at that and see if we can make it
14 less confusing.

15 MS. MONTOYA: Any other comments?

16 Ms. Dayton.

17 MS. DAYTON: Hi. Sue Dayton here again.

18 Yeah. I have a question about the City
19 Radioactive Water Discharge Policy and the program with
20 Sandia.

21 I can't remember the exact year, but several
22 years ago this was proposed to the City, just the
23 discharge of low levels of radioactive waste from Sandia
24 into the city sewer system.

25 MS. LEVINGS: I remember that.

22-7-13

22-8-18

Comment 22-7-13

Location of SWEIS Revision(s): None

Response: See the response to comment 18-22-15.

Comment 22-8-18

Location of SWEIS Revision(s): None

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript.

In addition, no current or future activity resulting in “the discharge of low levels of radioactive waste from Sandia into the city sewer system” is anticipated for SNL/NM operations in the foreseeable future.

22-8-18,
cont.

1 MS. DAYTON: It was rejected by the City. They
2 now have a zero discharge ordinance.
3 MS. LEVINGS: Um-hum.
4 MS. DAYTON: This appears to be a new draft and
5 with lower levels of discharge.
6 Am I correct? Will this be a future activity
7 under the Site-Wide -- under this Site-Wide Environmental
8 Impact Statement?
9 MS. LEVINGS: That does not sound right, that
10 it would be. So maybe we have an error that we need to
11 fix. I'm not sure what you're referring to specifically.
12 MS. DAYTON: Okay. This is -- do you want to
13 take a look at this real quick? It's very short.
14 MS. LEVINGS: Sure.
15 PIP appended. Okay. This is the Public
16 Involvement Plan. Okay. This is not our EIS.
17 MS. DAYTON: Okay.
18 MS. LEVINGS: Apparently.
19 Oh, okay. This is an appendix that was done
20 for the Public Involvement Plan that we prepared in 1997.
21 It was prepared by the contractor. And these were some
22 key concerns that had been identified that might be an
23 issue during scoping and during the preparation of the
24 EIS. This is not part of the EIS.
25 MS. DAYTON: Okay. All right.

1 MS. LEVINGS: And that was an issue, and that's
2 why it's in that appendix. And you're correct.
3 MS. DAYTON: Will this be -- will this issue be
4 revisited? Do you know? This time?
5 MS. LEVINGS: I don't think so. We don't -- I
6 don't believe that we deal with that at all in the EIS,
7 about that issue. I mean, the reason that that's in
8 there is because the contractor was trying to gather
9 things that Sandia had been involved in that had raised
10 public concern in the past, and that's why that was
11 there.
12 MS. DAYTON: Yeah. It was a little misleading
13 to me, you know, just having moved back into the state
14 and, you know, looked on the web site, and I found this.
15 MS. LEVINGS: And here's this Public
16 Involvement Plan. Okay.
17 MS. DAYTON: And I was aware of it in the past
18 but was surprised to see it come up again in this
19 document.
20 MS. LEVINGS: Yeah. It's only there as
21 historical, is why that's there.
22 MS. DAYTON: Okay. Thanks.
23 MS. LEVINGS: And that isn't part of the EIS,
24 is not.
25 MS. DAYTON: All right. Thank you.

22-9-18

Comment 22-9-18

Location of SWEIS Revision(s): None

Response: See the response to comment 22-8-18 regarding radioactive water discharge.

Comment 22-10-6

Location of SWEIS Revision(s): None

Response: Comment noted.

1 MS. LEVINGS: Sorry.
2 MS. MONTTOYA: Other comments?
3 Yes.
4 MS. RAMPONI: I guess I will.
5 My name is JoAnne Ramponi, and I'm on the
6 Citizens Advisory Board.
7 MS. MONTTOYA: Can you spell your last name?
8 MS. RAMPONI: R-A-M-P-O-N-I.
9 MS. MONTTOYA: Thank you.
10 MS. RAMPONI: And I really want to tell you how
11 thrilled I am that you have air quality listed in here.
12 This has been one of my major concerns since I came onto
13 the board, that we address groundwater and things, and we
14 have not addressed air quality.
15 And I think that especially for the people who
16 live in the area that surround Sandia, that that's a real
17 critical issue.
18 And we had Mrs. Clifton from the Trumbull
19 Neighborhood Association at our CAB meeting last night,
20 and that was something that she listed as a real concern
21 of hers. And so I'm just really thrilled about that
22 part.
23 MS. LEVINGS: Thank you.
24 MS. MONTTOYA: Ms. Walker.
25 MS. WALKER: Keep things going.

22-10-6

1 MS. MONTOYA: That's fine.

2 MS. WALKER: I have concerns about two facility
3 programs at Sandia that seem to, from what you are
4 writing, impact the environment, and that's the
5 microelectronics lab's impact on our groundwater and the
6 Moly-99 program's impact on the volume of waste that
7 Sandia is producing.

8 And I wondered if we can justify, in a
9 community with a water table that's sinking fast on us --
10 if we can justify programs like the microelectronics lab.
11 I understand very much the importance of
12 radiation, microchips and some of the neatest things that
13 are occurring there, but I wonder if that is a program
14 that could be transferred to another DOE facility, like
15 Idaho, for instance, where the water is not a concern to
16 the public or to the environment.

17 The second one is the Moly-99 program. How
18 much of the radioisotopes or medical isotopes that you're
19 using are actually being used by the Department? And can
20 we justify the waste being produced by that program for
21 the amount of waste and impact to the environment that
22 we're receiving from that program?

23 MS. LEVINGS: I don't know that I could answer
24 those questions here. I'm not, you know, the subject
25 matter expert in some of those areas.

22-11-24

22-12-20

22-13-7

22-14-34

*Comment 22-11-24**Location of SWEIS Revision(s): None*

Response: See the response to comment 17-72-20.

*Comment 22-12-20**Location of SWEIS Revision(s): None*

Response: The Stockpile Stewardship and Management Programmatic Environmental Impact Statement established SNL/NM's programmatic roles and responsibilities to accomplish the DOE's purpose and need. SNL/NM must maintain technical expertise, capabilities, and facilities to fulfill those roles and responsibilities. The SWEIS did not analyze transferring DOE programs to other DOE sites, as discussed in the Notice of Intent (Chapter 14). See the response to comment 17-72-20 regarding MDL capabilities and water conservation efforts.

*Comment 22-13-7**Location of SWEIS Revision(s): None*

Response: Over the past four decades, the DOE and its predecessor agencies have produced and distributed certain isotopes for medical and industrial applications through DOE's national laboratories. In 1990, Congress established the Isotope Production and Distribution Program to consolidate existing DOE isotope production activities under one program. Among other activities, this program has responsibility for ensuring that the U.S. health care community has access to a reliable supply of molybdenum-99 (Section 1.8.3). The near-term goal (over the next 5 to 10 years) would be to provide a backup capability for molybdenum-99 used in the U.S. by establishing a baseline production level of 10 to 30 percent of the current U.S. demand. This goal would include the capability to increase production to supply 100 percent of the U.S. demand. The DOE expects to produce medical isotopes for public demand. It is possible that the DOE would use some portion of the quantity produced; however, this quantity would be small.

*Comment 22-14-34**Location of SWEIS Revision(s): None*

Response: The justification for the MIPP EIS has been detailed in the ROD (61 FR 48921) and in Chapter 2 of the MIPP EIS. A brief discussion is provided in Section 1.8.3. The SWEIS does not revisit the programmatic decision contained in the MIPP EIS ROD.

The waste generation and related infrastructure impacts of the MIPP are presented in Chapter 5. SNL/NM has sufficient capability and capacity for handling the waste projections presented for each alternative (see Sections 5.3.10, 5.4.10, and 5.5.10).

No comments identified.

1 I am aware of the water usage at MDL, the
2 Microelectronics Development Laboratory, and I believe we
3 discussed that in the EIS, and obviously you've seen
4 that.
5 And I know that there are goals that Sandia has
6 and has been attempting to meet, which are the same
7 goals, I believe, the City has, as well, and Kirtland Air
8 Force Base has, which is to reduce water consumption by
9 30 percent.
10 And I know that the -- in fact, it could be
11 that the gentleman out here who is manning the poster
12 board session for Tech Area 1 may be able to tell you a
13 little bit more about what they do at the MDL. I'm going
14 to use that acronym because I get tongue-tied every time
15 I try to say the other. He can probably tell you some of
16 the systems they have in place to try to recycle that
17 water and use as little new water as possible.
18 MR. ZAMORSKI: Julianne, one thing I might
19 add -- I think part of your question related to are there
20 any other facilities at other DOE sites that could
21 perform that mission, and as far as I know, the
22 microelectronics facility is unique in the Department,
23 and there's no other similar facility anywhere at any of
24 our sites around the country that could do the same work
25 right now. So you'd have to build a new one.

No comments identified.

- 1 MS. LEVINGS: Thanks, Mike.
- 2 MS. WALKER: And how about the Moly-99?
- 3 MS. LEVINGS: I'm -- that's not one that I know
- 4 enough about to talk to.
- 5 I don't know if you could, Mike.
- 6 MS. MONTROYA: Thank you.
- 7 Other comments?
- 8 Ms. Dayton.
- 9 MS. DAYTON: Sue Dayton.
- 10 And I wanted to make a comment on the Site-Wide
- 11 Environmental Impact Statement newsletter. And I think a
- 12 lot of this I'll talk with Julianne about, but I
- 13 picked -- actually, I got this in the mail -- it's
- 14 stained with coffee, as you can see, but I received it in
- 15 the mail, and I neglected to look at the bottom here that
- 16 says it's issue number 4.
- 17 And as I read on, it -- we start out on the
- 18 first page with Project Manager's Corner and get into --
- 19 it's pretty wordy, and it does not say anywhere inside
- 20 what the Site-Wide Environmental Impact Statement project
- 21 is all about. It talks -- you know, we have a word from
- 22 the project manager, and then we get into the NEPA, and
- 23 then we have some information about public involvement.
- 24 But as I understand it, you know, the
- 25 newsletters are going to be distributed at various

No comments identified.

