

**CCNS and EVEMG
Environmental Justice Comments
Regarding the Draft LANL SWEIS**

*There's been a quantum leap technologically in our age,
but unless there's another quantum leap in human relations,
unless we learn to live in a new way towards one another,
there will be a catastrophe.*

- Albert Einstein

All issues related to Los Alamos County and LANL are environmental justice issues.

- NMED official

The treatment of Environmental Justice in the draft LANL SWEIS is wholly inadequate. It appears that little to no analysis was actually done. This is unacceptable in a document which is required to analyze the impacts to public health and the environment from polluting facilities, such as LANL. CCNS and EVEMG find this lack of emphasis on and respect for Environmental Justice issues reprehensible.

New Mexico bears and has historically born an un-paralleled burden from DOE activities. Within its borders there are two of the nation's three nuclear weapons research facilities, the nation's only nuclear weapons waste dump, a uranium belt and now a uranium enrichment facility. New Mexico has been subjected to 63 years of nuclear weapons activities starting back when there were no environmental laws and regulations.

New Mexico has the highest minority majority population of the 48 contiguous states and is second only to Hawai'i in the nation. New Mexico has extraordinary incidences of poverty. New Mexicans demand a complete analysis of Environmental Justice impacts. Considering that a fundamental policy of the National Environmental Policy Act (NEPA) is to "encourage productive and enjoyable harmony between man and his environment," and the situation at LANL, Environmental Justice should have been one of the priorities in this draft LANL SWEIS. (42 U.S.C. paragraph 4321) As it was not, reanalysis in a new draft LANL SWEIS is necessary.

The most conscious omission of DOE/NNSA's lack of adequate analysis is that there is no mention of Environmental Justice in the cumulative impact analysis in Chapter 5. Section 5.13. Section 3-301 (b) of Executive Order 12898 states, "Environmental human health analysis. . .shall identify multiple and cumulative exposures." Land resources, geology and soils, water resources, air quality and noise, ecological resources, human health, cultural resources, infrastructure, waste management and transportation were all analyzed. DOE/NNSA must

explain the basis of the decision to leave Environmental Justice out of the Cumulative Impact analysis of Chapter 5.

The decision to omit Environmental Justice from the cumulative impact analysis is reprehensible because Environmental Justice is an issue for which cumulative impacts are particularly significant. In the 63 years that LANL has been in existence, it has produced substantial toxic pollution and had a large impact on its surroundings and public health. One cannot consider the use of land, or the cultural significance of certain sites, without considering this contamination which the residents of New Mexico have been living with for three or more generations --- and will continue to live with for many more. For more on this topic, please see our comment regarding traditional land use and background radiation, regarding page 5-157 below.

A second indication of shallow analysis done for EJ issues was the short length of the chapter and the lack of reference documents cited. Other than statistics, only Executive Order 12898 and a report entitled "Environmental Justice: Guidance under the National Environmental Policy Act," were cited. Significant work has been done over the past two decades regarding environmental justice and the policies associated with it. Reports have been prepared specific to NM, following New Mexico Environment Justice Executive Order 2005-56, which will be of particular use to DOE/NNSA as they discuss LANL. DOE/NNSA must use the final report of the New Mexico Environmental Justice Committee as a basis of a reanalysis for the new draft LANL SWEIS. This report is available at: www.nmenv.state.nm.us/Justice/index.html.

Importance of meaningful involvement. The reference document 'Environmental Justice: Guidance under the National Environmental Policy Act' states,

Agencies should recognize that the question of whether agency action raises environmental justice issues is highly sensitive to the history or circumstances of a particular community or population, the particular type of environmental or human health impact, and the nature of the proposed action itself. There is not a standard formula for how environmental justice issues should be identified or addressed. P.14

CCNS and EVEMG agree with the statement that there is not a standard formula for how EJ issues should be addressed. Only the communities who are affected can decide the necessary solution. Therefore, in order to follow the guidelines DOE must establish meaningful dialogue with the affected communities. There is no discussion in the draft LANL SWEIS of a future process through which DOE/NNSA and LANL will involve the surrounding low-income and minority

communities in the decision making process. DOE/NNSA must include a plan for developing this dialogue, which must be included in the reanalysis for a new draft LANL SWEIS. DOE/NNSA must evaluate the level of public involvement achieved and the out reach methods used for the public comment hearings in the analysis done for a new draft LANL SWEIS.

