Shundahai Network's comments on the DOE's Draft Long Term Stewardship Study
Prepared by Reinard Knutsen and Susi Snyder

Shundahai Network is a grassroots community based organization working on nuclear and environmental justice issues. Our main office has recently moved to Pahrump, Nevada, where we monitor Department Of Energy's (DOE) activities at the Nevada Test Site and Yucca Mountain and organize public participation in the decision making process.

Shundahai Network is one of the 38 plaintiff organizations along with the Natural Resources Defense Counsel that settled a lawsuit with the DOE in 1998. From this settlement DOE was required to look seriously at long term stewardship issues within it's nuclear weapons complex and to involve community organizations and stakeholders in it's decision making process.

The Draft Long Term Stewardship Study (DLTSS) comes from DOE's attempt to fulfill its obligation under this settlement. While this is a worthwhile and important endeavor it is unfortunate that DOE decided to undertake this process only due to the outcome of litigation and not through it's own initiative.

The first thing that is apparent from reading this DLTSS is that DOE acknowledges major environmental contamination problems exist at the nations nuclear weapons industrial complex. This acknowledgement is a necessary start but falls short of addressing the underlying reasons for this contamination.

The scope of this study is limited to only sites that are managed and controlled by DOE or NNSA and not its hundreds of contractor sites that have suffered contamination as well. The major flaw of this study is that it does not effectively address the problem or methods to solve the problem. In fact like many other DOE documents it attempts to "whitewash" and "cover up" some of the real underlying issues like continued contamination from ongoing nuclear weapons research, testing, and development. 30.1

As an organization of grassroots activists and educators that work with effected communities not only in Nevada but around the Nation and world we urge the DOE and in particular the offices of Environmental Management and Long Term Stewardship to aggressively strive to end all nuclear weapons programs and concentrate solely on remediation, containment and clean-up.

"Cleanup does not imply that all hazards will be removed."
It is quite saddening that the term "cleanup" is used when talking about Long Term Stewardship, since cleanup will not actually be happening at a majority of sites. Cleanup, as understood by most people means bringing a place back to it's original state of being. This is not the plan for a great number of sites, and is in fact impossible. Using this language is misleading to the general public, and prohibits a trusting relationship from forming. Developing trust between effected communities and LTS sites is necessary in order for any LTS program to be successful. Not only should the state, local and tribal governments be included in 30.2

30.1 – The Department acknowledges this comment in a text box in Section 7.2 of the Study. Section 7.2 of the Study also notes that on February 11, 2001, the Department made public a list of sites, including beryllium vendors, DOE sites that used radioactive materials, and facilities where atomic weapons workers may have been employed (66 FR 4003). The Department is working on a database for these sites. The Study focuses on common issues and challenges that exist across many sites rather than focusing on one particular subset of these sites. The Department also notes that long-term stewardship is not limited to DOE sites, or even sites where the federal government has some responsibility. For example, local governments are already responsible for the long-term stewardship of closed municipal landfills. Many of the issues that pertain to DOE sites are likely to pertain to closed landfills as well.

30.2 – The Department acknowledges this comment in a text box in Section 2.1 of the Study. The Department agrees that the terms "cleanup," "end state," and "closure" are less than ideal. The term "cleanup" is a common word usage that can be confusing. To help clarify the limits of current cleanup technologies and the overall scope of long-term stewardship, the Department has added a text box to Chapter 2 of the Study that describes the limitations and challenges that preclude remediating many sites to levels that would permit unrestricted use; the types of residual; hazards that will require long-term stewardship; the time frames that may be involved in long-term stewardship; and the activities that may be involved in long-term stewardship. The Report to Congress on Long-term Stewardship provides additional site-specific information on the projected scope of long-term stewardship. The Department also maintains a Web Site (http://lts.apps.em.doe.gov) that provides public access to numerous documents describing the scope and challenges associated with long-term stewardship. The Department's Long-term Stewardship Working Group recently identified the issue of developing a consistent, consensus definition of long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee.

this process, but the general public, the everyday Jane and John Doe need to be talked to and encouraged to understand the enormisity of the problem. Another word needs to be found other than "clean-up", perhaps "cope with" instead, for we are not talking about cleaning these sites to their original state of being, but instead finding ways to cope with the legacy of what has been done to them.

Adequate funding should be made available to research and development. Funding mechanisms must be put into place that promote solid research into the fields of finding ways to clean up the mess left at so many sites across the nation. So much money is spent on researching new ways to cause contamination, and now that legacy must stop. A change must take place; there have been over fifty years of making messes, now it is time to take stock of exactly what damage has been done, and to pray that we can find a solution to these problems. There must be a better way to protect groundwater than the "pump and treat" method. Only if money is spent on good research will ways be found. 30.3

"Tribal nations also retain a unique political and legal status that requires federal trustee responsibility to protect the interests of the tribes" This is a quote from Carolyn Huntoon's letter opening DLTSS. I can only say if this is the attitude presented today, where the hell was this responsibility in the first place? How could these levels of contamination have been allowed on lands which are held in trustee status? It is deplorable, and while recognizing that there are efforts being made to makeup for this desecration, it will take many years, and many thousands of apologetic acts, not only words, for forgiveness to come.

The issue of Environmental Justice needs to be addresses. This can be done by consulting with organizations and alliances already in place, such as the People of Color Alliance for Environmental Justice, or the Communities Environmental Health Network. A mechanism for funding must be provided to create community based, community led studies at each site dealing with issues like: water quality testing, community health care, soil testing, air quality measures, etc. These things should be decided up on at community meetings, not held in Washington D.C., but at towns and cities surrounding the sites themselves. Well advertised, well publicized symposiums should be held to help these affected communities understand the gross magnitude of the issues they are facing, not just today and tomorrow, but for generations to come. 30.4 30.5

"Building the concept of "Pollution Prevention" into the planning process for new missions and facilities" While this is a nice sentiment, there must be a way to halt all activities which will add to contaminant levels until these levels can be stabilized, and surrounding communities are no longer threatened. It is not very cost effective to continue to add contaminants that will eventually have to be cleaned up. "Pollution Prevention" should mean no pollution creation. The concept here does not help the problem, why keep producing what you will have to monitor forever? 30.6

It is very important that the public have unrestricted access to information about residual hazards. Public access to information about specific contaminants left in their communities is a necessity in order for LTS to work. Without knowing the true risks they face entering a LTS 30.7

30.3 – The Department acknowledges these comments in a text box in Section 4.2.4 of the Study. As noted in Section 4.2.4 of the Study, the Department's process for developing and implementing new science and technology includes developing a long-term stewardship science and technology roadmap that will (1) identify science and technology needs; (2) identify existing capabilities to meet these needs both within and external to DOE; (3) determine research and development priorities; and (4) direct specific efforts to meet these needs. The Department agrees that research into a number of key areas is needed, including the long-term effectiveness and reliability of engineered and institutional controls, surveillance and monitoring, and information management. Advances in science and technology may provide future generations with the ability to cost-effectively achieve unrestricted use at some sites. The Department's Long-term Stewardship Working Group recently identified the policy issue as to whether the ultimate goal of new science and technology should be to improve the ability to maintain the existing end state (i.e., the end state established during cleanup) or should be to "improve" the end state more closely toward unrestricted use as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee.

30.4 – The Study does examine Environmental Justice issues in Chapter 9.

30.5 – The Department acknowledges this comment in a text box in Section 3.2 of the Study. Existing laws and regulations, especially the CERCLA process that is used for many site cleanups, require public involvement in the activities and decisions that lead to the selection of a remedy (ROD), including the technical and economic feasibility of cleanup to unrestricted use. However, these laws and regulations do not clearly articulate the role of public involvement in the activities and decisions that follow the ROD. At the same time, the Department recognizes that the ultimate success of long-term stewardship depends on the active involvement of the affected parties, including local governments and Tribes. It is important for all parties to develop a workable approach for meaningful public involvement in the decisions that affect and manage long-term stewardship activities. The Study identifies this as an additional key challenge associated with long-term stewardship. The Department's Long-term Stewardship Working Group recently identified public involvement as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. This issue includes how DOE should balance the need to involve the public in maintaining controls (e.g., institutional controls such as water use restrictions) with competing needs such as classified information or activities, particularly at sites with ongoing national security missions. The Department's Long-term Stewardship Working Group also has identified the issue of under what circumstances DOE should consider funding of external parties as one of the most important issues that should be addressed by the Executive Steering Committee. Although the general issue of public involvement has been identified to the Executive Steering Committee, specifics of implementation (e.g., what external organizations should be involved, what should be provided by DOE, what mechanisms for public involvement should be used) have not been discussed and may be determined on a site-specific basis. We intend for the public participation process to allow for meaningful Tribal and public involvement.

30.6 – The focus of this Study is to discuss the challenges the Department will need to address for sites with long-term stewardship responsibilities. The Department notes this commenter's suggestion related to DOE missions.

30.7 – The Department acknowledges this comment in Section 7.2 of the Study. The Department has begun a process to more clearly identify and develop a consensus on long-term stewardship information needs and develop guidance for long-term stewardship information and records management. Some information management guidance will be included in the guidance for site-specific long-term stewardship plans currently under development by the Department. This comment will be considered in these efforts.

site, many people may not believe the danger that they or their families are in. The United States is no longer in a cold war situation, we are the superpower, the world is held hostage by our nuclear weapons, we do not need to keep vital information from our own people. Information which could mean life or death to many generations. Full disclosure of the extent, and makeup of contamination at all sites should be mandatory.

We recognize that some contaminants will never be cleaned up, and their history must be told to future generations. There must be a way to tell the story of this stuff beyond language. It needs to be so incorporated into human understanding that the knowleges of the poision of these sites will continue to be passed on for generations to come.

CERCLA? Comprehensive Environmental Remediation, Compensation and Liability Act
RCRA? Resource Conservation and Recovery Act.

"The federal government as ultimate fiduciary responsibility for long-term stewardship at DOE sites"

Cost effectiveness should not be as important as reliable cleanup. 30.8

It is very important that LTS plans undergo a review like this every five years with full community disclosure and participation in each review. 30.9

All sites should have a plan for full cleanup with only the need for record keeping as LTS 30.10

Remedy Monitoring Plans should be subject to full public scrutiny. 30.11

The public needs the ability to have close consise information. Independent analysis.

We know that over time all engineered controls will fail to some degree and we need to make sure that adequate contingency plans are developed for all possibilities. 30.12

As well as developing estimated life cycle costs there should be attention paid to developing funding mechanisms that will help offset those costs. 30.13

On site records must be maintained and be available for public scrutiny. 30.14

Needs to be some uniformity on how each site deals with its LTS responsibilities.

All DOE contractors must be required to complete EM projects before LTS.

LTS must include not only DOE and DOD sites but all contractor sites as well. U.S.A. Today recently published a list of 500 "forgotten" sites that have been contaminated by the nuclear weapons industry in fulfilling DOE's missions. 30.15

30.8 – The decision to clean up to unrestricted use, or to meet other specific land use requirements, is made on a site-specific basis with input from regulators, stakeholders, and the public. It is both DOE and EPA policy that cleanup remedies should be consistent with the intended future use of the affected areas. Chapter 2 of the Study includes a new text box that provides a more formal statement on the scope of long-term stewardship and why it is required (i.e., the inability to achieve unrestricted use and the nature of residual hazards). The goal of long-term stewardship is to ensure continued protection of human health and the environment consistent with applicable requirements. The Department recognizes the many issues and public concerns associated with the uncertainties with planning for, documenting, and funding long-term stewardship throughout the Study and acknowledges this comment by including it in a text box in Section 3.2 of the Study.

30.9 – See response to Comment 30.5.

30.10 – See response to Comment 30.8.

30.11 – See response to Comment 30.5.

30.12 – As noted in Section 4.2.2 of the Study, Site-specific long-term stewardship plans are required by law for uranium mill tailings sites and must be approved by the Nuclear Regulatory Commission. The Department also requests the development of a site-specific long-term stewardship plan before accepting long-term stewardship responsibilities for any site. As the EM mission at a site is completed, current plans call for the EM program and the site landlord (if different from EM) to develop a long-term stewardship baseline for each site. The baseline will describe the scope of applicable long-term stewardship requirements, the technical activities and the projected schedule to meet these requirements, and expected costs. The Department acknowledges these comments in a text box in Section 4.2 of the Final Study and will consider the recommendations they provide in developing the guidance that will specify the format and content for site-specific long-term stewardship plans.