1 places, and some people who pick up the newsletter --
2 this may be the first newsletter that someone picks up,
3 like myself, and without knowing what the SWEIS is all
4 about, this would not interest me.
5 There's nothing -- I think it's a little late
6 now, but it might have been nice to have some consistency
7 and describe, well, what is the Site-Wide Environmental
8 Impact Statement? I mean, the average person probably
9 does not know.
10 And it's quite intimidating to pick this up, if
11 you even get anyone to pick it up, and see all this type
12 on the front page. And there's nothing on here that says
13 what it is.
14 So I wanted to voice that as a concern.
15 And I know that these are being placed in a
16 variety of public places, and I'm just a little worried
17 that people aren't getting the news. And, you know,
18 maybe that's, you know, another reason why we have low
19 involvement. So I --
20 MS. LEVINGS: Actually, thanks for your
21 comment.
22 This fourth newsletter we sent out to a much
23 larger group. The first flier we sent out to 2,300
24 people and asked, with a little return postage-paid card,
25 for anyone who wanted to be on the newsletter list to

1 send it back. And we got back quite a few, and we ended
2 up with a list of about 350 people that we've sent the
3 first three issues of the newsletter to.
4 But we thought that in addition to the other
5 things that we were doing in the area of public
6 participation, to send this newsletter out back to the
7 list of 2,300 again and to give people another chance to
8 send in a postcard if they were interested in getting the
9 EIS or something.
10 But what we didn't think of was, in fact, that
11 if you hadn't asked to be on the list of 350, that you
12 might not know what an EIS is. Some of the earlier
13 newsletters do talk about what is an environmental impact
14 statement and so on and so forth.
15 But you're right, and we didn't think about it,
16 that if someone picks it up off the street today, they're
17 going to miss that history.
18 MS. DAYTON: Yeah, absolutely.
19 And if I could, I'd like to ask another
20 question about public outreach.
21 Are you folks advertising on radio and TV, by
22 any chance?
23 MS. LEVINGS: Radio announcements, I believe,
24 public service announcements and press releases. We had
25 an article published in the paper on Wednesday by John

22-15-4

*Comment 22-15-4**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript. See the response to comment 18-9-4.

1 Fleck, did a telephone interview with him. He published
 2 an article and also gave us some -- talked about when the
 3 public hearings would be. That was in the Metro section.
 4 Our ads were placed a week ago Sunday in the legals,
 5 again yesterday in the Journal, and again tomorrow.

6 MS. DAYTON: Okay. Yeah.

7 My concern there is that there are certain, you
 8 know, portions of the population that, you know,
 9 obviously watch television more than they read, and so
 10 that's my concern, that, you know, these portions can be
 11 reached through appropriate media contacts.

22-16-4

12 And I know it's a big job, so I just wanted to
 13 know what you folks were doing on that.

14 MS. LEVINGS: That's what we've done. There's
 15 no television ads.

16 MS. MONTOYA: Thank you.

17 MS. DAYTON: Thank you.

18 MS. MONTOYA: Other comments?

19 Ms. Walker.

20 MS. WALKER: I have just one final comment.

21 I am amazed at the good job that they did with
 22 this -- with writing this and the amount of data that
 23 they packed in here and how businesslike they did it in
 24 such a short period of time, and so I do want to
 25 compliment the group that was involved in putting this

22-17-6

Comment 22-16-4

Location of SWEIS Revision(s): None

Response: Comment noted. See the responses to comments 18-9-4 and 22-15-4.

Comment 22-17-6

Location of SWEIS Revision(s): None

Response: Comment noted.

1 together and doing the research.
2 I still think there's some ways that they could
3 polish it a little and make the meaning clearer to me,
4 but I really am overwhelmed what I'm getting here to see
5 what they -- the number of documents and things they went
6 through to get this thing together.
7 So good job.
8 MS. LEVINGS: Thank you.
9 MS. MONTOYA: Thank you.
10 MS. LEVINGS: There's a lot of people here I
11 know that appreciate that comment.
12 MS. MONTOYA: Other comments?
13 MS. LEVINGS: Shall we adjourn for --
14 MS. MONTOYA: Shall we adjourn for a while?
15 MS. LEVINGS: Say for a half an hour, until
16 quarter to 5:00, I guess? Quarter to 5:00.
17 (Proceedings in recess.)
18 MS. MONTOYA: It's 5:45, and I'm going to
19 reconvene the meeting.
20 MS. LEVINGS: It's 4:45.
21 MS. MONTOYA: I'm sorry. I'm time challenged.
22 It's 4:45. Really. I'm clock challenged.
23 I'm wondering if there are any comments at this
24 time.
25 I'm comfortable with silence, so I'm willing to

22-18-13

*Comment 22-18-13**Location of SWEIS Revision(s): None*

Response: The DOE made every effort to make the SWEIS comprehensive without burdening the reader with unnecessary detail.

No comments identified.

1 wait a while and see if we get any comments.
2 If not, I'm going to recess, and then we'll
3 reconvene -- shall we reconvene at 5:30? Or 5:15?
4 MS. LEVINGS: We have a break between 5:00 and
5 6:00 between the two sessions.
6 MS. MONTROYA: Oh, we do. Oh. So we'll --
7 should we wait?
8 MS. LEVINGS: I think what we can do is we can
9 probably adjourn right now, but what we can do is just
10 make sure that in the next 10 to 15 minutes nobody else
11 comes in that wants to comment, just keep an eye out. If
12 they do, we'll give them that opportunity up until 5:00.
13 MS. MONTROYA: All right.
14 MS. LEVINGS: Okay. And then --
15 MS. MONTROYA: And then we'll start the next
16 session at six o'clock.
17 Thank you for those of you who came to give
18 comments.
19 MS. DAYTON: Thank you.
20 MS. LEVINGS: We do appreciate it, really.
21 MR. ZAMORSKI: Thank you.
22 MS. DAYTON: Thank you.
23 (Proceedings in recess.)
24 MS. MONTROYA: I'm going to go back on the
25 record to adjourn the meeting. It's now five clock.

No comments identified.

1 The next meeting is going to begin at six, 2 'clock here at
2 the Manzano High School Library.
3 (Proceedings adjourned at 5:00 PM.)
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No comments identified.

1 STATE OF NEW MEXICO)
 2 ss.
 3 COUNTY OF BERNALILLO)
 4
 5
 6 I, CHERYL ARREGUIN, the officer before whom the
 7 foregoing proceedings were taken, do hereby certify that
 8 I personally recorded the proceedings by machine
 9 shorthand; that said transcript is a true record of the
 10 proceedings; that I am neither attorney nor counsel for,
 11 nor related to or employed by any of the parties to the
 12 action in which this proceeding is taken, and that I am
 13 not a relative or employee of any attorney or counsel
 14 employed by the parties hereto or financially interested
 15 in the action.
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1 PUBLIC COMMENT HEARING ON THE
2 SANDIA NATIONAL LABORATORIES/NEW MEXICO
3 DRAFT SITE-WIDE ENVIRONMENTAL IMPACT STATEMENT

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10

11 MAY 22, 1999

12 1:10 PM

13 SOUTH BROADWAY CULTURAL CENTER

14 1025 BROADWAY, SOUTHEAST

15 ALBUQUERQUE, NEW MEXICO 87102

16
17
18
19

20 FACILITATOR:

21 MS. MARGARET MONTOYA

22 FOR THE DEPARTMENT OF ENERGY:

23 MS. JULIANNE LEVINGS

24 MR. EARL WHITEMAN

No comments identified.

1 MS. MONTOYA: Good afternoon.
2 Buenas tardes. Bienvendios a esta reunion
3 para recibir sus comentarios sobre el reporte del
4 impacto ambiental preparado por el laboratorio
5 nacional de Sandia.
6 Good afternoon. I'm Margaret Montoya.
7 We're here this afternoon to get your
8 comments on the Site-Wide Environmental Impact
9 Statement that has been prepared by Sandia National
10 Laboratories.
11 I'm a professor at the University. I'm a
12 professor of law at the University of New Mexico.
13 I'm an impartial facilitator. I have no
14 vested interest in the outcome of these meetings.
15 Just some housekeeping details. There is
16 some coffee and cookies here in the back, and there
17 are bathrooms just around on the outside of this
18 room.
19 Let me introduce Julianne Levings. She's
20 the Project Manager for the Department of Energy's
21 Environmental Impact Statement Project Office.
22 Julianne.
23 MS. LEVINGS: Good afternoon and welcome.
25 My name is Julianne Levings. I'm the
26 Department of Energy Project Manager who is

No comments identified.

1 responsible for the preparation of the draft Sandia
2 National Laboratories Site-Wide Environmental Impact
3 Statement.
4 The purpose of today's meeting is to collect
5 public comments on this draft EIS. The Site-Wide EIS
6 will then serve as the basis for DOE's decision on the
7 future of Sandia National Laboratories/New Mexico.
8 The Department of Energy proposes to
9 continue operations at the Sandia National
10 Laboratories located in central New Mexico.
11 The Department of Energy has identified and
12 assessed three alternatives for the operation of the
13 laboratory. Those alternatives are the no action
14 alternative, the expanded operations alternative and
15 the reduced operations alternative.
16 Under the no action alternative, the
17 Department of Energy would operate at planned levels
18 as reflected in current DOE management plans.
19 In the expanded operations alternative, the
20 DOE would increase activity at Sandia to the highest
21 reasonable level that could be supported by current
22 facilities and also includes the potential expansion
23 or construction of new facilities.
24 Under the reduced operations alternative,
25 the Department of Energy would operate Sandia National

No comments identified.