Crucial to Environmental Justice is the early and meaningful involvement of the low-income and minority communities who are impacted by past, existing and proposed activities. It is not something which can be assessed, awarded or achieved from the outside, but rather something which must come from an working relationship between the government agency and the impacted communities. The importance of such a process is discussed in the reference document 'Environmental Justice: Guidance under the National Environmental Policy Act', which states,

Early and meaningful public participation in the federal agency decision-making process is a paramount goal of NEPA. CEQ's regulations require agencies to make diligent efforts to involve the public throughout the NEPA process. Participation of low-income populations, minority populations, or tribal populations may require adaptive or innovative approaches to overcome linguistic, institutional, cultural, economic, historical, or other potential barriers to effective participation in the decision-making processes of Federal agencies under customary NEPA procedures. These barriers may range from agency failure to provide translation of documents to the scheduling of meetings at times and in places that are not convenient to working families. P.13

CCNS found the methods used to foster public involvement for this draft LANL SWEIS to be very ineffective and exclusionary. Foremost, the hearings were scheduled during the Pueblo feast days, which prevented the involvement of some of the most affected people. This decision should not have been made as DOE/NNSA must know the timing as these feast days are an annual event. DOE/NNSA should be well aware of such events due to their tribal accord relations. Furthermore, even after Elisabeth Withers, the DOE/NNSA manager for this process, was informed of the scheduling dilemma, she did not re-schedule the hearings nor schedule a later hearing in order to correct this.

There were other scheduling difficulties with the comment hearings. Primarily, the hearings were only held at night. This prevented many from attending, such as those who work at night or have a second job. The tourist industry is large employer in Northern New Mexico, and it requires many to work evenings and nights. Furthermore, childcare was not provided. Parents found it necessary to

pay for or arrange childcare. If the purpose of NEPA is to involve low-income populations than these matters must be taken into consideration. Furthermore, DOE/NNSA was not effective in involving the Spanish speaking population of New Mexico. Although a translator was present at all three public hearings, his services were never used. This is was not because a significant portion of those living in the surrounding communities would not have required one, but a failure on the part of NNSA to fulfill its executive order duties to involve the community.

CCNS and EVEMG will offer two explanations for why no one requested the use of the translator. The first is that is that few or no outreach efforts were made towards those requiring a translator. The second explanation is that individuals requiring a translator may not have felt comfortable attending or requesting that aid. These issues are in fact one and the same. Meaningful involvement of a community begins with having respect for the community you are trying to involve. One important step is establishing relationships with the organizers and leaders in these communities.

The report 'Environmental Justice: Guidance under the National Environmental Policy Act' lists "Assistance to hearing impaired or sight impaired individuals" (p.13) as one important step for encouraging early and meaningful involvement. This type of assistance was not provided for the draft SWEIS. At the hearings there was no sign language interpreter available. No versions of the document were made available for the seeing impaired. CCNS and EVEMG were informed that the digital version of the SWEIS was made to be compatible with software which could translate the document into either large print or Braille, however we do not believe that this is enough to ensure meaningful involvement. Furthermore, the translation software is quite expensive, the Duxbury Braille Translator v10.5, for example costs \$569.00, if purchased from enablemart.com. Requiring a seeing impaired individual to have own this software discriminates against those who cannot afford such costly technology. The new draft LANL SWEIS must be available in large-print, Braille and audio recording at the request of individuals and groups. If DOE/NNSA decides not to provide these materials, please state your justification for denying the seeing impaired access to the document.

The Executive Order requires each agency to "ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and easily accessible to the public." (section 5-5) DOE/NNSA must take significant steps to make the new draft LANL SWEIS *concise, understandable and easily accessible*. Unfortunately, on a fundamental level the draft LANL SWEIS was not physically accessible to many individuals of the public nor were the reference documents. CCNS distributed the draft SWEIS to

many members of the community who had not received one, including congressional staff, who only received the summery.

CCNS and EVEMG requested and had great difficulty receiving an electronic version of the reference documents. But once we received them we distributed four complete sets. Even after the documents were posted on the Nuclear Watch New Mexico website, many who did not have high-speed internet access required CD versions.

DOE/NNSA must also take significant steps to make the content of the new draft LANLSWEIS and future documents more *concise, understandable* and *easily accessible* to the public. There are two key components to doing so, the first is to ensure that the scientific discussions are written with the intention of being read by a member of the public and the seconded is to place the activities and information within a context.