30.13 – The Department acknowledges this comment in a text box in Section 8.2 of the Study. The Department currently relies on the annual appropriations process to fund long-term stewardship. This is not likely to change in the near term. As noted in Section 8.1 of the Study, a separate Project Baseline Summary (PBS) for long-term stewardship at each site will help the Department improve its estimates of annual long-term stewardship funding requirements. Developing an alternative funding mechanism will require additional study and eventually Congressional action. The Department's Long-term Stewardship Working Group recently identified funding of long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. Specific funding issues identified by the Working Group included: (1) current difficulties in determining long-term stewardship costs now and in the future because there is no consistent procedure for how long-term stewardship activities are budgeted for and reported among DOE sites; (2) whether the annual appropriations process is the most effective mechanism for funding long-term stewardship activities that may be needed for decades or centuries; and (3) circumstances under which DOE should consider funding external parties (e.g., local governments) to conduct long-term stewardship activities or oversight. This comment will be forwarded to the Executive Steering Committee for their consideration.

30.14 – See response to Comment 30.5.

30.15 – The Department acknowledges this comment in a text box in Section 7.2 of the Study. Section 7.2 of the Study also notes that on February 11, 2001, the Department made public a list of sites, including beryllium vendors, DOE sites that used radioactive materials, and facilities where atomic weapons workers may have been employed (66 FR 4003). The Department is working on a database for these sites. The Study focuses on common issues and challenges that exist across many sites rather than focusing on one particular subset of these sites. The Department also notes that long-term stewardship is not limited to DOE sites, or even sites where the federal government has some responsibility. For example, local governments are already responsible for the long-term stewardship of closed municipal landfills. Many of the issues that pertain to DOE sites are likely to pertain to closed landfills as well. The list of sites published in the Federal Register include contractor sites. However, the Department is not currently responsible for long-term stewardship at Department of Defense sites.

Recommend that DOE hold bi-annual workshops at each site, which would inform the surrounding communities about hazards and update them on current status of remediation.

Cost estimates

Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, directs federal agencies part of their mission by identifying and addressing disproportionately high and adverse human health or environmental effects of federal programs, policies and activities on minority populations and low income populations.

To effectively address stakeholders environmental justice concerns and ensure that no valid environmental justice concerns remain unaddressed, DOE should find ways to promote opportunities for members of minority and low-income populations to participate in the long-term stewardship planning process. Such opportunities may include providing translation services during public meetings, publication of notices in different media (newspapers, television, radio or distribution of flyers to community centers or door to door) and in different languages and holding meetings at convenient locations (e.g. accessible by public transportation). With effective public involvement, DOE can ensure that cleanup decisions and long-term stewardship activities consider any environmental justice concerns." Pg 103

30.16 30.16 – See response to Comment 30.5.

10.1.2 Maintaining Focus

DLTSS recommends separating the responsibilities of ensuring regulatory compliance from sponsoring improvements in science and technology. And the responsibility of implementing LTS programs from educating the communities about LTS and the residual hazards remaining at these sites.

10.2 The Rolling Stewardship Strategy

Focus on managing the problem rather then trying to solve the problem and focusing on managing the hazards for the near future rather then trying to manage hazards for centuries or millennia.

Carl N. Anderson
439 49th St., #35
Oakland, CA 94609
(510) 654-4983
December 14, 2000

Steven Livingstone
Office of Long-Term Stewardship (EM-51)
U. S. Department of Energy
PO Box 45079
Washington, DC 20026-5079

Subject: Draft Long-Term Environmental Stewardship Study

Dear Mr. Livingstone:

I have three general policy-level comments, and one technical question, on the issue of long-term stewardship of DOE contaminated sites. While I have not had the opportunity to review the draft, these comments should be considered in your ~~draft~~ final report.

1. A commitment to ongoing research is essential.

It is unfortunately clear that DOE is unable to clean up many of its most polluted sites at the current state of scientific and engineering knowledge. However, it is possible that this situation might improve over the years as scientific and engineering knowledge develop. No long-term policy can be considered adequate unless it includes a firm commitment for the indefinite future to sustain a very active research program, such that no reasonably promising lead is left unfunded. That commitment is not now being met; I am aware that promising research is not now being funded because DOE and the Congress have not considered it of sufficient priority. There also has to be a firm commitment for the indefinite future to fund actual clean-ups when new knowledge makes them possible. 31.1

31.1 – The Department acknowledges these comments in a text box in Section 4.2.4 of the Study. As noted in Section 4.2.4 of the Study, the Department's process for developing and implementing new science and technology includes developing a long-term stewardship science and technology roadmap that will (1) identify science and technology needs; (2) identify existing capabilities to meet these needs both within and external to DOE; (3) determine research and development priorities;p and (4) direct specific efforts to meet these needs. The Department agrees that research into a number of key areas is needed, including the long-term effectiveness and reliability of engineered and institutional controls, surveillance and monitoring, and information management. Advances in science and technology may provide future generations with the ability to cost-effectively achieve unrestricted use at some sites. The Department's Long-term Stewardship Working Group recently identified the policy issue as to whether the ultimate goal of new science and technology should be to improve the ability to maintain the existing end state (i.e., the end state established during cleanup) or should be to "improve" the end state more closely toward unrestricted use as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee.

2. A commitment to ongoing full availability of data is essential.

As a positive example of making data available, I would like to mention the Oak Ridge Environmental Information System (OREIS), which is available freely over the Web. All of the really difficult sites (Hanford, Savannah River, Rocky Flats, Nevada Test Site, etc.) and many of the sites that have problems not quite so bad, but quite significant (e.g. Site 300 of Lawrence Livermore) should provide data at a similar level of detail and accessibility. 31.2

31.2 – The Department acknowledges this comment in Section 7.2 of the Study. The Department has begun a process to more clearly identify and develop a consensus on long-term stewardship information needs and develop guidance for long-term stewardship information and records management. Some information management guidance will be included in the guidance for site-specific long-term stewardship plans currently under development by the Department. This comment will be considered in these efforts.

3. A commitment to training in the analysis of data is essential.

31.3

Because the worst sites will not be cleaned up, the DOE needs to find the training of community activists to learn to find and interpret data such as provided by OREIS.

4. The damaging effects of tritium should be carefully considered in a document such as the present study.

31.4

Very large quantities of tritiated groundwater exist and are almost impossible to clean up other than by waiting for generations. Your study has to include some sort of estimate of the damage caused by this tritiated groundwater. My concern is that the study may not adequately estimate this damage.

A tritium nucleus decays with a low-energy beta particle. There is some uncertainty of the health effects of this beta particle, but that is not my immediate concern. Rather, I would like to see a full discussion of the effects of the helium-3 nucleus that also results. The 3He nucleus comes away from the decay probably without any electrons and would therefore be a very powerful oxidizing agent. My concern is that the effects of this oxidizing agent, generated in situ (e.g. within a DNA molecule), may cause serious health damage that is not accounted for if calculations are based on the effects of the beta particle.

Very truly yours,

Carl N. Anderson

Carl N. Anderson

31.3 – The Department acknowledges this comment in a text box in Section 3.2 of the Study. Existing laws and regulations, especially the CERCLA process that is used for many site cleanups, require public involvement in the activities and decisions that lead to the selection of a remedy (ROD), including the technical and economic feasibility of cleanup to unrestricted use. However, these laws and regulations do not clearly articulate the role of public involvement in the activities and decisions that follow the ROD. At the same time, the Department recognizes that the ultimate success of long-term stewardship depends on the active involvement of the affected parties, including local governments and Tribes. It is important for all parties to develop a workable approach for meaningful public involvement in the decisions that affect and manage long-term stewardship activities. The Study identifies this as an additional key challenge associated with long-term stewardship. The Department's Long-term Stewardship Working Group recently identified public involvement as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. This issue includes how DOE should balance the need to involve the public in maintaining controls (e.g., institutional controls such as water use restrictions) with competing needs such as classified information or activities, particularly at sites with ongoing national security missions. The Department's Long-term Stewardship Working Group also has identified the issue of under what circumstances DOE should consider funding of external parties as one of the most important issues that should be addressed by the Executive Steering Committee. Although the general issue of public involvement has been identified to the Executive Steering Committee, specifics of implementation (e.g., what external organizations should be involved, what should be provided by DOE, what mechanisms for public involvement should be used) have not been discussed and may be determined on a site-specific basis. We intend for the public participation process to allow for meaningful Tribal and public involvement.

31.4 – The Department acknowledges this comment in Section 5.3 of the Study. The Department agrees that the primary purpose of LTS is continued protection of human health and the environment. The Department agrees that in some cases, site-specific LTS plans may need to include provisions for distributing public health information to affected parties, and, where appropriate, plans for health monitoring. A new text box at the end of Chapter 2 of the Study discusses the importance of public health concerns during long-term stewardship. With respect to care and compensation, such decisions would need to be made on a case-by-case basis.

2288 Fulton Street #307
Berkeley, CA 94704
December 14, 2000

Steven Livingstone, Project Manager
Office of Long-Term Stewardship, (EM-51)
Office of Environmental Management
U.S. Department of Energy, P.O. Box 45079
Washington, D.C. 20026-5079

Subject: Comments regarding the DOE/EM/LTS "Long-Term Stewardship Study Draft" dated October 2000

Dear Mr. Livingstone:

I am writing you, as President of the San Francisco-Bay Area Chapter of Physicians for Social Responsibility (PSR), to sign-on to the comments that were just submitted to you on December 12 by Tri-Valley CAREs (TVC) and Western States Legal Foundation (WSLF) regarding the Draft Long-Term Stewardship Study. Our organization, which represents approximately 2000 physicians and other health professionals in the SF-Bay Area, works closely in collaboration with TVC and WSLF on issues related to the public health impacts of past and ongoing work at DOE sites, particularly at the Lawrence Livermore National Laboratory (LLNL), and our partners have welcomed our support for their comments

While concurring with the specific comments of TVC and WSLF, we wish to emphasize the importance of prioritizing the long-term health and safety of populations and the environment around DOE sites that would include outreach to communities that would include up-to-date health information, and the development, in partnership with local communities and public health providers, of adequate health-monitoring plans. PSR's experience of working, in collaboration with TVC, WSLF and local health officials, in the larger community surrounding LLNL, underscores the importance of these issues.

32.1 – The Department acknowledges this comment in Section 5.3 of the Study. The Department agrees that the primary purpose of LTS is continued protection of human health and the environment. The Department agrees that in some cases, site-specific LTS plans may need to include provisions for distributing public health information to affected parties, and, where appropriate, plans for health monitoring. A new text box at the end of Chapter 2 of the Study discusses the importance of public health concerns during long-term stewardship. With respect to care and compensation, such decisions would need to be made on a case-by-case basis.

In addition, we wish to clearly state that, while we strongly support Stewardship clean-up measures that will serve to maximize the protection of communities from the legacy of DOE activities, we believe that true protection of the public health in this regard can only be attained by firm steps being undertaken to end all development, testing, and deployment of nuclear weapons at all DOE (and other) sites as a means to abolish these dread weapons once and for all.

32.2 – The focus of this Study is to discuss the challenges the Department will need to address for sites with long-term stewardship responsibilities. The Department notes this commenter's opinion related to the federal nuclear weapons mission.

Sincerely,

Robert M. Gould, MD
President
San Francisco-Bay Area Chapter
Physicians for Social Responsibility
(W)(408)-972-7299
email: rmgould1@yahoo.com

PS: I have attached a copy of the TVC/WSLF comments of 12/12/00 for your convenient reference.

32.3 -- Please see responses to Comment letter 6.

DRAFT LONG-TERM STEWARDSHIP PLAN

BY

TRI-VALLEY CAREs

AND

WESTERN STATES LEGAL FOUNDATION

December 12, 2000

1. The highest priority should be placed on selecting remedies that protect the long-term safety and health of the community and of the environment surrounding the DOE facility. All aspects of establishing, maintaining and funding long-term stewardship activities should be considered during the remedy selection process. Wherever possible, we prefer that DOE facilities are cleaned up to a level that allows unrestricted use and avoid the need for long-term stewardship. Where cleanup to such a level is not practical due to current technical constraints, we want commitments inserted into final remedy decision documents detailing the stewardship plan and funding.