1 Laboratories/New Mexico at the minimum level of
2 activity necessary to maintain facilities and
3 equipment in an operational readiness mode.
4 In fact, this last alternative was added as
5 a result of comments that we received from several
6 members of the public during the public scoping period
7 for this EIS.
8 The Draft Environmental Impact Statement
9 evaluates each of these alternatives and their
10 potential impact to the environment. Under all of the
11 alternatives, the affected environment is primarily
12 the area within 50 miles of the laboratory.
13 The draft EIS was completed and sent to the
14 public on Friday, April 9th, 1999. The formal Notice
15 of Availability appeared in the Federal Register on
16 Friday, April 16th, 1999, which was the start of the
17 formal public comment period. This comment period
18 extends for 60 days, until June 15th, 1999.
19 Looking forward, the current plans are for
20 the DOE to review all of the public comments received
21 during the comment period, to respond to comments in a
22 comment and response volume to the Site-Wide EIS, to
23 make any necessary updates to the main volumes of the
24 document, and to publish a final EIS in late fall of
25 this year, 1999.

No comments identified.

1 Following the completion and distribution to
2 the public of the final EIS, a Record of Decision will
3 be issued by the Department not sooner than 30 days
4 following publication in the Federal Register of a
5 Notice of Availability of the final EIS.
6 This is the last in a series of five
7 meetings at the South Broadway Cultural Center. We
8 held two meetings on Wednesday of this week at the UNM
9 Continuing Ed Center and two meetings on Thursday of
10 this week at the Manzano High School.
11 The Department of Energy will accept
12 comments through Tuesday, June 15th.
13 In addition to making oral comments at this
14 meeting, comments will also be accepted by a variety
15 of other methods. Comment cards are available at the
16 registration desk out front and they can be handed in
17 today with your written comments or they can be mailed
18 to the Department of Energy. These forms are already
19 addressed for mailing, all you have to do is fold the
20 form and put a stamp on it if you want to mail them
21 after you leave here.
22 You can also make comments by calling the
23 Department of Energy's EIS hotline, and that number is
24 up here on the wall, it's 1-888-635-7305. That number
25 is available 24 hours a day. Between business hours

No comments identified.

1 between 9:00 AM and 5:00 PM, Monday through Friday,
2 you can speak to a live person who will record your
3 comments for inclusion in the comment/response
4 volume. Before 9:00 or after 5:00, you'll hear a
5 recorded message, and just follow the instructions on
6 that message and you can also record your comments.
7 If you want to mail in your comments, you
8 can mail them to my address -- and you don't need to
9 write this down because we have a card for you to take
10 with you -- the address is Julianne Levings, US
11 Department of Energy, Albuquerque Operations Office,
12 Post Office Box 5400, Albuquerque, New Mexico, 87185.
13 If you want to fax us comments, you can fax
14 them to area code 505-845-6392.
15 And last of all, if you'd like to E-mail
16 comments to us, we have an E-mail address, you can
17 send them to inforequest@nepanet.com.
18 There are some small three-by-five size
19 index cards that are available out by the registration
20 desk that has all of this information on it. Just be
21 sure to pick up one of these before you leave.
22 If you're interested in further information
23 about some of the experimental facilities at Sandia
24 National Laboratories, there is a poster-board session
25 that's available in the next room that is staffed by

No comments identified.

1 Sandia Laboratory people who are very familiar with
2 the operations at their facilities.
3 To get to that room, you just go down the
4 hall by the registration desk and it's in there.
5 he displays and fact sheets in the otherr
6 oom are intended to provide you with additional
7 information and they are not a part of the official
8 public meeting.
9 At this time, I'd like to introduce you to
10 Mr. Earl Whiteman. Mr. Whiteman is the Department of
11 Energy's Assistant Manager for the Office of
12 Technology and Site Programs and is the technical lead
13 for the stockpile management and stockpile stewardship
14 functions at the Albuquerque Operations Office of the
15 Department of Energy. He also has the overall
16 responsibility for technical management of activities
17 covered in the Stockpile Stewardship and Management
18 Programmatic Environmental Impact Statement.
19 Mr. Whiteman has worked for the Department
20 of Energy, and its predecessor agencies, since 1972
21 and has extensive experience in nuclear weapons
22 distribution, production and program management.
23 Mr. Whiteman.
24 MR. WHITEMAN: Okay. I don't have anything
25 to add, Julianne. It's a wonderful facility here.

No comments identified.

1 I've never been here before, so I'm looking forward to
2 this afternoon.
3 MS. MONTOYA: Thank you.
4 Today's meeting is being structured so that
5 we can get the maximum number of comments. Some of
6 what you hear is very formal because, as you can see,
7 we're developing a record that will be published.
8 If you speak this afternoon, we'll ask you
9 to identify yourselves and to spell your name so that
10 the court reporter can get it for the record.
11 We're asking that those speakers who are
12 speaking for themselves speak about five minutes and
13 those speakers who are speaking on behalf of
14 organizations speak about ten minutes, although these
15 are only guidelines.
16 We would ask that you limit your comments
17 this afternoon to the Site-Wide Environmental Impact
18 Statement. That's why we're here today.
19 So comments.
20 MR. BINKLEY: Questions.
21 MS. MONTOYA: Yes, sir.
22 MR. BINKLEY: My name is David Binkley,
23 B-i-n-k-l-e-y.
24 What kind of directives are you getting from
25 Bill Richardson, if any?

23-1-7

Comment 23-1-7

Location of SWEIS Revision(s): None

Response: Mr. Whiteman, DOE, provided a response to this comment at the hearing, as noted in the transcript.

1 MR. WHITEMAN: Well, that's a very broad
2 statement. I think he --
3 MR. BINKLEY: I mean on this particular
4 issue.
5 MR. WHITEMAN: On this particular EIS, we
6 haven't had anything specific on that as yet, nor -
7 and I don't think anything specifically has gone up to
8 his office yet other than his office did approve the
9 release of the draft --
10 MS. LEVINGS: That's correct.
11 MR. WHITEMAN: -- Environmental Impact
12 Statement.
13 MS. MONTOYA: Any other comments?
14 MR. BINKLEY: I guess, could you explain
15 just a little bit more about those three
16 alternatives?
17 Are you leaning in one direction between no
18 action, expanded or reduced, or does that just come
19 out in this final fall of '99 report?
20 MS. LEVINGS: Oftentimes the Department of
21 Energy has a preferred alternative that they discuss
22 in the draft EIS, but this time we don't really have a
23 preferred alternative at this point in time.
24 So there really isn't -- we don't have a
25 preference for any of the three alternatives.

23-2-8

*Comment 23-2-8**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript. See the response to comment 9-1-8 on the DOE's selection of the Expanded Operations Alternative as the Preferred Alternative.

1 MR. BINKLEY: I bet you like the expanded
2 one. Don't you?

23-3-6

3 MS. LEVINGS: Well, what would you like?

4 MR. BINKLEY: I'm just curious. I mean, you
5 know, you just mentioned there was three. And when is
6 that decision known? Is that in the fall report of
7 '99?

23-4-8

8 MS. LEVINGS: Yes, it will be definitely in
9 the final EIS. It's a requirement that we do that,
10 and we will have an EIS. We haven't formulated one
11 yet, we will be shortly, but we hope to get some input
12 -- if we get any input from public comments during
13 the period, either in this venue here or written in
14 any way, we'll look at that, too, in helping us decide
15 which will be the preferred alternative for Department
16 of Energy.

17 So, actually, you have an opportunity to
18 have some input to that if you'd like.

19 MR. BINKLEY: Okay. I guess, you know,
20 whether it's an expanded or reduced, does that - the
21 operations would be expanded that would impact the
22 environment, is that the tie-in with an expanded
23 program or reduced?

23-5-8

24 MS. LEVINGS: Right. By using the expanded
25 -- by looking at expanded operations and looking at a

Comment 23-3-6

Location of SWEIS Revision(s): Summary and Section 1.3.1

Response: The DOE has identified the Expanded Operations Alternative as its Preferred Alternative for the continued operation of SNL/NM (Summary and Section 1.3.1). The SWEIS ROD will state the ultimate decision.

Comment 23-4-8

Location of SWEIS Revision(s): None

Response: Ms. Levings and Mr. Ordaz, DOE, responded to the comment during the public hearing, as noted in the transcript. See the response to comment 9-1-8 on the DOE's selection of the Expanded Operations Alternative as the Preferred Alternative.

Comment 23-5-8

Location of SWEIS Revision(s): None

Response: Ms. Levings and Mr. Ordaz, DOE, responded to the comment during the public hearing, as noted in the transcript. The DOE has analyzed impacts for three alternatives (No Action, Expanded Operations, and Reduced Operations) in Chapter 5. The framework for completing the analysis is discussed in Section 2.3.

1 reduced operations scenario for the laboratories, it's
 2 helped us to develop -- I guess you'd call it an
 3 environmental envelope of potential impacts.
 4 So you're right, in some instances there are
 5 more impacts for the expanded operations alternative,
 6 not exceeding standards, but perhaps more missions,
 7 and for reduced there would be less.
 8 That is described in the Site-Wide
 9 Environmental Impact Statement, the main volume.
 10 MR. ORDAZ: John Ordaz, O-r-d-a-z.
 11 You may want to indicate the preferred
 12 alternative might be a combination of the expanded, no
 13 action.
 14 MS. LEVINGS: Thank you. Right. It might
 14 not necessarily just be the straight alternative, it
 15 my be some aspects of expanded, some aspects of --
 17 MR. BINKLEY: Okay. Is there a budget for
 18 it? I mean, you said the EIS report. Is it - it
 19 isn't out there. That's the fall report?
 20 MR. TABER: Yes, it is.
 21 MS. LEVINGS: We have a copy of it if you
 22 would like a copy.
 23 MR. BINKLEY: Is it out there?
 24 MS. LEVINGS: It's the draft. We'll have a
 25 final in the fall. It's the final that will have a

23-6-31

*Comment 23-6-31**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript. Typically, the DOE does not include cost information in the analysis of alternatives. However, the ROD will factor cost and other information into the decision.