In order to ensure that the scientific writing is accessible to the public DOE/NNSA must hire a member of the public to read through and comment on the entire document with the intention of making it accessible. This should be done for both the English, Spanish and Braille versions of the final SWEIS. For clarity and ease in reading it is essential that scientific terms are defined the first time they are used in each chapters, as well as in a cumulative glossary at the end. This can be done either in the text or in a text box on the side

One example is the definition of a 'pit'. DOE/NNSA defined the 'pit' as "the central core of a primary assembly in a nuclear weapon typically composed of plutonium-239 and/or highly enriched uranium and other materials." (8-23) This definition does not give the full meaning of a 'pit'. There is no discussion of the use of nuclear weapons to put expanding plutonium pit production into perspective. CCNS requests the definition of a pit be expanded to something more like, "the trigger of a nuclear weapon such as the one the United States government dropped on Nagasaki Japan on August 9th 1945. A pit is typically composed of plutonium-239 and/or highly enriched uranium and other materials."

The draft SWEIS uses phrases which hide the significance of what they are discussing and does not connect proposed or current operations to their eventual outcome and purpose. One example from the Environmental Justice section in chapter 5 is the phrase "special pathways receptor." (5-157) No definition was given for this term in the draft LANL SWEIS. This phrase is speaking of a human being who has been exposed to radionuclides, but to one inexperienced with the technical language employed by DOE/NNSA it appears that this is discussing a mechanical instrument. It is of paramount importance that it is understood that human beings is being discussed.

In order to make the document *understandable* and *easily accessible* the principle of adding context must be applied to all terms or phrases that have reference to weapons activities. DOE/NNSA must ensure that the purpose of the projects are clearly stated and include the full ramifications of what is being discussed. Nuclear weapons activities cannot be hidden within vague scientific descriptions. Furthermore the health effects of all toxic, radioactive and hazardous materials must be clearly listed whenever the first time these materials are mentioned in a chapter, regardless of amount, without diluted qualification of greater or lesser amounts.

Furthermore DOE/NNSA must include a cost analysis or estimate for proposed actions within the document. Monetary sums put the projects proposed into a type of perspective that is *concise, understandable* and *easily accessible* to the general public.

The assessment of Environmental Justice issues must take place internally within LANL as well as outside of it. LANL has recently been sued for discriminatory practices in its employment policies. Please see attached article, from the Associated Press, entitled 'Lawsuit accused LANL of discrimination against women, Hispanics' dated August 6, 2006 in Exhibit 9.1. This is only the most recent in a long line of discrimination practices at LANL. DOE/NNSA must include a discussion of the social impacts of its internal policies in the reanalysis of Environmental Justice for a draft LANL SWEIS.

The discriminatory practices at LANL raise the issue of DOE/NNSA's sensitivity to gender both within and outside the laboratory. DOE/NNSA must give special consideration given to women in this section. Although women are not a minority, it is a population for whom the health effects of LANL are exaggerated. Furthermore women are a disempowered portion of the community whose voice must be sought out and heard if a significant discussion of the internal policies and impacts of LANL activities on the surrounding communities is to be had.

Specific Comments about Environmental Justice

Chapter 4: Affected Environment, Section 4.11 Environmental Justice

[4-150] Please note that the following comment is referenced several times below. "Persons whose income is below the federal poverty level are designated as low income." CCNS and EVEMG find DOE/NNSA's analysis to be misleading and inaccurate. The term 'low income' is not defined as, nor conventionally used interchangeably with, 'below the federal poverty level.' The United States Department of Education webpage, states, "the term "low-income individual" means an individual whose family's taxable income for the preceding year did

not exceed 150 percent of the poverty level amount," at <http://www.ed.gov/about/offices/list/ope/trio/incomelevels.html>. Below is a table taken from the same page:

(Effective February 2006 Until Further Notice)

Size of Family Unit	48 Contiguous States, D.C., and Outlying Jurisdictions	Alaska	Hawaii
1	\$14,700	\$18,375	\$16,905
2	\$19,800	\$24,750	\$22,770
3	\$24,900	\$31,125	\$28,635
4	\$30,000	\$37,500	\$34,500
5	\$35,100	\$43,875	\$40,365
6	\$40,200	\$50,250	\$46,230
7	\$45,300	\$56,625	\$52,095
8	\$50,400	\$63,000	\$57,960

For family units with more than 8 members, add the following amount for each additional family member: \$5,100 for the 48 contiguous states, the District of Columbia and outlying jurisdictions; \$6,375 for Alaska; and \$5,865 for Hawaii.