2. Long-term stewardship activities at each site should include distribution of health information and a health-monitoring plan. After remedy selection, we believe that the long-term stewardship should include the following activities: 1) distribution to the public of information, databases, and fact sheets about possible disease outcomes related to contamination; 2) distribution to local public health providers about possible disease outcomes related to contamination; 3) development of health monitoring plans in appropriate communities.

3. We strongly advise that DOE develop a mechanism where local communities will be involved throughout the long-term stewardship decision making process. Building strong local public involvement is possibly the most essential element of ensuring survivability and sustainability of long-term stewardship. This should include involvement in initial long-term stewardship activities and any changes to those activities that may occur as a result of re-evaluation or modification of the remedy. The community should also be involved in periodic reviews, such as the five-year review cycle under CERCLA to re-evaluate the effectiveness and performance of long term stewardship activities. Additionally, independent technical expertise should be provided to communities to assist them in wading through the many technical documents that form the basis for key decisions. DOE should provide funding for this expertise.

4. Develop Contingency Plans at the Time Cleanup Decisions are Made. The National Research Council recommended that "DOE should plan for uncertainty and fallibility" of some aspects of the long-tern stewardship program; including developing plans "to maximize follow-through on phased, iterative and adaptive long-term institutional management approaches at sites where contaminants remain." We believe that these plans should be developed concurrent with cleanup decisions, and should be periodically revisited.

5. Develop firm funding commitments for long-term stewardship. Funding for stewardship activities must be adequate. When the final remedy is agreed to at a site, full funding for stewardship activities should be defined, including the role of the parties who will manage the funding and the funding sources.

6. Periodically re-evaluate the remedy. DOE (or subsequent federal managers) should implement a systematic process for re-evaluating and if needed, modifying existing LTS activities to ensure that developments in science, technology and performance are incorporated. This reevaluation should consider the following: changes in health standards associated with contaminants that are left in place, changes in technology that were not available at the time when initial cleanup decisions were made but if implemented would eliminate the need for long-term stewardship activities, and performance of the remedy in place. The community should be involved in these re-evaluations.

7. DOE should develop a program to look for solutions that would minimize or eliminate the need for long-term stewardship. We are aware that some contaminants will have to be "stored" in place or at the site for long periods of time. This may be true for many radionuclides and some chemicals, often when they are in the form of dense-non-aqueous phase liquids (DNAPLs). We also believe that once decisions are made to leave a contaminant in place, it is difficult to continue research on how the contaminant could be safely treated, avoiding the need for long-term stewardship measures. We propose that DOE form a dedicated program that keeps an eye towards the future, and continually looks for solutions to these problems. We think that this program should be coordinated with the Office of Long-Term Stewardship.

8. A reliable, up-to-date record management facility accessible to the community is required. DOE must fully characterize, document, and disclose all environmental contamination at its sites in case failures occur. Because of the long-term nature of contaminants found at many of the sites, DOE should develop a record management system that will always be accessible near the location of the stewardship activities, from a regional access point (such as the state archive or library) and from the National Archive system. In cases such as waste burial areas (e.g., Waste Isolation Pilot Project), DOE should submit records to international archives as well.

9. Develop policy and regulations on property transfers. One of the more difficult aspects of this program is deciding how to handle property transfers and the obligations of DOE and the new owner after the transfer. We strongly advise that this be addressed as policy and specific regulation, which contains the premise that DOE is responsible for a site in perpetuity unless the new owner has altered the property (e.g., drills through a landfill), violated a legal deed restriction, or contaminates the environment. If the owner is insolvent, then liability should revert back to DOE.

10. When institutional controls or land-use controls are part of the remedy, DOE should be required to monitor and enforce compliance with those controls. If property is transferred to another entity, DOE should develop a system whereby it will monitor compliance with any land-use restrictions/institutional controls, and enforce compliance when necessary.

11. Avoid transferring hazardous substances. Transferring waste adds the complication of transportation and reclamation of the former site, while still maintaining the burden of long-term stewardship activities. We are also concerned that some locations with lax standards could become the dumping ground for many long-lived hazardous materials.

12. All cleanups that fall under the LTS program should use the CERCLA regulatory framework. There are many cleanups conducted pursuant to non-CERCLA authority. We propose that DOE take the initiative to form a consistent regulatory mechanism for the LTS program, and that CERCLA is the method that provides the most opportunity for community involvement in decision making.

13. When contaminants are left in place, DOE should compensate local governments. Compensation to fund protective equipment, emergency preparedness, and sophisticated record keeping should be available to all local governments where long-term stewardship activities fall under their jurisdiction. Even with the best plans, we know that there will be failures. Some of these failures may require emergency medical response due to sudden events (e.g., explosion), but many may lead to negative health affects due to non-sudden events (e.g., failure to contain seeping groundwater plumes leading to contamination of the water supply). Aside from direct compensation, we believe that DOE should provide an insurance policy for each site. This insurance should be similar to Environmental Impairment Liability policies required by the Resource Conservation Recovery Act (RCRA). These policies are required by EPA regulations for privately held sites that treat, store, or dispose of hazardous waste. We suggest that the Office of Long-Term Stewardship investigate various mechanisms to fund such insurance.

14. DOE Office of Environmental Management (or its successor organization) should take responsibility for long-term stewardship at the site. We do not believe that the other line programs of DOE would put equal focus into the mission and goal of adequate long-term stewardship. We are especially concerned that sites within the new National Nuclear Security Agency would not coordinate well with non-NNSA functions. It is of particular importance that long-term stewardship planning and activities are coordinated with adequate project management oversight and authority in one office within DOE.

15. DOE should integrate prior studies into its assessment of long-term stewardship needs. Assessing the sites on the "1995 List of Sites Reviewed for Possible Past Involvement in Nuclear Weapons and Nuclear Energy Related Activities" is an important and difficult task. We urge DOE to continue work on this list - specifically creating a database that will provide information about each site and long-term stewardship needs. Additionally, coordination between this study and the long-term stewardship analyses (site specific and national) currently being conducted by DOE for Congress should be improved.

ECONOMIC DEVELOPMENT PARTNERSHIP
Serving Aiken & Edgefield Counties

Fred K. Himes
Director

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To Terry Vought	From Jim Moore	
Co./Dept.	Co.	
Phone #	Phone # 5-5663	
Fax # 5-2016	Fax #	

December 11, 2000

Jim Moore
WSRC Public Involvement
742A, Room 182
Savannah River Site
Aiken, SC 29808

DRAFT LONG-TERM STEWARDSHIP STUDY – Your email of November 6, 2000

Dear Mr. Moore:

We have reviewed the subject draft and have the following comments:

Major Comments

1. We support the concept of planning for long-term stewardship at DOE sites. Because each DOE site has different long-term needs and integrates into a different community infrastructure, we suggest that long-term stewardship planning be performed on a decentralized basis. DOE headquarters should be responsible for policy development and program oversight, with program implementation and stakeholder involvement being performed at each site. 33.1

2. The draft Study has not been adequately scoped, and input from an important stakeholder interest has not been incorporated. Appendix B properly includes economic re-development as a driver for stewardship issues. However, none of the organizations responsible for economic development in the Central Savannah River Area were contacted during the scoping phase of this study. Some relevant agencies that should have been contacted include (1) the Savannah River Regional Diversification Initiative -- the DOE recognized community reuse organization, (2) the Savannah River Site Redevelopment Authority – the South Carolina state chartered organization responsible for reuse of excess SRS assets and (3) the Economic Development Partnership which has a multi-year history of integrating SRS assets into the local economic base. Many of the comments included herein should have been solicited during the scoping phase of this study. 33.2

3. Section 2.4, page 7 – A fifth disposition path must be identified. In many instances, excess DOE facilities will still have economic value, even though its DOE mission needs have been completed. At locations such as Savannah River, it may not be prudent for DOE to transfer land to the private sector (e.g. land needed for a buffer). In such instances, the option for a non-DOE entity to use that asset while still on DOE lands must be accommodated. Your list of disposition paths must include a fifth option for "Transfer or lease of excess facilities to non-federal government entities with DOE retaining title to underlying land. This requires developing development and negotiation of appropriate land-lord-tenant agreements." In support of this alternative, DOE should development, in conjunction with appropriate stakeholders, broad policy guidance. This alternative will assure that the American economy can benefit from the residual economic value of assets purchased with taxpayer dollars. 33.3

4. Section 4.3, page 39 – We would appreciate the opportunity to provide input to the multi-program working group that is examining long-term stewardship issues at sites with continuing non-EM operations. 33.4

33.1 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Department's Long-term Stewardship Working Group recently identified the need for a corporate vision for long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. The corporate vision includes the appropriate organizational structure for long-term stewardship within the Department. The Department also recognizes that it is important to define long-term stewardship roles and responsibilities both within DOE and between DOE and other entities, including other federal agencies, states, Tribes, and regional governments. The Executive Steering Committee is developing a Strategic Plan for long-term stewardship; part of that effort will include identifying roles and responsibilities within DOE. The commenters expressed varied opinions on the appropriate balance between federal vs. non-federal leadership, and between a strong central organization vs. independent field organizations. The Department notes that a balance that may work well for one site may not work well for other sites.

33.2 – This comment focuses on site-specific issues. Where these issues have identified general issues for long-term stewardship, the Department has attempted to communicate these issues in both the Draft and Final Study. This comment has been forwarded to the Department's long-term stewardship representatives at the appropriate sites; however, the long-term stewardship study is not the appropriate document for addressing site-specific issues. Exhibit 1.2 explains how the NEPA process was applied with regard to public scoping for the Study.

33.3 – The Department has not identified a fifth path because leasing is not a property disposition. However, leasing is discussed in Section 6.2 of the Study.

33.4 – The comment refers specifically to an internal working group for a policy on site transfer. Although that policy has already been completed, we encourage stakeholders to take active participation in the long-term stewardship process. Several stakeholder groups exist at the Savannah River Site, including the Site Specific Advisory Board, and the Board's Committee on Long-term Stewardship, that provide opportunities for public input to long-term stewardship issues.

Other Comments

5. Page 1 – Not all nuclear tests were weapons related. Many were performed under the "Plowshare" and the Department of Defense Advanced Research Projects programs. 33.5

6. Section 3.3, page 18. Ability to Monitor, etc. last sentence – The emphasis in this paragraph should be changed. It is much more important to achieve results then to produce data. 33.6

7. Section 7.3, Exhibit 7.2, page 78 – We do not concur that the "concentrated" option is the most "efficient" alternative from the user's standpoint. The concentrated option will require the user to access much information that may have relevance at sites other than the one of interest (e.g., data requirements will be determined by the lowest common dominator). We suggest that a core set of data common to all sites be collected and augmented at each site to meet site-specific requirements. 33.7

8. Section 3.3, page 18 and Section 3.4, page 23: Life-cycle accounting – this section should specify that an appropriate discounting factor shall be used. The discount factor should not favor expensive up-front remediation over longer-term surveillance and maintenance. 33.8

9. Section 8.2, Exhibit 8.3, page 86-87 – Trust funds/Escrow Accounts/etc that are funded by congressional appropriation should be used for stewardship activities only after all remediation activities are completed at an individual site. So long as remedial activities are in progress, program managers must have the flexibility to allocate available funding between on-going cleanup and stewardship activities. Otherwise, the program manager may be precluded from addressing the highest risk at the site. 33.9

10. Section 10.2. Focusing on . . . the near future, Page 109 – We suggest that there be more emphasis on the long-term than implied in this paragraph. It may be prudent to develop a long-term strategy at each site, but only implement those portions that are consistent with current technologies. 33.10

11. Section 10.2.1, first bullet (After very long periods), page 110 – The reduction in hazard over time as the result of radioactive decay and chemical degradation should be included in site stewardship planning. These effects are well understood, and should not the cause for the future reexamination of stewardship requirements. 33.11

12. Appendix A, History . . . as an issue for DOE, page A-1 – The statement that "Congress and the public assumed that DOE . . . was cleaning up its sites . . . for unrestricted use" is not correct. Specifically at Savannah River Site, the public assumed that many of site's structures would not be removed, requiring long-term DOE custody and that some parts of the site would be cleanup up to "brownfield" levels. 33.12

Thank you for the opportunity to provide input to this important document.