1 preferred alternative identified it in. The draft
 2 EIS, which is available if you'd like a copy -- there
 3 is one out there --
 4 MR. BINKLEY: Okay.
 5 MS. LEVINGS: -- does not indicate a
 6 preferred alternative.
 7 MR. BINKLEY: Does it have budgets?
 8 MS. LEVINGS: No, it does not have budgets.
 9 MR. BINKLEY: Will the final?
 10 MS. LEVINGS: No, the final will not have
 11 budgets in it.
 12 MR. BARTOSCH: Jim Bartosch,
 13 B-a-r-t-o-s-c-h.
 14 It does have socioeconomic information in
 15 specific chapters, if that's what you're talking
 16 about.
 17 MS. LEVINGS: In other words, by that, Jim
 18 is meaning that there is information on what is
 19 contributed -- what kind of dollar income is
 20 contributed to the community from the operation of the
 21 laboratory.
 22 MR. BARTOSCH: Correct.
 23 MR. BINKLEY: You guys are pretty thorough.
 24 I vote for a reduced plan.
 25 MS. LEVINGS: Is that on the paperwork or --

23-7-8

*Comment 23-7-8**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript. See the response to comment 9-1-8 on the DOE's selection of the Expanded Operations Alternative as the Preferred Alternative.

1 MR. BINKLEY: Yeah, yeah.
 2 MS. LEVINGS: -- on the operations?
 3 MR. BINKLEY: That's two years worth of
 4 reading.
 5 MS. MACIAS: I have a question. My name is
 6 Charlotte Macias, M-a-c-i-a-s.
 7 You said on the reduced plan that this
 8 mostly came from the public scoping for the EIS.
 9 Could you give us some salients on the
 10 public scoping, what they came in with as input for
 11 Sandia and DOE to come in with a third plan, which is
 12 the reduced?
 13 Could you give us a highlight or some
 14 highlights as to why the public scoping -- what they
 15 gave you?
 16 MS. LEVINGS: Okay. Sure.
 17 We had the public scoping -- let's see, we
 18 ad -- the Notice of Intent was published in the
 19 Federal Register the end of May, May 30th, 1997.
 20 After that, in June of 1997, we held public
 21 coping meetings. We had a 45-day comment period. So
 22 that was about two years ago.
 23 At that time, we had several letters and
 24 commenters from the public, and in the area of
 25 alternatives, we had about six people -- six different

23-8-4

*Comment 23-8-4**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript. In the Notice of Intent to prepare the SWEIS, published in the *Federal Register* on May 30, 1997 (62 FR 29334), the DOE announced its intention to include the Reduced Operations Alternative in the SWEIS, as an alternative considered but eliminated from further analysis. This was based on the assumption that current activities at SNL/NM were already at the minimum level of operations needed to protect the technical capability and competency of SNL/NM to support its assigned missions. A number of comments received during the public scoping process disagreed with removing the Reduced Operations Alternative from analysis. These comments centered around the need for a Reduced Operations Alternative analysis to provide a proper comparison for the No Action and Expanded Operations Alternative analyses. In addition, there was some concern about the DOE's objectivity in defining what minimum levels of operation would be for the various SNL/NM facilities. Finally, it was argued that the Reduced Operations Alternative was a reasonable alternative, given the DOE had in previous years explored the possibility of reducing the level of operations at various SNL/NM facilities. Given these comments, the DOE decided to include the Reduced Operations Alternative as a third alternative for analysis in the SWEIS.

1 letters -- that had read our Notice of Intent in the
2 Federal Register, and in that Notice of Intent we had
3 at that time indicated that we would look at two
4 alternatives, we'd indicated we would look at a no
5 action scenario and an expanded, and they recommended
6 to us that we should also look at a reduced
7 alternative.

8 MS. MACIAS: Why?

| 23-9-8

9 MS. LEVINGS: Most of them didn't
10 necessarily have reasons. Some of them said, "Well,
11 for balance." Others were perhaps -- how do I want to
12 say this? -- were not --

13 MR. WHITEMAN: They didn't give their intent
14 necessarily.

15 MS. LEVINGS: No, no, not usually, but some
16 may have been sort of against weapons laboratories and
17 may not have wanted Sandia Labs to be at their current
18 -- they may have wanted to see them downsized, but it
19 wasn't really obvious as to people's reasons for why.
20 Then we got lots of other public scoping
21 comments as well, it wasn't just on alternatives. We
22 had people that were concerned about transportation of
23 hazardous wastes and materials to and from the
24 laboratory; people that were concerned about
25 groundwater, groundwater both from the quality aspects

Comment 23-9-8

Location of SWEIS Revision(s): None

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript.

1 as well as quantity, how much was used by the
 2 laboratory.
 3 We had some comments about environmental
 4 justice, which is covered -- all of these things are
 5 covered in the EIS.
 6 We had concerns about cultural resources,
 7 that we be sure to look at traditional cultural
 8 properties for some of the Native American tribes that
 9 may have used the area.
 10 There were some comments about -- just about
 11 all of the natural -- all of the resource areas.
 12 There was a few comments of one kind or another. Some
 13 on socioeconomics, biology, to make sure we looked at
 14 biological resources, any threatened and endangered
 15 species and so on.
 16 We had, pretty much, a wide range of
 17 comments during scoping, just to make sure and put on
 18 the record that we would be sure to address those
 19 kinds of resource concerns.
 20 MS. MACIAS: Did anyone come up in the
 21 public scoping or ask any questions about noise
 22 pollution, such as our airport here and the
 23 possibility of the development soon of Mesa Del Sol
 24 and the aircraft pattern?
 25 Did anyone come up with anything having to

23-10-4

*Comment 23-10-4**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript. During the public scoping process, the only concerns expressed about noise levels were related to explosions that can be felt and cause structural damage. A number of comments were received about air quality. Specifically, these addressed the impacts of the Lurance Canyon Burn Site on adjacent public use areas and the East Mountain area, air conformity issues related to transportation, cumulative impacts of air pollutants to the Pueblo of Isleta, and the amount of air pollutants currently emitted and how this amount would change under the various alternatives.

1 do with noise and air pollution?
 2 also should have been
 3 involved in the scoping.
 4 MS. LEVINGS: There was one comment about
 5 noise, and there were concerns about -- I'm reading
 6 actually from the table that is in the Site-Wide EIS
 7 that summarizes the public scoping, and for your
 8 information, if you want to look at it later, it's on
 9 page 1-7 of the main volume.
 10 MS. MACIAS: I did look at it, but I was
 11 wondering if this --
 12 MS. LEVINGS: This was the only comment. It
 13 was about noise from explosions that could be felt -
 14 that they thought might cause structural damage. It
 15 was noise from explosions that was mentioned
 16 specifically, not noise from the airport.
 17 MS. MACIAS: Well, the reason why I ask that
 18 question is because we just had another EIS hearing
 19 from the airport in that they were going to divert the
 20 pattern from taxi zero, et cetera, from coming from
 21 north to south, east to west, et cetera, and we had
 22 the community and the constituents around here up in
 23 arms about the noise pollution and the direction the
 24 air traffic was going into the airport.
 25 Now, after that hearing, they changed the

23-10-4,
cont.

23-11-42

Comment 23-11-42

Location of SWEIS Revision(s): None

Response: Albuquerque International Sunport operations are not within the scope of the Sandia SWEIS.

1 directions going over the Mesa Del Sol, which is west
2 of the airport and south, which is going to be that
3 big community there.

4 Now, when that goes up and this amphitheater
5 and that Neilander out of Ohio or Indiana who is going
6 to build 35,000 houses, all that noise and development
7 will be going down on -- and the noise will be going
8 over the Mesa Del Sol area, and I was just wondering
9 if anyone had the insight to have to know -- to happen
10 to know what will be developed soon, rather than
11 having a meeting now and knowing what ambient air and
12 noise quality, et cetera, that maybe we're looking at
13 it now, but did anyone have any foresight to know
14 about the development coming up soon?

15 MS. LEVINGS: In the public scoping?

16 MS. MACIAS: Yes.

17 MS. MACIAS: This whole area -- this EIS
18 will be statewide, am I correct, or is it nationwide?

19 MS. LEVINGS: This Environmental Impact
20 Statement is simply for Sandia National Laboratories
21 here on the base, on Kirtland Air Force Base. It is
22 looking at their impacts -- environmental impacts on
23 the surrounding area.

24 MS. MACIAS: And Sandia does get its fingers

23-11-42,
cont.

23-12-42

23-13-7

Comment 23-12-42

Location of SWEIS Revision(s): None

Response: Development of the Mesa Del Sol area, a portion of which is currently a safety buffer zone for activities at the 10,000-ft Sled Track Complex, could create conflicts with respect to land use. This development could require realignment of test activities; all activities will be conducted in accordance with applicable regulatory requirements. Figure 5.3.11-1 shows noise contours produced by SNL/NM test facilities near Mesa del Sol. The lease of the Buffer Zone (state of New Mexico, University of New Mexico land trust) expired in 1995 and the New Mexico State Land Office and the DOE are discussing a continuation of the lease.