The term "low-income individual" means an individual whose family's taxable income for the preceding year did not exceed 150 percent of the poverty level amount.

The figures shown under family income represent amounts equal to 150 percent of the family income levels established by the Census Bureau for determining poverty status. The poverty guidelines were published by the U.S. Department of Health and Human Services in the [Federal Register](#), Vol. 71, No. 15, January 24, 2006, pp. 3848-3849.

Using these numbers from the Federal Registry, the average income for a family of four in New Mexico would be \$30,000 a year rather than \$17,029 as the analysis in the draft LANL SWEIS currently states [4-154]. This would include a far larger low-income population than is analyzed the draft LANL SWEIS. It is unacceptable for DOE/NNSA to determine a private definition for 'low-income' when the us department of human health and services has already done so.

The following is a list of the percentage of the population in the affected counties that earn less that \$34,999 a year per family and per household. This information was taken from the 2000 United States Census data. Please note that the Census data is not presented in such away as to allow us to calculate the percentage of the populations which earns 30,000 or less annually with out great difficulty. For that reason CCNS and EVEMG determined to raise the cut off point to \$34,999. What is provided below is intended to serve as an indication of the increase in affected population if the correct definition of low-income is used.

Los Alamos County: 8.2% of families, 16.4% of the households
[\[http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35028&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-lang=en&-redoLog=false&-sse=on\]](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35028&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-lang=en&-redoLog=false&-sse=on)

Mora County: 59.2% of families, 66.4% of households
[\http://factfinder.census.gov/servlet/QTTable?_bm=y&-

geo_id=05000US35033&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-_sse=on]

Rio Arriba: 52.5% of families, 58% of the households. In Espanola City alone: 45.6% the households earned under \$35,000 a year.
[http://factfinder.census.gov/servlet/QTTTable?_bm=y&-geo_id=05000US35039&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-_sse=on]

Sandoval County: 30.6% of families, 36.7% of households
http://factfinder.census.gov/servlet/QTTTable?_bm=y&-geo_id=05000US35043&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on]

San Miguel County: 55.8% of families, 62.7% of households
[http://factfinder.census.gov/servlet/QTTTable?_bm=y&-geo_id=05000US35047&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on]

Santa Fe County: 34% of families 40.6% of the households
[http://factfinder.census.gov/servlet/QTTTable?_bm=y&-geo_id=05000US35049&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on]

Taos County: 51.6% of families, 60.9% of households
[http://factfinder.census.gov/servlet/QTTTable?_bm=y&-geo_id=05000US35055&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on]

It is crucial when assessing the above data to note that Los Alamos County has a vastly different demographic from the surrounding area, both in income and in race/ethnicity. DOE/NNSA must ensure that the statistical analysis is not weighted by the large population of affluent Anglo individuals living in Los Alamos County. It is unacceptable for DOE/NNSA to use the Anglo scientists who have chosen to come to LANL and receive good salaries to weight the scale when assessing the Environmental Justice issues in the surrounding area. For this reason it is crucial that analysis also be done excluding the residents of Los Alamos County.

Although LANL makes mediocre contributions to the surrounding communities, the positive economic impact of its presence is also called into question by the income disparity. When working with the surrounding communities to develop future plans for operations at LANL, DOE/NNSA must also receive input as to ways in which LANL could contribute in a more positive

fashion. Members of the public who came to the public comment hearings for the draft LANL SWEIS discussed this topic at length. Such discussion must be fostered.

4.11.1 Region of Analysis

4-151 Please cite the scientific justification behind the NNSA methodology of using a 50-mile radius for assessing the potential risks to populations. Precedent is not adequate scientific justification.

Expanding the radius to 60 miles would include Albuquerque and Sandia National Laboratories. Including Albuquerque is important for ensuring Environmental Justice. Albuquerque has a population of 448, 607 people. The 2000 Census found that 39.9 % of the Albuquerque population is Hispanic or Latino, and the sum of other non-white population is 28.4%.

http://factfinder.census.gov/servlet/QTable?_bm=y&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-lang=en&-sse=on&-geo_id=16000US3502000

A significant portion of the Albuquerque population is low-income, 35.3% of the families and 45.6% households have an annual income of less than \$34,999.