Sincerely,

Fred E. Hunter

33.5 – The text has been changed to reflect this comment; the Study now refers to "energy research activities" as well.

33.6 – The text has been changed to reflect this comment.

33.7 – The Department acknowledges this comment in Section 7.2 of the Study. The Department has begun a process to more clearly identify and develop a consensus on long-term stewardship information needs and develop guidance for long-term stewardship information and records management. Some information management guidance will be included in the guidance for site-specific long-term stewardship plans currently under development by the Department. This comment will be considered in these efforts.

33.8 – Use of a discounting factor is not addressed; however the uncertainty of life-cycle accounting is examined at length.

33.9 – The Department acknowledges this comment in a text box in Section 8.2 of the Study. As noted in Section 8.2 of the Study, developing an alternative funding mechanism will require additional study and eventually Congressional action. Section 8.2 of the Study also provides a summary of the recent study of Trust Funds by Resources for the Future. The Department's Long-term Stewardship Working Group recently identified funding of long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. Specific funding issues identified by the Working Group included: (1) difficulties in determining long-term stewardship costs now and in the future because there is no consistent procedure for how long-term stewardship activities are budgeted for and reported among DOE sites; (2) whether the annual appropriations process is the most effective mechanism for funding long-term stewardship activities that may be needed for decades or centuries; and (3) circumstances under which DOE should consider funding external parties (e.g., local governments) to conduct long-term stewardship activities or oversight. This comment will be forwarded to the Executive Steering Committee for their consideration.

33.10 – The Department evaluated the specific suggestion made in this comment but chose not to revise the Study in response. The comment is addressed in the text which discusses the need to concentrate initially on the near future because of the nature of long-term uncertainties.

33.11 – The Department acknowledges these comments in a text box in Section 4.2.4 of the Study. As noted in Section 4.2.4 of the Study, the Department's process for developing and implementing new science and technology includes developing a long-term stewardship science and technology roadmap that will (1) identify science and technology needs; (2) identify existing capabilities to meet these needs both within and external to DOE; (3) determine research and development priorities; and (4) direct specific efforts to meet these needs. The Department agrees that research into a number of key areas is needed, including the long-term effectiveness and reliability of engineered and institutional controls, surveillance and monitoring, and information management. Advances in science and technology may provide future generations with the ability to cost-effectively achieve unrestricted use at some sites.

33.12 – The text has been altered to address this comment.

12/14/00

Steven Livingstone, Project Manager,
Office of Long-Term Stewardship, (EM-51),
Office of Environmental Management,
U.S. Department of Energy, P.O. Box 45079
Washington, D.C. 20026-5079,
phone: 202-586-9280.

Topic: Public Comments regarding the DOE/EM/LTS "Long-Term Stewardship Study Draft" dated October 2000.

Dear Mr. Livingstone:

Thank you for this opportunity to comment on the "Long-Term Stewardship Study Draft" (LTSSD) dated October 2000. I found it to be very well organized and thought-out. In general I support all the comments provided by the organization Communities Against a Radioactive Environment (Tri-Valley CAREs).

34.0 – Please see responses to comment number 6.

After reviewing the entire study I identified numerous issues which should be addressed in the final report. Many of these issues are likely to involve details which the study formulators may consider as Out-of-scope or as issues already relegated to the "Report to Congress - Long-Term Stewardship" document. I believe such segmentation and compartmentalization, of this major program, tends to impede the public's ability to judge the LTSSD which is largely limited to programmatic policy issues. My comments include numerous criticism which many DOE/EM/LTS officials may view as unproductive or irrelevant. I urge the reviewers of my criticisms to look upon then as opportunities to serve the needs of future generations, as was stated in the inset box in Chapter 10, titled "Seventh Generation Planning."

34.1 – The Department issued the National Defense Authorization Act (NDAA) Report, entitled A Report to Congress on Long-term Stewardship, in January 2001 (DOE/EM-0563). The Report to Congress and the Study were prepared as separate documents because the required scope for each was different. The primary focus of the Report to Congress was site-specific requirements; the primary focus of the Study was common national issues. Nonetheless, the two reports are complementary to one another, and the public is encouraged to read both documents. The Report to Congress can be useful for certain common long-term stewardship analyses, such as evaluating long-term stewardship needs. Similarly, the Department has added a text box to Chapter 2 of the Study providing an overview of the overall scope of DOE's long-term stewardship responsibilities. The cost estimates from the Report to Congress have been incorporated into Section 8.1 of the Study. They were not in the Draft Study because the cost information in the Report to Congress was not final prior to publication of the Draft Study. The Department anticipates that life-cycle cost estimates will improve over time as DOE moves forward with planning and implementing long-term stewardship. For the Report to Congress, each site was strongly encouraged to work with local stakeholders during the preparation of site-specific cost estimates. The Study is not the appropriate document to respond to specific comments on the Report to Congress or on the public comment process used to develop the Report. The Department encourages members of the public to comment on their respective site's cost estimate through established public involvement mechanisms at each site.

Below is listed the recommendations by Tri-Valley CAREs in italics. Following the first paragraph are my own suggestions and comments that include details that should be addressed in the final report. Following the TVC list are additional observations and comments that I produced while reviewing the LTSSD.

* *THE HIGHEST PRIORITY SHOULD BE PLACED ON SELECTING REMEDIES THAT PROTECT THE LONG-TERM SAFETY AND HEALTH OF THE COMMUNITY AND OF THE ENVIRONMENT SURROUNDING THE DOE FACILITY. All aspects of establishing, maintaining and funding long-term stewardship activities should be considered during the remedy selection process that is part of active cleanup. Wherever possible, we prefer that DOE facilities are cleaned up to a level that allows unrestricted use and avoids the need for long-term stewardship. Where cleanup to such a level is not practical due to current technical constraints, we want commitments inserted into final remedy decision documents detailing the stewardship plan and funding.*

The fact remains that many of the DOE's facilities lie on public lands which were withdrawn from public use for the temporary use of the AEC. It was assumed that AEC would serve as good stewards of those public lands and return them in good condition for the use of future generations. Instead, it has turned out that some aspects of some of those lands have been turned into national sacrifice zones and many future generation will need to devote resources to limit the possibility that those contaminated properties will result in future harm.

Though the LTSSD indicates that short-term congressional funding for the stewardship program is likely to be adequate, the fact remains that the remedy options that are being chosen are a result of compromises and trade-offs that reflect current political, economic and technological realities. Once the remidy is selected it is often touted as the best of all possible solutions and the abandonded options are forgotten. The complete history of all decisions, and the background data that led up to those

34.2

decisions, must be made freely available to the public from the very eairliest stages of the stewardship program.

In the case of the underground nuclear explosion test areas at the Nevada Test Site (NTS) a DOE contractor conceptual study estimated that one cleanup option would cost $7.3 trillion. The Nevada Operations Office chose the Institutional Controls option which was estimated to costs less than one eight-thousandth as much as the high figure.

Future generations deserve to know why certain options were not chosen, including rejection for being economically and/or technologically impractical. Inserting such early decision details into the final decision documents should be an enforced requirement.

34.2

* *DOE SHOULD DEVELOP A PROGRAM TO LOOK FOR SOLUTIONS THAT WOULD MINIMIZE OR ELIMINATE THE NEED FOR LONG-TERM STEWARDSHIP. We are aware that some contaminants will have to be "stored" in place or at the site for long periods of time. This may be true for many radionuclides and some chemicals, often when they are in the form of dense-non-aqueous phase liquids (DNAPLs). We also believe that once decisions are made to leave a contaminant in place, it is difficult to get funding to monitor it while simultaneously continuing research on how the contaminant could be safely treated. Still, developing a remedial treatment that destroys a chemical contaminant, for example, should remain a high priority, as it avoids the need for long-term stewardship measures. We propose that DOE form a dedicated program that keeps an eye towards the future, and continually looks for solutions to these problems. In short, DOE should continue to develop new and better remediation technologies for sites that are in the long-term stewardship mode, and then to move them back to active cleanup when it is technically feasible to do so.*

* *WE STRONGLY ADVISE THAT DOE DEVELOP A MECHANISM WHERE LOCAL COMMUNITIES WILL BE INVOLVED IN LONG-TERM STEWARDSHIP DECISIONS. This should include involvement in initial long-term stewardship activities and any changes to those activities that may occur as a result of re-evaluation or modification of the remedy. The community should also be involved in periodic reviews, such as the five-year review cycle under CERCLA (the Superfund law) to re-evaluate the effectiveness and performance of long term stewardship activities. Additionally, independent technical expertise should be provided to communities to assist them in wading through the many technical documents that form the basis for key decisions.*

* *DEVELOP CONTINGENCY PLANS AT THE TIME CLEANUP DECISIONS ARE MADE. The National Academy of Sciences' National Research Council recommended that "DOE should plan for uncertainty and fallibility" of some aspects of the long-tern stewardship program; including developing plans "to maximize follow-through on phased, iterative and adaptive long-term institutional management approaches at sites where contaminants remain." We believe that these plans should be developed concurrent with cleanup decisions, and should be periodically revisited.*

* *DEVELOP FIRM FUNDING COMMITMENTS FOR LONG-TERM STEWARDSHIP. Funding for stewardship activities must be adequate. When the final remedy is agreed upon at a site, full funding for stewardship activities should be defined, including the role of the parties who will manage the funding and the funding sources.*

34.2 – The Department acknowledges this comment in a text box in Section 3.2 of the Study. Existing laws and regulations, especially the CERCLA process that is used for many site cleanups, require public involvement in the activities and decisions that lead to the selection of a remedy (ROD), including the technical and economic feasibility of cleanup to unrestricted use. However, these laws and regulations do not clearly articulate the role of public involvement in the activities and decisions that follow the ROD. At the same time, the Department recognizes that the ultimate success of long-term stewardship depends on the active involvement of the affected parties, including local governments and Tribes. It is important for all parties to develop a workable approach for meaningful public involvement in the decisions that affect and manage long-term stewardship activities. The Study identifies this as an additional key challenge associated with long-term stewardship. The Department's Long-term Stewardship Working Group recently identified public involvement as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. This issue includes how DOE should balance the need to involve the public in maintaining controls (e.g., institutional controls such as water use restrictions) with competing needs such as classified information or activities, particularly at sites with ongoing national security missions. The Department's Long-term Stewardship Working Group also has identified the issue of under what circumstances DOE should consider funding of external parties as one of the most important issues that should be addressed by the Executive Steering Committee. Although the general issue of public involvement has been identified to the Executive Steering Committee, specifics of implementation (e.g., what external organizations should be involved, what should be provided by DOE, what mechanisms for public involvement should be used) have not been discussed and may be determined on a site-specific basis. We intend for the public participation process to allow for meaningful Tribal and public involvement.

* *PERIODICALLY RE-EVALUATE THE REMEDY. DOE (or subsequent federal managers) should implement a systematic process for re-evaluating and if needed, modifying existing LTS activities to ensure that developments in science, technology and performance are incorporated. This reevaluation should consider the following: changes in health standards associated with contaminants that are left in place, changes in technology that were not available at the time when initial cleanup decisions were made but if implemented would eliminate the need for long-term stewardship activities, and performance of the remedy in place. The community should be involved in these re-evaluations.*

* *A RELIABLE, UP-TO-DATE RECORD MANAGEMENT FACILITY ACCESSIBLE TO THE COMMUNITY IS REQUIRED. DOE must fully characterize, document, and disclose all environmental contamination at its sites in case failures occur. At a minimum, DOE needs to develop a record management system that will always be accessible at or near the location of the stewardship activities.*

If past, or ongoing, information classification and other forms of information access restrictions have limited, or otherwise altered site characterization activities and documentation, then the public record should clearly indicate such. The complete data record, behind all risk analysis, must be made available for independent peer reviewers who have no connection with the DOE and who do not require security clearances to obtain all the relevant background data. The public records should note such things as still pending FOIA requests for site data that is related to residual contamination. In cases where DOE has announced a "declassification action," and yet has still to release the information into the public domain, that should also be made obvious in the public record. Classification reform requires that the public know the what sort of information, including document titles, remains withheld from them. The balancing, of what classified information can be released to the public, continues to weigh heavily towards protecting institutions such as the DOE, not towards protecting the need to maintain a well informed populace that forms the basis of a flexible and vibrant democracy.