Comment 23-13-7

Location of SWEIS Revision(s): None

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript. The SWEIS is limited to the potential environmental impacts of three operational alternatives for continued operation of SNL/NM in Albuquerque, NM.

1 into different areas in the state, right --
2 MS. LEVINGS: Well -
3 MS. MACIAS: -- with DOE?
4 MS. LEVINGS: Sandia National Laboratories
5 has a facility in California and it has a facility or
6 some land at the Tonopah Test Range near the Nevada
7 Test Site in Nevada, and it has some other small areas
8 outside of this immediate area, but we're only looking
9 -- this EIS only deals with Sandia National Labs, the
10 facilities that are located on Kirtland Air Force
11 Base, only those.
12 MS. MACIAS: Okay. One last comment.
13 I think most of us here just love Sandia,
14 and we don't want you to change, we don't want anyone
15 getting in your business, we just want you to stay
16 great and powerful and use your brains. Don't let
17 rules and regs get in the way of your brains. We love
18 you the way you are and we look up to you and we
19 really appreciate you.
20 MR. BINKLEY: I second that.
21 MS. LEVINGS: Thank you very much.
22 MS. MONTOYA: Thank you.
23 We had some people come in and if - you
24 know, feel free to sit down.
25 As you can see, we have a court reporter,

23-14-6

Comment 23-14-6

Location of SWEIS Revision(s): None

Response: Comment noted.

1 which is why we're asking people to identify
2 themselves.
3 Let me just say that we do have someone
4 available if someone wants to give comments in
5 Spanish, Mr. Arturo Sandoval is available as a
6 translator.
7 Any other comments?
8 Mr. Binkley.
9 MR. BINKLEY: Just kind of a follow-up to
10 what she was asking.
11 Is there going to be a similar one for Los
12 Alamos and other DOE facilities?
13 MR. WHITEMAN: Yes. In fact, we just are
14 finishing that. We did a Site-Wide Environmental
15 Impact Statement for Los Alamos, and the final was
16 just published --
17 MR. BINKLEY: Really.
18 MR. WHITEMAN: -- a couple of months ago.
19 MS. LEVINGS: If you want a copy of that,
20 you can leave us your name and address and we'll send
21 it to you.
22 MR. WHITEMAN: It's twice as big as that
23 one.
24 MR. BINKLEY: No, no. Just give me the
25 highlights. Give me the cliff notes.

23-15-1

*Comment 23-15-1**Location of SWEIS Revision(s): None*

Response: Mr. Whiteman, DOE, responded to the comment during the public hearing as noted in the transcript.

1 MS. MONTOYA: Well, that's the executive
2 summary, that's the cliff notes section.
3 Other comments?
4 Yes.
5 MR. FAICH: My name is Ron Faich. I was at
6 the -- she's got it, she knows me, I was at the
7 hearing on Wednesday at the Continuing Ed Center.
8 Part of the reason why I came back and asked
9 to speak again is because there was one thing that I
10 meant to say but I forgot to, and I'm going to follow
11 up in a written statement, but I wanted to at least
12 bring it out here in the public record, and I think I
13 know partly what your response is going to be, but,
14 nevertheless, I think it's got to be raised.
15 I know you're Department of Energy and I
16 know the Air Force is Department of Defense and you
17 guys are next-door neighbors, but one of the
18 complaints I have about the draft SWEIS is that I
19 don't really feel that you adequately address some of
20 the -- I would call them interactive or potential
21 interactive impacts.
22 I think the place that it fits under the
23 NEPA statute would be under cumulative, and I think
24 the thing that I'm particularly concerned about is
25 something that's very sensitive to the Air Force and

23-16-38

Comment 23-16-38

Location of SWEIS Revision(s): None

Response: See the response to comment 14-6-38.

1 to the Department of the Defense, and that's KUMSA,
 2 and it occurs to me, and I don't know that it's
 3 public, but I know generally that KUMSA, and that's
 4 K-U-M-S-A, but I guess the more current acronym is
 5 KUMMSC for Kirtland Underground Munitions and
 6 Maintenance Storage Complex, it's where they store the
 7 nukes now underground, and I know that it's just north
 8 of Area 3 -- Sandia Area 3 and Area 5, and I know that
 9 those facilities are just south of the runway, the
 10 main east/west runway, and that I also know from my
 11 own experience, I guess, that most planes seem to take
 12 off from west to east.

13 So I'm wondering, what's the possibility
 14 that a plane is taking off from west to east and gets
 15 a few hundred feet off the ground and it has severe
 16 difficulties and it makes a sharp right turn and
 17 crashes into some of this stuff that's in Area 5?
 18 I'm wondering if the seismic shock, and
 19 whatever else might happen, could, in fact, then
 20 engulf KUMSA, cross bureaucratic lines, of course, and
 21 you know, maybe there is an ultimate catastrophe for
 22 the Albuquerque metropolitan area, and maybe the
 23 Sandia SWEIS is not the appropriate document in which
 24 to consider that, but certainly the people of
 25 Albuquerque, I think, deserve some attention be paid

23-17-37

23-18-37

23-19-38

*Comment 23-17-37**Location of SWEIS Revision(s): None*

Response: The probability of an aircraft crashing into a facility in TA-V is presented in Appendix F.5 of Volume II. The consequences of such a crash are described in Appendix F.2 of Volume II.

*Comment 23-18-37**Location of SWEIS Revision(s): None*

Response: See the response to comment 14-7-37.

*Comment 23-19-38**Location of SWEIS Revision(s): None*

Response: See the response to comment 14-6-38.

1 to the possibility of an interdepartmental
 2 catastrophe, let's say, and I think, you know, this
 3 might be the appropriate time at least to raise the
 4 issue.
 5 I never did see an EIS for KUMSA. I imagine
 6 they don't have to do that because it's -- for
 7 national security reasons, but certainly there must be
 8 some risk associated with it.
 9 Certainly at night, those of us who live
 10 within five miles or so of the airport hear large prop
 11 planes coming in, I don't think they are disgorging
 12 passengers, I think they are, you know, either
 13 bringing in or taking out nuclear weapons and things
 14 like that, and I'm just wondering -- I don't worry
 15 about it too much, I only live five miles away, that's
 16 just a few nano seconds, I guess, as neutrons fly, but
 17 it does seem that, you know, that risk -- if there is
 18 such a risk, and I'm not saying that it's high or I
 19 probably wouldn't live within five miles of the
 20 airport, but I think somewhere that should be
 21 addressed.
 22 Is there a possibility of a Sandia disaster
 23 affecting KUMSA or vice versa? And maybe all of it is
 24 tied in or maybe the trigger being a plane crashing as
 25 it's coming in or taking off at the airport.

23-19-38,
cont.

23-20-14

23-21-37

*Comment 23-20-14**Location of SWEIS Revision(s): None*

Response: The USAF has completed an Environmental Assessment of the Munitions Storage Facility (USAF 1986). The document and a Finding of No Significant Impact were issued in October 1986. The KAFB Environmental Management Division may be contacted for additional information. See the response to comment 14-7-37.

*Comment 23-21-37**Location of SWEIS Revision(s): None*

Response: See the response to comment 14-7-37.

1 Thank you.
 2 MS. MACIAS: Charlotte Macias.
 3 I'd follow that up, too, speaking of the
 4 Mesa Del Sol that's cropping up, also, that's my big
 5 worry, looking ahead, planning ahead.

23-22-38

6 MS. LEVINGS: Looking ahead in what regard?
 7 To Mesa Del Sol?

8 MS. MACIAS: The gentleman just spoke about
 9 the east/west and et cetera.

10 MS. LEVINGS: An accident, okay.

11 MS. MACIAS: He's talking further south and
 12 east of the Mesa Del Sol area, but it all is within
 13 the circle of takeoffs and landings.

23-23-37

14 MS. LEVINGS: I am not an expert on
 15 accidents, so I can't answer your question in this
 16 format as you know.

17 MR. FAICH: I didn't expect an answer here
 18 today.

19 MS. LEVINGS: Yes, I know you didn't. You
 20 just wanted to make a comment about DOE policy versus
 21 DOD or Air Force policy.

22 It happens to be a Department of Energy
 23 policy to do Site-Wide Environmental Impact
 24 Statements.

25 It isn't required by the Council on

Comment 23-22-38

Location of SWEIS Revision(s): None

Response: See the response to comment 14-7-37.

Comment 23-23-37

Location of SWEIS Revision(s): None

Response: The annual frequency (or probability) of any type of aircraft crash into an SNL/NM facility is listed in Volume II, Table F.5-5, and additional details are listed in Tables F.5-6 through F.5-13.

Although a potential crash into a local community of a non-DOE or non-SNL/NM aircraft is not within the scope of the SWEIS, aircraft carrying DOE or SNL/NM cargo are within the scope. Because of the low number of takeoffs and landings of DOE or SNL/NM aircraft, the probability of a crash into a local community is not credible (less than 1 in 10 million).

In addition, the probability of any airplane crashing before the landing approach or after takeoff is considerably smaller than during takeoff or landing. Also, the probability of a specific type of airplane carrying hazardous DOE or SNL/NM cargo crashing into an Albuquerque community is not credible.

See the response to comment 14-7-37.

1 Environmental Quality. That's something that's
2 required by the Department of Energy for multiprogram
3 sites, which is why we have done Site-Wide EISs out of
4 Albuquerque for Pantex, Los Alamos and Sandia.
5 Kirtland Air Force Base and the Air Force,
6 they do not have a similar policy to do site-wide
7 kinds of things, and, consequently, they don't do
8 that.

9 MR. FAICH: Does NEPA not cover them? Does
10 NEPA not cover the Department of Energy?
11 MS. LEVINGS: Oh, it does cover them, yes,
12 and they do it by facility. When they construct or
13 build a new facility, or something of that nature,
14 they do NEPA for it, but they are not required by
15 their own department to do site-wide-type NEPA
16 documents, which is what this is. Nor are they funded
17 to do them.