The state of affairs is similar in the whole of Bernalillo County, the 2000 census data shows that in 1999, 36% of families and 45.1% of households had an annual income of less than \$34,999.

http://factfinder.census.gov/servlet/QTable?_bm=y&-context=qt&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-tree_id=403&-redoLog=true&-all_geo_types=N&-_caller=geoselect&-geo_id=05000US35001&-geo_id=16000US3502000&-search_results=01000US&-format=&-_lang=en

Expanding the radius would also include the Laguna Pueblo lands. DOE/NNSA must include Canoncito Pueblo within the Environmental Justice analysis for a new the draft LANL SWEIS because of its proximity to the circumference of the affected area.. Further more DOE/NNSA must include the tribes which use the land and natural resources surrounding LANL for sacred purposes, such as the Hopi who use the water.

Furthermore, section 3-301 (b) of the Federal Executive Order states, "Environmental human health analysis. . .shall identify multiple and cumulative exposures." The draft LANL SWEIS states that "cumulative impacts for this SWEIS includes . . . a review of past, present, and reasonably foreseeable actions for other federal and non-federal agencies in the region." (5-180) Although DOE/NNSA failed to include analysis of the cumulative impacts as they pertain to Environmental Justice, the Executive Order requires such analysis.

DOE/NNSA must include these impacts in the assessment for a new draft SWEIS. Please see our comments regarding the cumulative impacts to Laguna lands.

Other sites which DOE/NNSA must assess include, but are not limited to Sandia National Laboratories (which fall within the 60-mile radius of LANL) WIPP, NEF, the Nevada Test Site and past present and future uranium mining sites.

The Environmental Justice repercussions of the alternatives for waste storage and transportation were not analyzed in the draft LANL SWEIS. The draft LANL SWEIS states that if expanded operations, a modern pit facility and full cleanup are to be implemented it would require over 100,000 shipments to WIPP. S-87 This statement begs the question of how these communities through which the waste is transported, would be impacted. Furthermore, it demands the question as to which communities the WIPP route passes through. The trucks pass through land that is sacred to many tribes. They pass through San Ildefonso, Pojoaque and Tesuque lands. Furthermore, the trucks pass through many low-income and minority communities in central and southeastern New Mexico. See CCNS comments about the National Enrichment Facility Permit Application in Exhibit 9.2 for more information about the demographic of these communities. DOE/NNSA must include the Environmental Justice issues associated with waste transportation in the reanalysis for a new draft SWEIS.

Further multiple impacts that must be considered are the way that increased LANL activities will affect those at sites, which perhaps remote in location, are directly implicated by LANL operations. Please see CCNS and EVEMG comments below regarding Section 5.13 Cumulative Impacts, for further comment on these multiple impacts.

4.11.2 Changes Since the 1999 SWEIS

Non United States Citizen Population. How are non-citizen residents accounted for in the draft LANL SWEIS Environmental Justice Analysis? No mention is made of this group, nor their land uses. CCNS and EVEMG have knowledge of many immigrants fishing, gathering plants for medicinal purposes and hauling water for many activities. This population and their use of the land, water and wildlife must be addressed in the reanalysis for a new draft LANL SWEIS.

Furthermore, there is no discussion of undocumented residents in this section. The fact that this community is undocumented does not mean that they do not exist, nor are they impervious to the impacts of LANL's activities. DOE/NNSA must include an estimate of that population, its income and demographic, in the Environmental Justice section of the reanalysis for a new draft LANL SWEIS.

DOE/NNSA must make efforts to include the immigrant and undocumented communities in the discussions regarding Environmental Justice issues. Although difficult such efforts are not impossible.

4-153 It is not adequate to look simply at those individuals below the poverty level. As stated above in reference to page 4-150, a 'low income individual' by federal definition is one who's family income is less than 150% of the federal poverty level, not below it. See above comment in reference to p. 4-150

4.11.4 Low-Income Population in 2000

4-154 It is not adequate to look simply at those individuals below the poverty level. As stated above in reference to page 4-150, a 'low income individual' by federal definition is one who's family income is less than 150% of the federal poverty level. It is not adequate to look simply at those individuals below the poverty level. See above comment in reference to p. 4-150.

4-155, 4-156 Figure 4-33 Minority Population and Figure 4-34: DOE/NNSA must add a joint figure which shows both the overlap of minority population and low-income population at the same time. As previously stated, by low-income, CCNS does not mean those individuals living below the federal poverty level, but rather those who qualify as low income individuals under the Federal Registry regulations cited above. DOE/NNSA must include an additional figure to indicating the portion of the affected environment which overlaps with Sandia National Laboratory's affected environment. Please see the attached image of the multiple if the effected area were extended to 60 miles, Exhibit 13.1.