34.3 – The Department acknowledges this comment in Section 7.2 of the Study. The Department has begun a process to more clearly identify and develop a consensus on long-term stewardship information needs and develop guidance for long-term stewardship information and records management. Some information management guidance will be included in the guidance for site-specific long-term stewardship plans currently under development by the Department. This comment will be considered in these efforts.

The characterization must include, the contamination cause, source, history, the spatial distribution, the concentration profiles of the individual contaminants, and the current exact location on the globe of the debris deposit. In addition, the elevation below the surface, as well as relative to present mean sea-level should be part of the Geographic Information System (GIS) database. A uniform set of standards must be established for such a database and those requirements should be published as provisions in the U.S. Code of Federal Regulations. Global location measurements should be highly accurate, based upon current U.S. Geological Survey mapping standards. The global position should be provided in decimal degrees with a preferred accuracy of less than plus or minus 0.0001 degree. The contaminated body spatial extent should be recorded in standard metric engineering units, based upon one meter. Both contamination volume and mass should be recorded in standard metric terms. The mass, volume, and other characteristics, of the contamination source elements should also be provided. Where the contamination involves a mixture of different elements, each component must be identified and quantified as a separate layer in the GIS database. Insider terms and jargon should be avoided or minimized. This includes "heavy metal," "special nuclear material," "special case waste," "classified waste," "AEA Section 11e(1) by-product material," "AEA Section 11e(2) byproduct material," "contaminated environmental media," "TRU-contaminated waste," and "spent nuclear fuel." Other terms should also be minimzed or at least described as accepted regulatory terms. This includes low-level mixed waste, low-level waste, transuranic waste, high-level waste, and "Greater-Than-Class-C" waste. Such terms, and associated data, should be put into appendixes or defined in a glossary. I doubt that future generations will appreciate being burdened with such regulatory golbbledygook which was created in less than a half-century of our lives.

34.4 – See response to Comment 34.3.

34.5 – The Department attempted to minimize the use of these terms and jargon.

In the case of radioactive elements, the radioactivity level (in Curies), referenced to a recent date, should be included in the GIS public record. The GIS record should include basic local information such as depth to the local water table, subsurface flow direction, annual rainfall and surface water flow direction. Once the recording requirement standards are established the public record, for each site, should clearly note where data is missing, incomplete, inaccurate, or uncertain. This would include the

causes, such as "source data remains classified as SECRET RESTRICTED DATA, as of 1 January 2001, in file xxx, located at zzz."

The Initial data input into this GIS database can begin immediately and progress rapidly if DOE/EM/LTS starts an inititive to do so. One of the contacts listed on the LTS web site is Denise Bleakly, a GIS Specialist at Sandia National Laboratories. With the right tools, funding resources, rapid feed of DOE site description name and geographic coordinates, a preliminary GIS database of all the stewardship sites can be created. With one cheep GPS receiver and a dedicated person that can travel to each of the sites and be escorted by DOE/EM field techs, a full set of semi-accurate GPA location coordinates could be assembled in a few months.

The GIS database should be made transparent to public access. Assess to the raw data and metadata, in the GIS, should be made easily available through a link on any GIS presentation page located on the DOE/EM server, as well as on outlying servers, such as those at Oak Ridge and at site specific field offices. Means should be provided to provide feedback to GIS specialists to suggest data additions, refinements and corrections. Several different quality control structures should be established to ensure, that final version input data is accurate, or at least its limitations are properly described and noted.

The LTSSD mentions that funding, for DOE/EM records management activities, is often viewed as not a priority. There needs to be more incentives and teeth established in the case of the stewardship program. As regulatory records are generated and delivered to oversight agencies, the full-text of those documents should be posted on the DOE's and the regulator's web sites, along with indications that delivery milestone dates were met or missed. Delivery of hard copies should not be limited to the agencies of concern. Numerous other copies should be immediately sent to dedicated repositories, such as the State library, regional community libraries near the affected site and to colleges and university libraries in the state. Major decision documents should be distributed to at least a dozen major federal repositories located through-out the nation. In Nevada, DOE/NV has an agreement with the State to send regulatory milestone documents to a special section in the State Library. When I last checked, it appeared delivery was years late. Apparently, there was little incentive to meet this agreement.

34.6 34.6 – See response to Comment 34.3.

The DOE/EM should provide professional information specialist help to the various repositories. This is especially needed for small community libraries that have little space, or experience, with indexing and filing of DOE's arcane publication titling and numbering system. Since prodigious quantities of reports are generated during site characterization and remedial activities, it might be useful to request funds for building additions on to community libraries to house massive quantities of site specific reports. The ultimate cost of the stewardship program should take into account the storage, and cataloging burden it will leave with outside entities, such as community libraries.

Major efforts need to go into cataloging and the creation of cross indexes that relate all data associated with a given site. The World Wide Wide web and computer information databases can aid in that process but those still retains many weaknesses and faults.

34.7 34.7 – See response to Comment 34.3.

I urge the LTS office to post a link to the draft Environmental Protection Agency guidance on CERCLA 5-Year reviews on the LTS web site. This site should also contain links to at least the last four reports to Congress involving progress in Implementing Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act. Links to these reports, and to the titles of all 12 reports, should be consolidated into a single web page. The titles of all 12 reports should turn up when using several different DOE search engines. I found that several of DOE's search engines failed to find one or more of these on-line reports.

34.8 34.8 – See response to Comment 34.3.

Links to the last four of these reports are as follows:

Ninth Annual Report: http://www.em.doe.gov/cercla/index.html
Tenth Annual Report: http://www.em.doe.gov/cercla97/index.html
Eleventh Annual Report: http://www.em.doe.gov/cercla99/index.html
Twelfth Annual Report: http://www.em.doe.gov/rtc2000/index.html

The stewardship program needs to take into account the durability of records. The advise of archival information specialist is needed. Many hi-tech DOE contractors are churning out massive data sets on CD/ROMs. In many cases they are intended primarily for use within the DOE and its array of contractors. The indexing cataloging, and physical filing of such electronic reports may not follow the rules presently applied to hard copy documents. When I requested a CD-ROM, that a DOE contractor generated, I was given a run-around and then told by the DOE Operations Office that production of an extra copy would cost me about $30 dollars.
I believe blank R-CD/ROMS cost less than $2.

34.9 34.9 – See response to Comment 34.3.

I've been told by archive specialist that the CD/ROM format is not regarded as an archival document, mainly becuse such electronic formats change rapidly in our rapidly evolving society. I was glad to see the brief reference, in the LTSSD report, to the Long Now Foundation and its concept of preserving written materials for very very long periods of time. Still I see that as a future concept that should not be utilized to sell todays stewardship policy planning mission.

In conclusion, the LTS Office should make some near-term efforts to ensure that regulatory reports, and all other reports that might be associated with stewardship functions are available in hard-copy form and freely available to interested community members. Confidentially agreements, between the DOE and its contractors should not interfere with the public's and the state regulator's ability to determine the degree of site contamination, the need to take remedial actions, and the exact form of those remedial actions. The LTS Office needs to look into any conflict of interest that can take place between a regulator's need to know and a contractors desire to not reveal its plan to potential competitors.

34.10 34.10 – See response to Comment 34.3.

Increasingly, the DOE is relying upon document distribution via the Internet. Apparently, existing policy is increasingly pushing the PDF format. That is fine for an organization that can justify upgrading its fast networked computers and software on a regular basis, and that has a staff of system administrators to ensure the smooth transition to the latest licensed software version. Unfortunately, that leaves many small community-based, non-profit oversight organizations, behind. Old Mac computers, connected via a 28K modem, can take hours to download a PDF report that a DOE/HQ machine can capture in under five minutes. I have been out to remote Indian communities where use of the Internet involves a carefully rationed long-distance call. I would like to see the playing field leveled a bit with some more sensitivity towards those who have limited hi-tech informational resources.

As used today, large organizations tend to operate an intranet for internal operations and a Internet for public relations purposes. This process makes it easy to conduct numerous analysis and decisions behind closed doors. This situation needs to be looked at from the standpoint of involving the local communities in the earliest stages of DOE's site restoration and stewardship activities.

* *DEVELOP POLICY AND REGULATIONS ON PROPERTY TRANSFERS. One of the more difficult aspects of this program is deciding how to handle property transfers and the obligations of DOE and the new owner after the transfer. We strongly advise that this be addressed as policy and specific regulation, which contains the premise that DOE is responsible for a site in perpetuity unless the new owner has altered the property (e.g., drills through a landfill), violated a legal deed restriction, or contaminates the environment.*

As stated under TVC's first comment paragraph, I mentioned that the AEC sacrificed public lands which were temporarily loaned to it in trust. The LTSSD report indicated the complex nature of some of the land transfers that occurred during the time of the AEC and how the AEA allowed the rapid takeover in numerous situations. The LTSSD then pointed out many mechanisms by which DOE land disposition transfers could be accomplished in conjunction with environmental analysis. There were some examples of such, but I believe the final report should also provide a couple of recent examples

where major land transfers occurred with little or no environmental analysis. Its likely that officials in the LTS Office were not informed of these land transfers when they were gathering information on this topic.

With the signing of Public Law No. 106-65 on 5 Oct. 1999, a provision in it took effect which effectively transferred 60 square miles of withdrawn public lands, assigned in June of 1958 to the control of the AEC, to the the control of the U.S. Air Force. No public environmental assessment of this land had taken place, nor was an analysis or review proposed before the transfer was made. In fact, since 10 October 1965, public revelations of the environmental status of this land has been blocked by a series of annual Presidential Determinations.

Legal citations: 23 FR 4700: PLO 1662
PD 95-45, PD 96-54, PD 97-35, PD 98-36, PD 99-37, PD 2000-30
Pub.L. 106-65, Div. B, Title XXX, Subtitle A,
§ 3011(b)(2)(A), Oct. 5, 1999, 113 Stat. 886

With the same stroke of the Presidential pen, 200 square miles of perpetually contaminated nuclear testing lands were formerly transferred to the control of the DOE. At that time the DOE knew this land was destined for for its long-term stewardship program.

Legal citation:
Pub.L. 106-65, Div. B, Title XXX, Subtitle A,
§ 3011(b)(2)(B), Oct. 05, 1999, 113 Stat. 886

* *AVOID TRANSFERRING OR RELOCATING HAZARDOUS SUBSTANCES. This practice reduces the complication of transportation and reclamation of the former site, while still maintaining the burden of long-term stewardship activities. We are also concerned that some locations with lax standards could become the dumping ground for many long-lived hazardous materials.*

* *ALL CLEANUPS THAT FALL UNDER THE LTS PROGRAM SHOULD USE THE CERCLA REGULATORY FRAMEWORK. There are many cleanups conducted pursuant to non-CERCLA authority. We propose that DOE take the initiative to form a consistent regulatory mechanism for the LTS program, and that CERCLA is the method that provides the most opportunity for community involvement in decision making.*

In the case of all this nation's nuclear testing sites, new Preliminary Assessments (PAs) should be conducted and judged on the basis that future generations may decide to homestead on such sites. The PA should be performed by environmental analysis experts who have no connection with DOE/NV and do not depend upon old data supplied by them. The previous PA, prepared by a long-time DOE/NV contractor, should not be used as the basis of the new PA. Each of the 933 nuclear detonation sites should be evaluated separately and listed on the NPL if the future (not present) hazard is deemed serious. Those sites that fail to make the NPL should not be simply be issued a Finding of No Significant Impact (FONSI) and then dropped off the regulatory radar screen.

34.11 – The focus of this Study is to discuss common issues the Department will need to address for sites with long-term stewardship responsibilities. The Office of Long Term Stewardship forwarded this site-specific comment to the appropriate point of contact at the Nevada Test Site.

* *WHEN CONTAMINANTS ARE LEFT IN PLACE, DOE SHOULD COMPENSATE LOCAL GOVERNMENTS. Compensation to fund protective equipment, emergency preparedness, and sophisticated record keeping should be available to all local governments where LTS activities fall under their jurisdiction.*

The full funding scope of leaving temporarily borrowed public lands permanently damaged must be recognized at the earliest stages of the DOE/EM/LTS program. Simply dropping hundreds of arcane technical reports in the laps local libraries is not likely to lead to the long-term goals which the

program managers claim they desire. Libraries regularly dispose of excess materials which are old, damaged and poorly used. This is a fact of life where budgets are limited and space is tight.