18 MR. FAICH: The Department of Defense is not
19 funded to --
20 MS. LEVINGS: Right.
21 MR. FAICH: -- do site-wide --
22 MS. LEVINGS: They do not have funding to do
23 site-wide.
24 MR. FAICH: Let me ask you, Ms. Levings,
25 seriously, and I'm not trying to pin you to the wall

23-24-1

Comment 23-24-1

Location of SWEIS Revision(s): None

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript.

1 or anything of the sort, and I know that, you know,
 2 all of us in Albuquerque are real proud of having
 3 Kirtland Air Force and Sandia Base and all of that,
 4 but the fact of the matter is that there can be risk
 5 associated with the interdepartmental activities that
 6 are going on side-by-side.

7 MS. LEVINGS: I understand.

8 MR. FAICH: Where does that get addressed,
 9 if any place?

10 MS. LEVINGS: I think we'll have to look
 11 into that. I know that we did an accident analysis
 12 with airplane crashes that is in the Site-Wide EIS,
 13 and it does look at -- I believe it's Tech Area 5, if
 14 there was an airplane crash -- I'm seeing some
 15 nodding.

16 MR. TABER: Yes.

17 MS. LEVINGS: Thank you. It does look at
 18 airplane crash scenarios hitting some of the buildings
 19 in Tech Area 5 where we have our research size
 20 reactors there, and we can -- and if you will put your
 21 comment in writing to us, which you're intending to
 22 t that and see if there is
 23 something that we missed.

24 MR. FAICH: All I'm saying is to include the
 25 possibility that KUMSA could somehow get involved in

23-25-38

23-26-37

Comment 23-25-38

Location of SWEIS Revision(s): None

Response: See the responses to comments 14-6-38 and 23-23-37.

Comment 23-26-37

Location of SWEIS Revision(s): None

Response: See the response to comment 14-7-37.

1 that analysis. I mean, you said an airplane crash
2 into Tech Area 5, all right, well, what happens - is
3 it a possibility that those weapons that are stored
4 underground -- and I know that they are not fully
5 armed when they are stored there, you know, but could
6 we have a major disaster here as a result of something
7 like that, that's all I'm asking, and where does that
8 get addressed? If not in the Sandia SWEIS, where does
9 that get addressed?

23-26-37,
cont.

10 MS. LEVINGS: Okay.

11 MS. MONTOYA: Thank you.

12 Other comments?

13 MR. BINKLEY: I missed some of those

14 acronyms.

15 MS. MONTOYA: Well, I heard SWEIS, which is

16 Site-Wide Environmental Impact Statement.

17 MR. BINKLEY: Okay. What's --

18 MS. MONTOYA: Okay.

19 MR. BINKLEY: What was the --

20 MR. FAICH: KUMSA.

21 MS. MONTOYA: KUMSA.

22 MS. MACIAS: NEPA.

23 MR. BINKLEY: Yeah.

24 MR. FAICH: National Environmental Policy

25 Act.

1 MS. MONTOYA: And that's explained right in
 2 the beginning.
 3 MR. BINKLEY: Oh, wow.
 4 MS. MONTOYA: I was going to tell you that
 5 the -
 6 MR. BINKLEY: Okay. Okay.
 7 MS. LEVINGS: I think I explained CEQ, that
 8 was Council on Environmental Quality. There is a
 9 whole acronym list in there.
 10 MR. BINKLEY: Oh.
 11 MS. MONTOYA: Feel free to come in and sit
 12 down if you'd like.
 13 MS. MACIAS: Ms. Levings, could you please
 14 add my question to the gentleman's question for what
 15 are you going to do about it, where does it lie, who
 16 is going to take care of this or address this matter?
 17 My concern is the Mesa Del Sol development
 18 soon to be coming up.
 19 MS. LEVINGS: Yes, your question was
 20 recorded for the record and we will look at that.
 21 MS. MACIAS: Please. Thank you.
 22 MS. MONTOYA: Other comments?
 23 MR. BINKLEY: I'm just curious, you're DOE
 24 and you oversee Sandia. You guys are writing this
 25 report independently of Sandia, or how much is Sandia

23-27-37

23-28-1

*Comment 23-27-37**Location of SWEIS Revision(s): None*

Response: See the response to comment 14-7-37.

*Comment 23-28-1**Location of SWEIS Revision(s): None*

Response: Ms. Levings, DOE, responded to the comment during the public hearing, as noted in the transcript.

1 -- they just cooperate -- they just do what you say
2 or -- ha-ha-ha, they are all laughing.
3 MS. LEVINGS: This isn't an ideal world.
4 MS. MACIAS: Let them do what they want,
5 Sandia.
6 MS. LEVINGS: Sandia National Laboratories
7 has been involved in providing all of the data and
8 information that we've used to put this information
9 together.
10 In order to provide some objectivity, we,
11 The Department of Energy, hired a contractor - Tetra
12 Tech NUS is the name of the contractor who did the
13 analysis for what's in the Site-Wide EIS.
14 We took the information that we received
15 from the laboratory and that's been gathered by the
16 laboratory and the analysis was done independently.
17 However, I have a counterpart at Sandia
18 National Laboratories I work with very closely through
19 this whole project, and so we're all doing this in
20 cooperation.
21 MR. BINKLEY: But you make the final report
22 based on --
23 MS. LEVINGS: That's correct.
24 MR. BINKLEY: -- recommendations from the
25 subcontractor?

23-28-1,
cont.

23-29-6

Comment 23-29-6

Location of SWEIS Revision(s): None

Response: Comment noted.

1 MS. LEVINGS: Well, they prepared the
 2 analysis and then the Department of Energy will make
 3 the decisions. We will issue the Record of Decision
 4 in terms of what is the preferred alternative, and the
 5 Department of Energy is the decision maker in the
 6 process.

7 MR. BINKLEY: Okay.

8 MS. MONTOYA: Other comments?

9 MS. MACIAS: One more question. One last
 10 question.

11 Has Isleta had any questions for their
 12 environmental impacts to the south of us?

13 MS. LEVINGS: Yes. During this public
 14 comment period that's going on right now, we have not
 15 heard yet from the Isleta Pueblo; however, we have
 16 been involved in traditional cultural property
 17 consultations with the pueblo over the past year or
 18 so.

19 So they have been involved in what's been
 20 going on and they have been -- I've given them
 21 briefings. We'd had a briefing about the Site-Wide
 22 Environmental Impact Statement. They submitted
 23 comments during the public scoping period, and we
 24 expect that we will receive comments from them during
 25 this comment period.

23-30-30

Comment 23-30-30

Location of SWEIS Revision(s): None

Response: During the public scoping process, which is described and summarized in Section 1.7, multiple comments or questions were presented by the public regarding the potential for environmental impacts to Pueblo of Isleta lands. The governor's office of the Pueblo of Isleta submitted a letter during the scoping process describing issues of particular concern to the Pueblo. These issues were to include a Reduced Operations Alternative in the SWEIS analysis; to study the potential for impacts to tribal TCPs located on KAFB; to analyze the potential for waste discharge impacts to the Pueblo's water, air, soil, and human health; and to include the lands leased by the Pueblo of Isleta to DOE in the analysis of cumulative effects.

In addition, the Pueblo of Isleta submitted comments on the Draft SWEIS. They are presented in this volume.

1 MR. BINKLEY: No chance for a bypass from
 2 I-40 to I-25 south, is there?
 3 MR. WHITEMAN: Not from DOE.
 4 Mr. BINKLEY: It would make a nice toll
 5 road.
 6 MR. FAICH: Have a rest stop right at
 7 KUMSA.
 8 MR. BINKLEY: Free neutrons.
 9 MS. MONTOYA: Any other comments?
 10 MS. LEVINGS: Do we want to adjourn then,
 11 Margaret?
 12 MS. MONTOYA: Yes.
 13 If there aren't comments, why don't we
 14 adjourn, and we'll reconvene in about half an hour -
 15 MS. LEVINGS: At 2:15.
 16 MS. MONTOYA: -- which means about 2:15.
 17 MS. LEVINGS: Yes.
 18 MS. MONTOYA: Thank you very much for coming
 19 and thank you for your comments.
 20 Thank you.
 21 (Recess held from 1:44 to 2:15 PM.)
 22 MS. MONTOYA: This is Margaret Montoya, I'm
 23 the moderator for this meeting.
 24 I'm recovering the meeting, it's about
 25 2:15, to see whether anyone else has come in who wants

23-31-38

*Comment 23-31-38**Location of SWEIS Revision(s): None*

Response: Mr. Whiteman, DOE, responded to the comment during the public hearing, as noted in the transcript.

As discussed in Section 6.3, the Southwest Transportation Corridor is being considered by Bernalillo county. Both the DOE and the DoD consider the corridor project to be incompatible with their missions at KAFB.

1 to make comments.
 2 Is there anyone here who would like to make
 3 a comment?
 4 Since there isn't, we're going to adjourn,
 5 and we will reconvene at 3:00.
 6 (Recess held from 2:15 to 3:00 PM.)
 7 MS. MONTOYA: I'm Margaret Montoya, I'm the
 8 moderator for this meeting, and I'm reconvening us,
 9 it's just a little bit before 3:00.
 10 I understand Mr. Hancock wants to speak.
 11 MR. HANCOCK: Okay.
 12 MS. MONTOYA: Well, I have a request to
 13 speak, that's why.
 14 MR. HANCOCK: How are we doing this? Am I
 15 just --
 16 MS. LEVINGS: You can just sit there. Kathy
 17 can hear you just fine.
 18 MR. HANCOCK: Okay. Fine.
 19 I'm Don Hancock. I'm from SouthWest Research
 20 and Information Center. We're a private, nonprofit
 21 organization.
 22 One of the reasons that this document is
 23 being done is because of a lawsuit that we and the
 24 Pueblo of Isleta filed to require the publication of a
 25 Site-Wide Environmental Impact Statement.