Chapter 5: Environmental Consequences

5.11 Environmental Justice

5-156 DOE/NNSA must expand the Environmental Justice analysis to include not only "the potential for disproportionately high and adverse human health and environmental effects on minority and low-income populations," but also the social and psychological impacts to minority and income populations. Further, DOE/NNSA must explain their efforts to foster meaningful involvement of these populations in the development and implementation of activities at LANL and the impacts of this process on their health, environment and communities. DOE/NNSA must include analysis of the psychological impacts both of being involved and of being neglected. DOE/NNSA must access the impact to and role of women in the Environmental Justice assessment of a new draft LANL SWEIS.

CCNS and EVEMG object to the definition: “*Low-income population*: Low income populations in an impacted area are identified with the annual statistical poverty thresholds from the Census Bureau’s Current Population Reports, Series PB60, on Income and Poverty.” As stated above in reference to page 4-150, a ‘low income individual’ by federal definition is one who’s family income is less than 150 percent of the federal poverty level, not below it. See above comment in reference to p. 4-150.

See above comment regarding CCNS and EVEMG’s objection to use of a 50-mile radius for the Environmental Justice analysis on page 4-151.

CCNS and EVEMG object to the following sentence and it’s conclusion: “Based on the analysis of impacts for other resource areas, DOE expects few high and adverse impacts from the continued operation at LANL under any of the alternatives, and, to the extent impacts may be high and adverse, DOE expects the impacts to affect all populations in the area equally.” This conclusion is impossible when most of the population has limited to nonexistent recourses and/or resources to mitigate the damage caused by LANL.

Foremost CCNS and EVEMG object to the analysis of impacts for other areas. Especially as the analysis does not account for the health of women. And as the analysis does not account for psychological factors, which are of particular concern to Environmental Justice analysis. Please see above discussion of the importance of meaningful involvement.

5-157 There is no information about the traditional, current or cultural significance of consumption of fish and wildlife, subsistence farming, the soil and water used in religious ceremonies in the text. Cited references, such as the 1999 LANL SWIES are inadequate as they do not describe current nor past uses nor the cultural and psychological import of the land. How can DOE/NNSA make conclusions without any information? CCNS has witnessed subsistence based people fishing for dinner at Cochiti Lake. DOE/NNSA must include a detailed discussion on the cultural consumption of fish and wildlife in the reanalysis for new draft LANL SWEIS and use this to make a determination.

In gathering this information, it is important to foster meaningful involvement of the community. In order to address this, DOE/NNSA must initiate a dialogue with those living in the surrounding area before coming to a conclusion. Please see above discussion regarding the importance of meaningful involvement. Please include alternative sources of information such as mythology, oral histories and interviews to see what minority and low-income individuals dream and aspire to using the land for. DOE/NNSA must involve women, as life-givers, in this discussion and decision making process.

“Special pathways were considered that took into account the levels of contamination in native vegetation (. . .), crops, soils and sediments, surface water, fish and game animals on or near LANL.” However, ‘special pathways’ are not defined here in this document. DOE/NNSA must define ‘special pathways’ in the new draft LANL SWEIS.

DOE/NNSA must broaden its list of special pathways. It is very possible that a hiker or camper, especially children, may drink the water flowing from springs, for this reason springs as a source of drinking water must be included in the reanalysis for a new draft LANL SWEIS. Children have a tendency to ingest dirt while playing. Have DOE/NNSA accounted for the impacts of ingesting soil? If not, then DOE/NNSA must consider soil ingestion as a special pathway in the reanalysis for a new draft LANL SWEIS. Please see the attached comments by IEER about the clean up of the South Fork of Acid Canyon.

“Additional exposures. . . from the ingestion pathway.” The BEIR VII report found that the risks from radiation exposure should be assessed using a linear non threshold model. This means that each additional exposure, no matter how small leads to an increase in risk. DOE/NNSA must not dismiss even the smallest exposure in this way. Furthermore, DOE/NNSA must consider all health impacts from radiation exposure, see CCNS comments on the health analysis in the draft LANL SWEIS.