At the end of Appendix C is a listing of some of associated web sites. I have explored a number of these and found portions of the Long-term Stewardship site (http://lts.apps.em.doe.gov) very well developed. However the
http://doe-web-rpt.em.doe.gov/login.asp and the
http://ndaa.longtermstewardship.net/ndaa/index.asp

sites appear to be limited to insider access.

34.12 34.12 – The text has been changed to reflect this comment.

A few years ago the Livermore Lab announced, in one of their public journals, that a modeling program that portrays the underground contamination plumes, on and off site, were now available on the Internet. What the public journal failed to mention was that access to that web site was restricted to certain parties, such as a State regulator who's job it was to track lab regulatory compliance. If the DOE announces its opening certain doors to the public then that should happen. If it turns out to be and empty promise then there needs to be serious consequences. Rarely, do I see such consequences.

DOE/EM has become quite adept at freely throwing about the term "long-term" without providing some quantitative perspective on the periods of time that may often be involved. The Department claims this lack of quantitative estimates is due to great uncertainties in determining the stewardship fate of the sites. I see this as a way to avoid the hard truth which is that some sites are likely to remain contaminated for about a quarter-million years due to large quantities of buried plutonium-239. Planning for stewardship activities at sites that could be removed from that status within the next hundred years can be very different than for sites that will likely require caution for tens of thousands of years. In 40 CFR 191.13 the containment requirement period, for transuranic radioactive waste, was chosen as 10,000 years. That was a compromise value due to great uncertainties beyond that. The DOE/EM/LTS Office must start dealing more openly with the realities of such extreme periods of time and provide quantitative estimates of the length of time individual sites are likely to require stewardship activities. The LTS Office sponsored study by the National Research Council titled "Long-Term Institutional Management of U.S. Department of Energy Legacy Waste Sites" put the problem rather succinctly, saying

34.13 34.13 – The Department acknowledges this comment in Section 2.1 of the Study. The Department notes that the definition of long-term stewardship used in the Study is that which is stated explicitly in the Settlement Agreement. The Department agrees that long time frames may be involved, and has added a text box in Chapter 2 of the Study to help clarify that point. The Department's Long-term Stewardship Working Group recently identified the issue of developing a consistent, consensus definition of long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. In addition, with regard to quantitative estimates, the Report to Congress on Long-term Stewardship provides the most up-to-date estimates; however, the Department notes that considerable uncertainty will be associated with any such estimates beyond several decades or so.

> Since some radioactive wastes remain dangerous for several thousand years, the problem is analogous to a waste-management program established during the Roman Empire. It is unlikely that the Romans would have been able to foresee conditions in today's world, but their waste products might still be poisoning the environment.

34.14 – The Study does not include this statement.

Typically, a fundamental grasp of such enormous spans of time is not the forte of DOE administrators. The LTS Office should establish policy that discourages the use of the term "long-term" and substitutes specific quantitive time estimates for individual site situations.

I have noticed that the "Report to Congress - Long-Term Stewardship Report" is now expected to be delivered to Congress on the 17th of December, instead of the originally mandated date of the 1st of October. In Carolyn L. Huntoon's introductory letter I noticed an error in that she stated, at the top of page -iv-, that Congress requested the report "...in the FY 2000 National Defense Authorization Act..." The request wording appeared in a committee report and never made it into the actual Law.

34.14 34.15 – The Department issued the National Defense Authorization Act (NDAA) Report, entitled A Report to Congress on Long-term Stewardship, in January 2001 (DOE/EM-0563). The Report to Congress and the Study were prepared as separate documents because the required scope for each was different. The primary focus of the Report to Congress was site-specific requirements; the primary focus of the Study was common national issues. Nonetheless, the two reports are complementary to one another, and the public is encouraged to read both documents. The Report to Congress can be useful for certain common long-term stewardship analyses, such as evaluating long-term stewardship needs. Similarly, the Department has added a text box to Chapter 2 of the Study providing an overview of the overall scope of DOE's long-term stewardship responsibilities. The cost estimates from the Report to Congress have been incorporated into Section 8.1 of the Study. They were not in the Draft Study because the cost information in the Report to Congress was not final prior to publication of the Draft Study. The Department anticipates that life-cycle cost estimates will improve over time as DOE moves forward with planning and implementing long-term stewardship. For the Report to Congress, each site was strongly encouraged to work with local stakeholders during the preparation of site-specific cost estimates. The Study is not the appropriate document to respond to specific comments on the Report to Congress or on the public comment process used to develop the Report. The Department encourages members of the public to comment on their respective site's cost estimate through established public involvement mechanisms at each site. Copies of the Report to Congress were distributed to persons and organizations who received previous publications related to long-term stewardship. Please contact DOE if you require additional copies.

While reviewing the STGWG meeting notes, from the 28 March 2000 gathering, I noticed that some members felt that their opportunity to comment on the draft version of "Report to Congress - Long-Term Stewardship Report," was overly limited. I hope the LTS office considers publishing numerous additional copies of that report and sends it out to all the parties that have shown an interest in the "Long-Term Stewardship Study development process. Hopefully, we will receive complete copies, containing all volumes and appendixes soon after Congress receives their volumes.

In Appendix B, Page - B-5 -, Exhibit B-2. Scoping Comments, Box 1,
The third comment noted from the State Attorney General Office was
< Proposed that DOE dedicate part of each former DOE facility as a historic site or museum for long-term information management. >
The LTS response to that was "(Out of scope)" I feel that response is highly reflective of the limited focus which this LTSSD report was confined to. Perhaps such museums should not be encouraged since they are typically run with a particular bias. That bias is to put the site in the best possible light while neglecting to describe the horrendous environmental costs that may extend for hundreds of generations into the future. 34.16

When the final report is issued it should contain a notice, perhaps in an appendix dealing with the public comments, that states where the original received comments, on all aspects of the report development, can be viewed and copied. I highly encourage DOE/EM/LTS Office to prepare a similar sheet for the "Report to Congress - Long-Term Stewardship Report." Efforts should be made to form a document of all received public comments and to place copies of these in all of DOE's public reading rooms around the country. 34.17

I hope the Office of Long-Term Stewardship (EM-51) finds some of my comments useful and produces a final report that reflects a broader perspective than that which I found in the draft version.

Sincerely,

Vernon J. Brechin

Vernon J. Brechin
255 S. Rengstorff Ave. #49
Mountain View, CA 94040-1734
650-961-5123

34.16 – This comment is acknowledged in a text box in Section 7.2 of the Study. The Department agrees that museums may be a way to meet legal requirements to maintain an information repository and to provide knowledge about sites to communities during long-term stewardship. Museums already exist at certain DOE sites (e.g., Sandia National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, and the Hanford Site), although information management is not currently part of their mission. The advantages and disadvantages of establishing a museum need to be assessed on a site-specific basis, since museums are not appropriate for all sites. The establishment of an information repository is a separate mission but could be incorporated with the development of a museum, visitor's center, or library. The Department agrees with the specific comment that a discussion of museums is not "out of scope" and has included such a discussion in Section 7.2 of the Study. Any decision to establish a museum at a specific site would need to consider issues such as mission, location, and funding sources, but the Department has not developed a policy on this. This comment will be provided to the senior management Long-term Stewardship Executive Steering Committee for their consideration.

34.17 – The Department issued the National Defense Authorization Act (NDAA) Report, entitled A Report to Congress on Long-term Stewardship, in January 2001 (DOE/EM-0563). The Report to Congress and the Study were prepared as separate documents because the required scope for each was different. The primary focus of the Report to Congress was site-specific requirements; the primary focus of the Study was common national issues. Nonetheless, the two reports are complementary to one another, and the public is encouraged to read both documents. The Report to Congress can be useful for certain common long-term stewardship analyses, such as evaluating long-term stewardship needs. Similarly, the Department has added a text box to Chapter 2 of the Study providing an overview of the overall scope of DOE's long-term stewardship responsibilities. The cost estimates from the Report to Congress have been incorporated into Section 8.1 of the Study. They were not in the Draft Study because the cost information in the Report to Congress was not final prior to publication of the Draft Study. The Department anticipates that life-cycle cost estimates will improve over time as DOE moves forward with planning and implementing long-term stewardship. For the Report to Congress, each site was strongly encouraged to work with local stakeholders during the preparation of site-specific cost estimates. The Study is not the appropriate document to respond to specific comments on the Report to Congress or on the public comment process used to develop the Report. The Department encourages members of the public to comment on their respective site's cost estimate through established public involvement mechanisms at each site. The Comment-Response document (Volume II) of the Study contains a photocopy of all comment letters on the Draft Study along with DOE's responses and will be sent, along with Volume I, to all commenters.

Campbell, Kathleen

From: Girod, Brenda
Sent: Tuesday, December 19, 2000 9:43 AM
To: Campbell, Kathleen
Subject: FW: Stewardship study

more comments, and you may just want to fax these to Bob ?? or email??

-----Original Message-----
From: Steven Livingstone [mailto:Steven.Livingstone@EM.DOE.GOV]
Sent: Tuesday, December 19, 2000 8:56 AM
To: 'bgirod@icfconsulting.com'
Subject: FW: Stewardship study

-----Original Message-----
From: TurnerJ [mailto:janis_turner@snmail.lvjusd.k12.ca.us]
Sent: Friday, December 15, 2000 9:15 PM
To: Livingstone, Steven
Subject: Stewardship study

The highest prioprity should be placed on selecting remedies that protect the long-term safety & health of the community and of the environment surrounding the DOE facility. Whenever possible, the DOE facility should be cleaned up to a level that allows unrestricted use & avoids the need for long-term stewardship. Where clean up to such a level is not possible due to technological constraints, commitments must be inserted into the final decision documents detailing the stewardship plan & funding. 35.1 35.2

Where long-term stewardship becomes part of the plan, local communities should be involved in the remedy plan & funding for the stewardship activities must be adequate . 35.3

Janis Kate-Turner
749 Hazel St
Livermore, Ca 94550
janis_turner@snmail.lvjusd.k12.ca.us

35.1 – The Department acknowledges this comment in Section 5.3 of the Study. The Department agrees that the primary purpose of LTS is continued protection of human health and the environment. The Department agrees that in some cases, site-specific LTS plans may need to include provisions for distributing public health information to affected parties, and, where appropriate, plans for health monitoring. A new text box at the end of Chapter 2 of the Study discusses the importance of public health concerns during long-term stewardship. With respect to care and compensation, such decisions would need to be made on a case-by-case basis.

35.2 – The Department agrees that site-specific long-term stewardship planning and decision documents should clearly identify problems, remedial objectives, and long-term stewardship implications to the extent feasible. Section 3.2 of the Study has been revised to emphasize this point. The Department acknowledges this comment in a text box in Section 3.2 of the Study. Chapter 4 of the Study discusses DOE's current policy requiring sites to conduct long-term stewardship planning.

35.3 – The Department acknowledges this comment in a text box in Section 3.2 of the Study. Existing laws and regulations, especially the CERCLA process that is used for many site cleanups, require public involvement in the activities and decisions that lead to the selection of a remedy (ROD), including the technical and economic feasibility of cleanup to unrestricted use. However, these laws and regulations do not clearly articulate the role of public involvement in the activities and decisions that follow the ROD. At the same time, the Department recognizes that the ultimate success of long-term stewardship depends on the active involvement of the affected parties, including local governments and Tribes. It is important for all parties to develop a workable approach for meaningful public involvement in the decisions that affect and manage long-term stewardship activities. The Study identifies this as an additional key challenge associated with long-term stewardship. The Department's Long-term Stewardship Working Group recently identified public involvement as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. This issue includes how DOE should balance the need to involve the public in maintaining controls (e.g., institutional controls such as water use restrictions) with competing needs such as classified information or activities, particularly at sites with ongoing national security missions. The Department's Long-term Stewardship Working Group also has identified the issue of under what circumstances DOE should consider funding of external parties as one of the most important issues that should be addressed by the Executive Steering Committee. Although the general issue of public involvement has been identified to the Executive Steering Committee, specifics of implementation (e.g., what external organizations should be involved, what should be provided by DOE, what mechanisms for public involvement should be used) have not been discussed and may be determined on a site-specific basis. We intend for the public participation process to allow for meaningful Tribal and public involvement.