23-32-6

*Comment 23-32-6**Location of SWEIS Revision(s): None*

Response: Comment noted.

1 On one hand, while it's later than it was
 2 supposed to be schedule-wise under the time frame we
 3 talked about in the lawsuit, we are glad that the
 4 document is out and is available and the process is
 5 going along. So from that standpoint, we're glad that
 6 the process is moving along.

7 I'm going to focus, as you might guess, more
 8 on criticisms and concerns that I have about the
 9 document and some of the things that are not so
 10 problematic, and so that's one initial comment.
 11 The second initial comment is we
 12 organizationally haven't finished our review, so we
 13 intend to submit some additional comments before the
 14 end of the comment period.

15 In terms of concerns, I guess one place that
 16 I want to start is the comments that we made during
 17 the scoping process in terms of what the EIS should
 18 cover and -- and concerns about, from my standpoint, a
 19 lack of adequate consideration of some of those
 20 scoping comments in terms of what's actually in the
 21 document.

22 We argued, during the scoping, that the
 23 original two alternatives were not sufficient. The
 24 response in the draft, of course, is to add the third
 25 reduced operations alternative.

23-32-6,
 cont.

23-33-39

Comment 23-33-39

Location of SWEIS Revision(s): None

Response: The DOE believes that it gave full consideration to comments made during the scoping process. These comments were integral to the development of methodologies used in the evaluation of impacts.

1 We don't think you've done a very good job
 2 of actually looking at what range of reduced
 3 alternatives there could be or reduced operations
 4 there could be.
 5 We also argued that one of the major changes
 6 that could happen over these next ten years, in terms
 7 of Sandia's impacts, relates to the withdrawal area,
 8 and that this document ought to justify -- provide
 9 analysis of Sandia's use of the withdrawal area, and
 10 to make a case, if there is one to be made, for why
 11 the operations in that area should continue, and to
 12 seriously look at how the Sandia operations in that
 13 area could be relocated, changed, eliminated, et
 14 cetera, and I don't think you've done that in this
 15 document.
 16 There is a -- I looked for some analysis,
 17 and if somebody wants to point me to some that I
 18 haven't found, I would be glad for that.
 19 There is this reference on page 6-17 about
 20 the Forest Service's consideration of a relatively
 21 small return of the withdrawal area to public use.
 22 That's -- I mean, we know about that, that's a Forest
 23 Service process.
 24 What Sandia needs to do, though, in terms of
 25 its own use of the withdrawal area, I don't -- I think

23-34-8

*Comment 23-34-8**Location of SWEIS Revision(s): None*

Response: The DOE believes the Reduced Operations Alternative accurately reflects the minimal level of operation possible for SNL/NM to fulfill its mission as determined in the Stockpile Stewardship and Management Programmatic Environmental Impact Statement (DOE 1996a). Several facilities in the Withdrawn Area are unique to the DOE nuclear weapons complex, such as the Lurance Canyon Burn Site and the Aerial Cable Facility. The DOE does not anticipate moving these facilities or suspending activities at these facilities within the time frame analyzed in the SWEIS. See the response to comment 11-2-8 on the adequacy of the Reduced Operations Alternative.

1 this document is extremely inadequate and apparently
 2 didn't take serious the scoping comment that we and
 3 other people made.
 4 The comment is actually listed on page 1-7.
 5 There is -- under "Alternatives," the first one listed
 6 -- first comment listed is, "Return all or part of
 7 the withdrawn US Forest Service Lands to public use."
 8 So it's listed here, but I don't see the
 9 response, and the analysis that we, SouthWest
 10 Research, expected, and that was one of our comments.
 11 So that's pretty disappointing, frankly.
 12 This is an issue that has been discussed numerous
 13 times, not only by us, but others, over the last ten
 14 years or so, and to not have a better -- to not have a
 15 better analysis of that is pretty disappointing.
 16 I've had some discussions with Ross on some
 17 of the water issues. I guess in terms of impacts, I
 18 guess there are a couple of things that I, you know,
 19 want to say for the purposes of the formal comment.
 20 The analysis is that the Sandia impact on
 21 water -- groundwater use, drawdown of the aquifer, et
 22 cetera, is pretty minor, a few feet a year, and it's
 23 going to continue that way.
 24 I certainly hope that's the case. Actually,
 25 I hope that Sandia doesn't do much drawdown at all,

23-34-8,
cont.

23-35-7

23-36-20

*Comment 23-35-7**Location of SWEIS Revision(s): None*

Response: Determinations on the current and future use of the Withdrawn Area are the responsibility of the DOE, USAF, and the USFS. The return of land to public use is a Federal issue among these agencies. Section 3.5.3 has been added to the Final SWEIS discussing why the return of the Withdrawn Area for public use is considered an unreasonable alternative. Nonetheless, a USFS-sponsored effort to return a part of the Withdrawn Area to public use is part of the cumulative effects analysis in Section 6.4.

*Comment 23-36-20**Location of SWEIS Revision(s): None*

Response: Table 5.3.4-2 projects SNL/NM's contribution to aquifer drawdown (1998 to 2008) at 3.1 ft. Regardless of Mesa del Sol's withdrawal, SNL/NM would be responsible for 3.1 ft, not accounting for the 30-percent water use reduction goal. If the Mesa del Sol community were not built, SNL/NM's percentage of the drawdown would increase from 11 to 12.8 (or 3.1 ft of 24.2 ft of total drawdown over the 10-year period). The response to comment 11-12-24 discusses the impacts related to Mesa del Sol water use.

1 that Sandia actually implements this 30 percent
2 conservation reduction that is mentioned more than
3 once in the document, that Sandia has the commitment.
4 The document, of course, doesn't include that, and the
5 analysis of the kind of withdrawal and drawdown that
6 would be over the next ten years, and I understand
7 from a -- I understand from a NEPA context the logic
8 of that, but in the real world, I would hope that
9 Sandia would do less in that regard.
10 My concern is that -- and apparently in the
11 interest of trying to show that Sandia's impact is
12 moderate, some contortions have been gone through in
13 the document that I don't think are appropriate.
14 The document talks about, in the regional
15 area, 11 or 12 percent is Sandia's use. That assumes
16 larger uses over the next ten years by Mesa Del Sol
17 than what Sandia is going to do, and, of course,
18 that's, at best, highly speculative. So the Sandia
19 use could easily be well over 20 percent, not 11 or 12
20 percent.
21 On the one hand, I understand the argument,
22 the impact is still going to be minimal, et cetera,
23 but Sandia should be doing better than that, number
24 one, but the document shouldn't use artificial -
25 shouldn't use in the narrative artificially low

23-36-20,
cont.

1 analysis.

2 The other issue that I want to talk about in

3 terms of Sandia's impact, and again this relates to

4 the metropolitan area, Sandia's use of water in the

5 context of the overall metropolitan area is small, if

6 you're looking at the total, but Sandia, it seems to

7 me, should join the rest of us in significant

8 conservation efforts over the next few years.

9 One other thing, and again I've mentioned

10 this but would like it to be responded to in terms of

11 some future analysis for the context of the final, is

12 on B-7, page B-7, there is a listing of the last 12

13 years historical groundwater withdrawals, and there

14 are two years in the last eight that are pretty much

15 out of the norm. There is a 258 million cubic feet

16 withdrawal in 1989 and a 235 in 1992.

17 Those are very much not consistent with

18 years before and afterwards, and I've asked the

19 question, and again there may be somebody here that

20 knows the answer to that, but just in terms of looking

21 at that historical use, there ought -- there needs to

22 be an explanation of why there has been such a great

23 disparity.

24 There may be an easy, obvious answer to that

25 question, but if there is not, it throws into question

23-37-20

*Comment 23-37-20**Location of SWEIS Revision(s): None*

Response: Based on 1996 usage, SNL/NM's goal is to reduce water use from 440 million gallons to 308 million gallons by 2004.

*Comment 23-38-20**Location of SWEIS Revision(s): None*

The increase in groundwater withdrawal in 1989 to 258 million ft³ appears to be weather related. From June through September of 1989, water flow in the Rio Grande was 50 percent less than in 1988 and 25 percent less than in 1990 (USGS 1999). This low river flow is indicative of a dryer summer and subsequent increase in water use.

The answer to the question of abnormally high groundwater withdrawal in 1992 is not as straightforward. An initial check of the Rio Grande water flow (USGS 1999) did not indicate a dry year, therefore, the reasons for the increased groundwater withdrawal were internal to KAFB. Groundwater withdrawal, as shown in Table B.2-1, does not constitute all water usage at KAFB. KAFB uses city of Albuquerque water to supplement water pumped from KAFB wells. From 1990 to 1993, KAFB water usage remained constant at approximately 241 million ft³ per year (USAF 1998a). In 1992, due to equipment failure, equipment maintenance, or other factors, KAFB purchased less water from the city of Albuquerque, with a higher percentage of water used pumped from KAFB wells (USAF 1998a). In summary, although Table B.2-1 shows an increase in groundwater withdrawal for 1992, actual water consumption remained constant.

23-38-20

1 the projections that are being made, because those,
 2 quote, high years are really not -- are not assumed in
 3 terms of the ten-year future use.

4 So I'd like to see some explanation of why
 5 there was such high use in those years, one at least
 6 of which, to my recollection, was not a low-water year
 7 for Albuquerque.