Background Radiation Levels “This included natural background, weapons testing fallout, and previous radiological releases from LANL. The actual contribution from recent operations at LANL is only a small fraction of this value. The overall risk to the special pathway receptor would not differ between the alternatives considered in this new SWEIS, because most of the risk is attributed to the existing low-levels of radiological contamination in water and soils in the area”

The 1979 LANL SWEIS states, “summing the cosmic and terrestrial components, the average expected total yearly dose is about 135 mrem/year.” 3-58 The June 2006 draft LANL SWEIS places the background radiation at 450 mrem/year. 5-91 DOE/NNSA’s calculation of background radiation has grown by a three fold increase since the 1979 LANL SWEIS. The background radiation estimate has absorbed, no doubt, the contamination generated by past LANL activities. However, the environmental crimes of LANL do not belong to nature and cannot be attributed to her.

Before the Manhattan project began and LANL’s establishment in 1943, the Pajarito Plateau was pristine. Much of the land and water was used for traditional and subsistence farming, as well as sacred rituals. The draft LANL SWEIS manipulates scientific data to make it appear as though the contribution

from 'weapons testing fallout, and previous radiological releases from LANL' are the same as natural background, which they are not and must not be treated as such. DOE and NNSA must use 135 mrem/year as the background for reanalysis in a new draft LANL SWEIS. While doing so, DOE/NNSA must acknowledge that the contribution of background radiation may have been lower in 1943.

The BEIR VII report found that the risks from radiation exposure should be assessed using a linear non threshold model. This means that each additional exposure, no matter how small leads to an increase in risk. Based on the determination of the BEIR VII, CCNS objects to the conclusion that "consequently, no disproportionately high and adverse human health impacts would be expected in the special pathway receptor populations in the region as a result of subsistence consumption of fish and wildlife." The linear non threshold model would indicate that adverse human health impacts would result from subsistence consumption, and further that the impact grows higher with each addition release from LANL activities. Based on this evidence it appears that any further release would lead to significant harm. DOE/NNSA must address these concerns in a reanalysis for a new draft LANL SWEIS.

There are significant health impacts from toxic, chemical and hazardous contamination in native vegetation, crops, soils and sediments, surface water, springs, fish and game animals on and in the area surrounding LANL. In February of 2006 New Mexico governmental agencies issued a "no eat advisory" for fish in the Rio Grande and Rio Chama watersheds for polychlorinated biphenyls. The New Mexico Environment Department, Health Department, State Parks and Department of Game and Fish advised against eating channel catfish and common carp caught from Abiquiu and Cochiti reservoirs and from the Rio Grande below LANL. The fish advisory is based on do-not-eat guidelines for various contaminants established by the Environmental Protection Agency. This is the first advisory for fish caught from the Rio Grande. The contamination was linked to LANL through PCB fingerprinting. See NMED advisory in Exhibit 9.4.

One example of a significant step in developing a meaningful relation with the surrounding communities would be for LANL to post warnings to the public of such contamination. These warnings should be posted on the LANL website and alerts should go out to impacted communities both upstream and downstream, grocery stores that will potentially sell local produce and game, and to local media.

5.11.1 No Action Alternative

5-157 CCNS objects to the conclusion that there would be no disproportionately high and adverse impacts because we object to the analysis done in other parts of chapter five. DOE/NNSA must incorporate CCNS comments regarding on going activities at LANL for the reanalysis of a new draft LANL SWEIS. This reanalysis must be used to draw new conclusions regarding the No Action Alternative.

5.11.2 Reduced Operations Alternative

LANL Site-Wide Impacts

5-158 CCNS objects to the conclusion that there would be no disproportionately high and adverse impacts because we object to the analysis done in other parts of chapter five. DOE/NNAS must incorporate CCNS comments regarding activities at LANL.

5.11.2 Expanded Operations Alternative

LANL Site-Wide Impacts

5-158 CCNS objects to the conclusion that there would be no disproportionately high and adverse impacts because we object to the analysis done in other parts of chapter five. Please see and incorporate out comments about the other subsections of this chapter.

In order to fully address the impacts of the expanded operations alternative DOE/NNSA must include an analysis of the psychological and spiritual impact of having sacred land used in support of nuclear weapons production. This discussion of sacred land must take into account the Hopi's use of water from the LANL area, and the salt formations of WIPP, which are the Great Salt Mother to many of the Northern Pueblos. In the scientific considerations of Environmental Justice issues at LANL DOE/NNSA must consider science that was not developed to support the nuclear weapons complex but developed to protect public health and the environment.