Dept of Energy -
Fernald Environmental
Mgmt. Project

DRAFT COMMENTS ON DOE LONG-TERM STEWARDSHIP STUDY – 12/12/00

1. Although the Long-term Stewardship Study was not intended to be a decision document, a timeline for the resolution of critical issues identified by this document is needed. Several DOE sites are expected to achieve closure by the middle part of the decade. Decisions must be made and actions taken, in the short term, if the DOE is to ensure a smooth transition to stewardship. For example, the Draft LTS Study discusses the transfer of lands owned or controlled by the DOE to another federal agency as one future disposition option (Page 7). Stakeholders are eager to have the future stewards identified and interface with these stewards begun prior to the end of remediation, to ensure that the future stewards understand site specific LTS issues and to provide opportunity for the LTS steward to contribute to the development of LTS plans. Will the Office of Long-Term Stewardship or another office within DOE-HQ take the lead role on discussions/negotiations related to the transfer of land to other federal agencies as part of their role in providing guidance and policy to the sites (Page 30)? Such negotiations need to be initiated in the short term. If not undertaken at a national level, should individual sites and/or field offices initiate discussions if transfer to another federal, state or local agency is perceived as a viable option? If discussions related to the transfer of land will be handled at the DOE-HQ level, what is the anticipated time frame for those types of discussions? 36.1 36.2 36.3

2. Related to the previous comment, should discussions at the site level and/or field office level regarding future site stewards include local universities and/or private institutions who may have an interest in LTS activities and/or future management of portions of an individual site? Again, guidance is required in the near future to ensure a smooth transition? 36.4

3. The study mentions that additional sites will be transferred to the Grand Junction Office (GJO) for LTS responsibilities (page 32). What is the timeframe for determining whether LTS will fall under the responsibility of GJO or some other organization? For sites with disposal facilities or residual contamination requiring environmental monitoring, it would seem appropriate and most economical that LTS be handled by some centralized function within DOE. Coordination with that organization should ideally have begun prior to the initiation of a monitoring program, hence prior to completion of disposal facility construction. At the Fernald Environmental Management Project monitoring of the disposal cell has been ongoing since the initiation of disposal facility construction, and completion of the first cell will be accomplished in 2001. As such, the identification of the LTS steward is essential. 36.5 36.6

4. Page 76 of the Draft LTS Study discusses the use of the information centers or displays at individual sites as part of the process of ensuring information related to LTS is available to the public. Additional information and guidance on the appropriate mechanisms for funding, long-term operation and maintenance of such a facility would be beneficial. 36.7

5. Editorial:
   - Add "NNSA" to the acronym list. 36.8
   - Page 22, Exhibit 3-4, Information Management, 2nd bullet – delete first "provide." 36.9

36.1 – The Department acknowledges this comment in a text box in Section 4.2.1 of the Study. As noted in Section 4.3 of the Study, it is current DOE policy that long-term stewardship responsibilities at sites with ongoing, non-EM missions will transfer to the site landlord organization when the EM cleanup mission is completed and several conditions are met. The Study in several sections notes existing guidance and guidance under development that address one or more aspects of long-term stewardship. In addition, the senior management Long-term Stewardship Executive Steering Committee has begun to develop a Strategic Plan for long-term stewardship. The Strategic Plan will be the basis for additional program planning documents, including any future policies, procedures, processes, mechanisms, and strategies. The Executive Steering Committee will provide recommendations for the resolution of specific issues, including paths forward and timetables, as appropriate. This comment will be forwarded to the Executive Steering Committee for their consideration.

36.2 – The Department acknowledges this comment in a text box in Section 6.2 of the Study. The Department agrees that there needs to be a smooth transition of long-term stewardship responsibilities.

36.3 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Department's Long-term Stewardship Working Group recently identified the need for a corporate vision for long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. The corporate vision includes the appropriate organizational structure for long-term stewardship within the Department. The Department also recognizes that it is important to define long-term stewardship roles and responsibilities both within DOE and between DOE and other entities, including other federal agencies, states, Tribes, and regional governments. The Executive Steering Committee is developing a Strategic Plan for long-term stewardship; part of that effort will include identifying roles and responsibilities within DOE. The commenters expressed varied opinions on the appropriate balance between federal vs. non-federal leadership, and between a strong central organization vs. independent field organizations. The Department notes that a balance that may work well for one site may not work well for other sites.

36.4 – The Department acknowledges this comment in a text box in Section 3.2 of the Study. Existing laws and regulations, especially the CERCLA process that is used for many site cleanups, require public involvement in the activities and decisions that lead to the selection of a remedy (ROD), including the technical and economic feasibility of cleanup to unrestricted use. However, these laws and regulations do not clearly articulate the role of public involvement in the activities and decisions that follow the ROD. At the same time, the Department recognizes that the ultimate success of long-term stewardship depends on the active involvement of the affected parties, including local governments and Tribes. It is important for all parties to develop a workable approach for meaningful public involvement in the decisions that affect and manage long-term stewardship activities. The Study identifies this as an additional key challenge associated with long-term stewardship. The Department's Long-term Stewardship Working Group recently identified public involvement as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. This issue includes how DOE should balance the need to involve the public in maintaining controls (e.g., institutional controls such as water use restrictions) with competing needs such as classified information or activities, particularly at sites with ongoing national security missions. The Department's Long-term Stewardship Working Group also has identified the issue of under what circumstances DOE should consider funding of external parties as one of the most important issues that should be addressed by the Executive Steering Committee. Although the general issue of public involvement has been identified to the Executive Steering Committee, specifics of implementation (e.g., what external organizations should be involved, what should be provided by DOE, what mechanisms for public involvement should be used) have not been discussed and may be determined on a site-specific basis. We intend for the public participation process to allow for meaningful Tribal and public involvement.

36.5 – This comment focuses on site-specific issues. Where these issues have identified general issues for long-term stewardship, the Department has attempted to communicate these issues in both the Draft and Final Study. This comment has been forwarded to the Department's long-term stewardship representatives at the appropriate sites; however, the long-term stewardship study is not the appropriate document for addressing site-specific issues.

36.6 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Department's Long-term Stewardship Working Group recently identified the need for a corporate vision for long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. The corporate vision includes the appropriate organizational structure for long-term stewardship within the Department. The Department also recognizes that it is important to define long-term stewardship roles and responsibilities both within DOE and between DOE and other entities, including other federal agencies, states, Tribes, and regional governments. The Executive Steering Committee is developing a Strategic Plan for long-term stewardship; part of that effort will include identifying roles and responsibilities within DOE. The Department also notes that long-term stewardship as an issue is broader than DOE sites. For example, states and local governments already have long-term stewardship responsibilities at municipal landfills, and states will have long-term stewardship responsibility for "Superfund-lead" sites on the CERCLA NPL. Implementation of long-term stewardship across this broad spectrum of sites will require states to develop their own, independent capability to provide long-term stewardship.

36.7 – The Department acknowledges this comment in a text box in Section 8.2 of the Study. As noted in Section 8.2 of the Study, developing an alternative funding mechanism will require additional study and eventually Congressional action. Section 8.2 of the Study also provides a summary of the recent study of Trust Funds by Resources for the Future. The Department's Long-term Stewardship Working Group recently identified funding of long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. Specific funding issues identified by the Working Group included: (1) difficulties in determining long-term stewardship costs now and in the future because there is no consistent procedure for how long-term stewardship activities are budgeted for and reported among DOE sites; (2) whether the annual appropriations process is the most effective mechanism for funding long-term stewardship activities that may be needed for decades or centuries; and (3) circumstances under which DOE should consider funding external parties (e.g., local governments) to conduct long-term stewardship activities or oversight. This comment will be forwarded to the Executive Steering Committee for their consideration. In addition, any decision to establish an information center at a specific site would need to consider issues such as mission, location, and funding sources, but the Department has not developed a policy on this.

36.8 – The text has been altered to include this comment.

36.9 – The text has been altered to reflect this comment.

December 15, 2000

Steven Livingstone
Project Manager
U.S. Department of Energy
P.O. Box 45079
Washington, D.C. 20026-5079

Subject: Comments on Draft Long-Term Stewardship Study, October 2000

Dear Mr. Livingstone:

A draft Long-Term Stewardship Study dated October 2000 has been made available for public comment.

Envirocare of Utah, Inc., (Envirocare) is the nation's premier mixed (radioactive and hazardous) waste treatment, storage, and disposal facility, located near Clive, Utah. Envirocare holds licenses and permits from the State of Utah, the U.S. Nuclear Regulatory Commission, and the U.S. Environmental Protection Agency and assists the U.S. Department of Energy (DOE) and other government and private organizations in the treatment and disposal of radioactive wastes and materials.

Envirocare hereby submits the following comments on the Draft Long-Term Stewardship Study:

1. *Where waste management involves on-site disposal, stewardship of radioactive materials should include segregation and location controls within the disposal cell. Wastes that are not segregated by waste type or regulatory class cannot subsequently be retrieved or remediated as effectively as wastes that are segregated throughout their life cycle. DOE should ensure that material management preserves future management options long term, including disposal management.* 37.1

2. *DOE's Long-Term Stewardship Study should assess long-term liabilities of the development of new low-level radioactive waste disposal facilities at Oak Ridge and INEEL against the cost of using existing commercial and government disposal facilities.* 37.2

3. *DOE's Long-Term Stewardship Study appears to overlook radioactive materials that are removed from sites being cleaned up (e.g., FUSRAP waste sent to unlicensed disposal facilities). Radioactive materials disposed at facilities which are not regulated under the Atomic Energy Act may create liability and long-term liability and long-term challenges for DOE, i.e., Section 11e.(2) material. Such facilities should be considered part of DOE's long-term stewardship program.* 37.3

4. *The Report to Congress was scheduled to be issued in October 2000. However, it does not appear to be publicly available for use in reviewing and evaluating the Draft Long-Term Stewardship Study. Review of the Draft Long-Term Stewardship Study would benefit from a concurrent review of the Report to Congress.* 37.4

5. *The draft study suggests that cleanup can be done in varying degrees. In order to ensure that long-term stewardship does not become a substitute for cleanup, long-term stewardship plans should include optional levels of cleanup and their associated impacts, including economic impacts. The costs of long-term storage and different levels of cleanup should be evaluated. DOE's objective regarding cost-effective long-term stewardship should be to minimize the overall physical "footprint" of each site hence reducing the overall cost for long-term stewardship.* 37.5 37.6

Should you have any questions about these comments, please contact Jay Vance at (801) 532-1330.

37.1 – The Department believes this comment is outside the scope of the Study because it addresses implementation and best practices for waste management in preparation for site closure.

37.2 – This comment focuses on site-specific issues. Where these issues have identified general issues for long-term stewardship, the Department has attempted to communicate these issues in both the Draft and Final Study. This comment has been forwarded to the Department's long-term stewardship representatives at the appropriate sites; however, the long-term stewardship study is not the appropriate document for addressing site-specific issues.

37.3 – The Department acknowledges this comment in a text box in Section 6.2 of the Study. The Study notes in several places that long-term stewardship will be required at waste disposal sites. The requirements that apply to a given disposal unit do not depend upon whether the waste disposed in the site came from the same or another geographic site. All of the Department's waste disposal activities are conducted in compliance with applicable laws and regulations.

37.4 – The Department issued the National Defense Authorization Act (NDAA) Report, entitled A Report to Congress on Long-term Stewardship, in January 2001 (DOE/EM-0563). The Report to Congress and the Study were prepared as separate documents because the required scope for each was different. The primary focus of the Report to Congress was site-specific requirements; the primary focus of the Study was common national issues. Nonetheless, the two reports are complementary to one another, and the public is encouraged to read both documents. The Report to Congress can be useful for certain common long-term stewardship analyses, such as evaluating long-term stewardship needs. Similarly, the Department has added a text box to Chapter 2 of the Study providing an overview of the overall scope of DOE's long-term stewardship responsibilities. The cost estimates from the Report to Congress have been incorporated into Section 8.1 of the Study. They were not in the Draft Study because the cost information in the Report to Congress was not final prior to publication of the Draft Study. The Department anticipates that life-cycle cost estimates will improve over time as DOE moves forward with planning and implementing long-term stewardship. For the Report to Congress, each site was strongly encouraged to work with local stakeholders during the preparation of site-specific cost estimates. The Study is not the appropriate document to respond to specific comments on the Report to Congress or on the public comment process used to develop the Report. The Department encourages members of the public to comment on their respective site's cost estimate through established public involvement mechanisms at each site.