8 I understand that Kirtland's use, unlike
 9 some of the rest of the population, is not so much
 10 based on what the actual weather for the year is. The
 11 other -- so water use is a big issue in the
 12 metropolitan area as a whole. There are changes being
 13 made from a public policy standpoint in terms of use,
 14 increase in cost to average users in terms of our home
 15 bills, et cetera.

16 Another major issue for the city is
 17 transportation. I guess it's a concern to me that the
 18 document doesn't really reflect the transportation
 19 issues in a couple of ways that I think it should.
 20 Number one, in terms of alternative missions
 21 for Sandia, there is a lot of scientific and technical
 22 expertise at Sandia that could and should be more used
 23 in terms of looking at transportation and reducing
 24 some of the negative effects of transportation in the
 25 metropolitan area as well as Sandia, specifically.

23-38-20,
 cont.

23-39-20

23-40-43

Comment 23-39-20

Location of SWEIS Revision(s): None

Response: The DOE and SNL/NM recognize the importance of water use in the Albuquerque-Belen Basin aquifer.

See the response to comment 7-35-20 on water conservation.

Comment 23-40-43

Location of SWEIS Revision(s): None

Response: As discussed in Section 3.5.2, additional alternative missions were not analyzed in detail because the three alternatives evaluate and bound levels of activity for SNL/NM's facilities. SNL/NM's primary role is to contribute its specified capabilities to the assurance of a safe, secure, and reliable nuclear weapons stockpile. SNL/NM's support of other mission lines (see Section 2.1) developed primarily as an offshoot of weapons research into a number of fields, including transportation. SNL/NM's publicly available Institutional Plan (SNL 1997b) describes various research and development projects in areas such as fuel cells, alternative fuels, batteries, and improvements to the internal combustion engine, which have the potential to reduce the negative effects of current transportation modes. For specific SNL/NM workforce efforts to reduce traffic problems, see the response to comment 11-16-27.

1 That's really not reflected in the document.
2 The projections here about future -- how the
3 future of -- of transportation to and from Sandia
4 doesn't show any great innovation happening. Again,
5 if you're saying from a NEPA standpoint, that's a
6 conservative and reasonable way of doing the analysis,
7 that's one thing, but the document itself could and
8 should reflect much more -- some -- some commitment on
9 the part of Sandia to both come up with better
10 transportation modes for its employees and people
11 going to and from Sandia to lessen the overall impact
12 in terms of transportation, but also in terms of the
13 mission of Sandia, the document should reflect, or it
14 should discuss, if it's not going to be a significant
15 Sandia mission in the future, why -- why -- Sandia
16 diversifying itself more away from that base operation
17 as a weapons facility to doing other kinds of socially
18 useful activities, why that kind of policy -- from a
19 policy standpoint, why that kind of action isn't going
20 to be more a part of Sandia's purpose, and I would
21 hope it would be reflected in this kind of a
22 document. It should be.

23 MS. MONTOYA: Mr. Hancock, let me interrupt
24 you for just a moment. You've been speaking for about
25 15 minutes and we had talked about --

23-41-43

Comment 23-41-43

Location of SWEIS Revision(s): None

Response: See the response to comment 23-40-43.

1 MR. HANCOCK: I hadn't heard what the limit
2 was, so I assumed somebody would stop me when I had
3 gone too far.

4 MS. MONTOYA: I was just going to tell you
5 that we had talked about some guidelines, and we had
6 talked about --

7 MR. HANCOCK: I missed those, so please tell
8 me now.

9 MS. MONTOYA: -- that people who were here
10 to speak on their own behalf could talk about five
11 minutes; someone who came on behalf of an
12 organization, as you are, could speak about ten.
13 You've been speaking about 15, and what I
14 wanted to do was see if there was anyone here who had
15 some comments to make and --

16 MR. HANCOCK: Fine.

17 MS. MONTOYA: -- if not, we can go back to
18 you and let you talk a while.

19 MR. HANCOCK: That's fine. I'm glad to hear
20 other people.

21 MS. MONTOYA: Are there any other comments?
22 Why don't you continue, Mr. Hancock.

23 MR. HANCOCK: Let me just say a couple more
24 things, then, since I wasn't keeping track, I'm glad
25 you were, in terms of how long I was speaking, and I

No comments identified.

1 didn't know what your guidelines were.
 2 MS. MONTOYA: That's fine. It's not a
 3 problem.
 4 MR. HANCOCK: I guess a couple more things
 5 that I think I want to mention while we're here on the
 6 record.
 7 Let me ask a question. Are the program
 8 documents here -- the environmental and program
 9 documents, are there copies physically here?
 10 MS. LEVINGS: The information documents?
 11 MR. HANCOCK: Yes.
 12 MS. LEVINGS: They are not physically at
 13 this meeting. They are in the public reading rooms.
 14 MR. HANCOCK: Fine. I haven't looked at
 15 them yet. That's one of the things I want to do in
 16 terms of understanding some of the -- some of the
 17 impact numbers that are here.
 18 MS. LEVINGS: Okay.
 19 MR. HANCOCK: I guess the other thing I want
 20 to just mention a little bit more is I don't -- I
 21 don't understand -- and, again, it may be my lack of
 22 spending enough time with the document yet -- but I
 23 mentioned briefly before the concern that we had about
 24 the reduced operations alternative looking seriously
 25 at impacts of significantly reduced operations in

23-42-14

23-43-8

Comment 23-42-14

Location of SWEIS Revision(s): None

Response: Copies of these documents are available in the public reading rooms.

Comment 23-43-8

Location of SWEIS Revision(s): None

Response: See the response to comment 11-2-8 on the adequacy of the Reduced Operations Alternative.

1 terms of some facilities.
 2 Other than the statement made more than once
 3 in the document that people will notice that reduced
 4 operations in some cases are higher than -- the
 5 impacts are higher and the use is higher than the
 6 baseline years, and that's because in some cases the
 7 baseline year is when -- either it doesn't reflect new
 8 facilities or it doesn't reflect meaningful operation
 9 -- again, I don't see in the reduced operations
 10 alternatives the kind of discussion that I think is
 11 needed and justified in terms of, on a
 12 facility-by-facility basis, why -- why, in -- for each
 13 individual facility, there is not more of a discussion
 14 of what reasons there are that much more substantial
 15 reduced operations are not reasonable and possible,
 16 why that for the individual facilities the expected
 17 use is the way it is.

18 To me, it's sort of picking something out of
 19 a hat, basically, which I'm sure is not what the
 20 people at the facilities actually did, they obviously
 21 had some assumptions about what they needed to do to
 22 operate, and if -- and I would like to see more
 23 analysis in the document on those things, or if that
 24 kind of more detailed analysis is in some other
 25 document, and it doesn't seem to be in terms of

23-43-8,
 cont.

23-44-8

Comment 23-44-8

Location of SWEIS Revision(s): None

Response: See the response to comment 11-2-8.

1 looking at the text here and referring the reader to
2 another document in terms of why -- why the reduced
3 operations are the way they are, I feel like that -
4 that alternative hasn't been taken as seriously as it
5 should have been as well.

6 So I will stop. Thank you.

7 MS. MONTOYA: Thank you.

8 Any other comments?

9 MR. FAICH: Just a question.

10 Do you respond in the final to these
11 comments made at the public meeting or must you also
12 submit those comments in writing before you respond?

13 MS. LEVINGS: No, you do not have to submit
14 them in writing. They will be in the comment/response
15 volume. There will be responses to all the comments
16 we've received in this forum, comments that are sent
17 in via writing, via the phone number, E-mail --

18 MR. FAICH: Right.

19 MS. LEVINGS: -- or any of the other ways
20 that we discussed. If you remember -- I remember,
21 Ron, you wanted to clarify some things that you had
22 said in the public meeting and you were going to
23 submit a written comment.

23 MR. FAICH: Yes, and I still intend to do
24 that.

23-44-8,
cont.

1 MS. LEVINGS: We will look at those together
2 and respond to that.
3 MR. FAICH: Right. I expect you to do
4 that.
5 Thank you.
6 MS. MONTOYA: Any other comments?
7 If not, we're going to adjourn until 4:00 --
8 until 4:00, and we will reconvene at that time.
9 (Recess held from 3:17 to 3:56 PM.)
10 MS. MONTOYA: This is Margaret Montoya, and
11 I'm the moderator for this afternoon's meeting.
12 I'm reconvening the meeting just a little
13 before 4:00, and I'm wondering whether there is anyone
14 here who would like to make a comment.
15 I don't see that there is, and so we're
16 going to adjourn and we will reconvene around 4:30.
17 Thank you.
18 (Recess held from 3:57 PM 4:25 PM.)
19 MS. MONTOYA: This is Margaret Montoya, and
20 I'm the moderator for today's meeting.
21 It is about 4:25. I'm reconvening the
22 meeting to see if there is anyone here who would like
23 to make comments.
24 Should we call it a day?
25 MS. LEVINGS: Yes.

No comments identified.

No comments identified.

1 MS. MONTTOYA: Okay. We are adjourning the
2 meeting, thanking everybody.
3 (Adjourned at 4:28 PM.)
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1 STATE OF NEW MEXICO)
 2)ss.
 3 COUNTY OF BERNALILLO)
 4 I, Kathy Townsend, the officer before whom the
 5 foregoing proceedings were taken, do hereby certify
 6 that I personally recorded the proceedings by machine
 7 shorthand; that said transcript is a true record of
 8 the proceedings; that I am neither attorney nor
 9 counsel for, nor related to or employed by any of the
 10 parties to the action in which this matter is taken,
 11 and that I am not a relative or employee of any
 12 attorney or counsel employed by the parties hereto or
 13 financially interested in the action.
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 25 S110 TWELFTH STREET, NW, ALBUQUERQUE, NM 87102

No comments identified.

CHAPTER 4

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