37.5 – As noted in Section 4.2.2 of the Study, Site-specific long-term stewardship plans are required by law for uranium mill tailings sites and must be approved by the Nuclear Regulatory Commission. The Department also requests the development of a site-specific long-term stewardship plan before accepting long-term stewardship responsibilities for any site. As the EM mission at a site is completed, current plans call for the EM program and the site landlord (if different from EM) to develop a long-term stewardship baseline for each site. The baseline will describe the scope of applicable long-term stewardship requirements, the technical activities and the projected schedule to meet these requirements, and expected costs.

37.6 – The Department agrees that strategies for reducing long-term stewardship costs should be pursued to the extent feasible. However, DOE has not established specific policies or identified specific strategies for accomplishing this, and the Study is not the appropriate place to do so. The Department has acknowledged this comment in a text box in Section 3.2 of the Study.

Campbell, Kathleen

From: Girod, Brenda
Sent: Tuesday, December 19, 2000 10:05 AM
To: Campbell, Kathleen
Subject: FW: Comments to L.T.Stewardship

-----Original Message-----
From: Steven Livingstone [mailto:Steven.Livingstone@EM.DOE.GOV]
Sent: Tuesday, December 19, 2000 9:58 AM
To: 'bgirod@icfconsulting.com'
Subject: FW: Comments to L.T.Stewardship

-----Original Message-----
From: Roman Kohler [mailto:rkohle29@idt.net]
Sent: Friday, December 15, 2000 6:41 PM
To: Livingstone, Steven
Subject: Comments to L.T.Stewardship

Mr. Steven Livingstone
Project Manager
Office of Long Term Stewardship
U.S. Department of Energy

Comments to the Long Term Stewardship Study Draft Document.

These comments are in support of a Cold War Museum, Library and/or research center located in proximity of the Rocky Flats Plant in Golden Colorado. 38.1

The DOE Long Term Stewardship Study recommends that DOE implement stewardship in a manor to protect and provide access to cultural resources.
One manor to carry out that objective may be to fund a Cold War historical exhibit at a facility in proximity of the Rocky Flats Plant in Golden Colorado.
That facility may also house real time environmental data collection of land, air and water quality as required in the Rocky Flats Clean Up Agreement and various CDPHE and EPA regulations.
A facility that houses historical data of the materials used at the Rocky Flats plant, the chemicals and by products used during the production era will provide a one stop shopping location for environmental agencies, health professionals, neighbors, and students from local instructional institutions to review how regulations such as RCRA, CRCLA were employed at the Rocky Flats Plant. The real time data collection will insure that regulations are being met to provide safety to the neighboring communities.
The facility which may be a museum, library, and/or research center will provide the long term stewardship requirements causing future generation to have adequate information from which to make future decision about management of the property that was contaminated and must be controlled in perpetuity until evaluated as suitable and safe for unrestricted use or when surveillance and maintenance of the property is no longer required.
Long term funding of a facility could come from a trust fund established by DOE. Examples of trust funds are included in Exhibit 8-4 of the Draft Long Term Stewardship document.

The proposed facility also fulfills the public need for open access to information about residual hazards at the site. Continued protection of human health and the environment will be satisfied.

38.1 – This comment is acknowledged in a text box in Section 7.2 of the Study. The Department agrees that museums may be a way to meet legal requirements to maintain an information repository and to provide knowledge about sites to communities during long-term stewardship. Museums already exist at certain DOE sites (e.g., Sandia National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, and the Hanford Site), although information management is not currently part of their mission. The advantages and disadvantages of establishing a museum need to be assessed on a site-specific basis, since museums are not appropriate for all sites. The establishment of an information repository is a separate mission but could be incorporated with the development of a museum, visitor's center, or library. The Department agrees with the specific comment that a discussion of museums is not "out of scope" and has included such a discussion in Section 7.2 of the Study. Any decision to establish a museum at a specific site would need to consider issues such as mission, location, and funding sources, but the Department has not developed a policy on this. This comment will be provided to the senior management Long-term Stewardship Executive Steering Committee for their consideration.

Comments from:
Roman Kohler
Board member
Rocky Flats Homesteaders (an organization of Rocky Flats retirees)

Roman Kohler
9295 W. 90th Circle
Westminster, CO 80021-4413
(303)420-7442
rkohle29@idt.net

Campbell, Kathleen

From: Girod, Brenda
Sent: Tuesday, December 19, 2000 9:57 AM
To: Campbell, Kathleen
Subject: FW: Comments to Long-Term Stewardship Study (Draft)

-----Original Message-----
From: Steven Livingstone [mailto:Steven.Livingstone@EM.DOE.GOV]
Sent: Tuesday, December 19, 2000 9:48 AM
To: 'bgirod@icfconsulting.com'
Subject: FW: Comments to Long-Term Stewardship Study (Draft)

-----Original Message-----
From: H_B_Boyd_Hathaway@RL.gov [mailto:H_B_Boyd_Hathaway@RL.gov]
Sent: Friday, December 15, 2000 6:06 PM
To: Livingstone, Steven
Cc: H_B_Boyd_Hathaway@rl.gov
Subject: Comments to Long-Term Stewardship Study (Draft)

General Comment

The long-term stewardship (LTS) definition is to narrow. It's more than just cleanup mission. LTS should include management activities for natural and man features. You have to understand what you have today, how to manage your assets and control what the future hold. Therefore LTS includes the past, present and future resources and activities. A broader definition of LTS was eluded to on page 27, Box, first paragraph, and Page 96, first paragraph. LTS should exist outside and after cleanup. DOE is still responsible for the resources which is driven by laws outside of cleanup (see exhibits 9-2 and 9-3). 39.1

Page 7, Section 2.4, second bullet, Land can also be used by other agencies in DOI, such as the Fish and Wildlife Services (e.g., Hanford Reach National Monument) 39.2

Page 38, Section 4.3, DOE needs to establish a new DOE program office specifically for LTS (DOE LTS Program Office). 39.3

Page 45, Exhibit 5-3, back to the definition of LTS. "Operation" is part of LTS. LTS does not begin with active cleanup. It includes resource management of natural and man made features. As presented in Exhibit 5-3, it is currently a part of the LTS, but certainly not all exclusive element of LTS. 39.4

Page 67, "Planning Restrictions, Traditional Land Use Restrictions and Zoning Restrictions," The federal government needs a land use planning act (enabling act like states have) that set guidelines for comprehensive planning and zoning. It needs to align with county and municipal approach of state and local governments where DOE sites exist. It needs to enable the federal government to impose and enforce land use restrictions (like a zoning ordinance). This process is a process the state and local governments understand and would provide a better interface with the government. An example, is HUD requiring states to have comprehensive land use plans and zoning ordinances in order to receive matching funds from the government for housing. On page 107, it discusses centralized institution, this proposed act would help in that direction. I will add that LTS should focus on day-to-day activity, such as site selection, to control use and activities, and therefore shape what LTS will be in the future. 39.5 39.6

If you have questions, please give me a call.

39.1 – The Department acknowledges this comment in a text box in Section 2.1 of the Study. The Department notes that the definition of long-term stewardship used in the Study is that which is stated explicitly in the Settlement Agreement. The Department agrees that long-term stewardship at some sites may include activities such as resource management and discusses these concepts, for example, in a new text box in Chapter 2 and in Section 9.1 of the Study. The Department also agrees that coordinated management of resources on adjacent federal and non-federal lands may be appropriate at some sites and has modified the text in Sections 6.1.3 and 9.1 of the Study to note that point. The Department's Long-term Stewardship Working Group recently identified the issue of whether the scope of long-term stewardship includes only compliance activities or also includes other activities associated with the management of DOE lands as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee.

39.2 – The Department acknowledges this comment in a text box in Section 6.2 of the Study. The Department recognizes that long-term stewardship responsibility eventually may be vested in any number of federal or non-federal entities. The Department will address these issues during site-specific long-term stewardship planning processes. The Department has added language to Section 6.2 of the Study to address some of the potential complications associated with a transfer of LTS responsibility to other federal agencies.

39.3 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Department's Long-term Stewardship Working Group recently identified the need for a corporate vision for long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. The corporate vision includes the appropriate organizational structure for long-term stewardship within the Department. The Department also recognizes that it is important to define long-term stewardship roles and responsibilities both within DOE and between DOE and other entities, including other federal agencies, states, Tribes, and regional governments. The Executive Steering Committee is developing a Strategic Plan for long-term stewardship; part of that effort will include identifying roles and responsibilities within DOE. The Department also notes that long-term stewardship as an issue is broader than DOE sites. For example, states and local governments already have long-term stewardship responsibilities at municipal landfills, and states will have long-term stewardship responsibility for "Superfund-lead" sites on the CERCLA NPL. Implementation of long-term stewardship across this broad spectrum of sites will require states to develop their own, independent capability to provide long-term stewardship.

39.4 – See response to Comment 39.1.

39.5 – As noted in Section 4.2.2 of the Study, Site-specific long-term stewardship plans are required by law for uranium mill tailings sites and must be approved by the Nuclear Regulatory Commission. The Department also requests the development of a site-specific long-term stewardship plan before accepting long-term stewardship responsibilities for any site. As the EM mission at a site is completed, current plans call for the EM program and the site landlord (if different from EM) to develop a long-term stewardship baseline for each site. The baseline will describe the scope of applicable long-term stewardship requirements, the technical activities and the projected schedule to meet these requirements, and expected costs.

39.6 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Department's Long-term Stewardship Working Group recently identified the need for a corporate vision for long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. The corporate vision includes the appropriate organizational structure for long-term stewardship within the Department. The Department also recognizes that it is important to define long-term stewardship roles and responsibilities both within DOE and between DOE and other entities, including other federal agencies, states, Tribes, and regional governments. The Executive Steering Committee is developing a Strategic Plan for long-term stewardship; part of that effort will include identifying roles and responsibilities within DOE. The commenters expressed varied opinions on the appropriate balance between federal vs. non-federal leadership, and between a strong central organization vs. independent field organizations. The Department notes that a balance that may work well for one site may not work well for other sites.

H. Boyd Hathaway
Hanford Site
DynCopr Tri-Cities Services, Inc.
Real Estate and Site Planning
509-376-7340

KEN SALAZAR
Attorney General

CHRISTINE M. ARGUELLO
Chief Deputy Attorney General

ALAN J. GILBERT
Solicitor General

STATE OF COLORADO
DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

STATE SERVICES BUILDING
1525 Sherman Street - 5th Floor
Denver, Colorado 80203
Phone (303) 866-4500
FAX (303) 866-5691

December 15, 2000

Steven Livingstone, Project Manager
U.S. Department of Energy
P.O. Box 45079

RE: Comments on Draft Long-Term Stewardship

Dear Mr. Livingstone:

Congratulations to DOE on a comprehensive, well thought out and nicely presented draft report on the intractable issue of long-term stewardship. Both the substance and the format are commendable. In particular, the express incorporation of and response to public input is unique in my experience. I have a few comments which I have included below. 40.1

1. The considerations and complexities identified in this Report, I believe, argue strongly for a centralized entity to step back and take the long view, interact with national interest groups, act as clearing house of ideas, and provide leadership, guidance and priority for the effort. Long-term stewardship should be the sole mission of such an entity. Policy, direction and research provided by this entity should then be implemented on a site-by-site basis. In addition, this entity should be involved upfront in the design of new programs and facilities to help the relevant agencies appreciate the costs and complexities associated with long-term stewardship, and plan to prevent or at least minimize such societal costs. The entity would also be in an excellent position to identify research and development needs that could be addressed in support of this function. 40.2
2. The Draft Report does an admirable job of identifying large issues and making some recommendations. It does not identify specific approaches that will satisfy the needs outlined. This will undoubtedly be an iterative process, building upon experiences that succeed or fail. On page 73, however, the Report states that "DOE has begun to catalogue and report the types of long-term stewardship activities that are to be conducted at its sites in a standardized way. However, the methodology and resulting data apply only to that unique report." It is not clear why such information could not be included in this Report. It would certainly be of interest to the public, states and site managers. 40.3
3. The Report discusses estimated costs associated with long-term stewardship activities. It is not clear from the text whether costs to states and local governments, which are likely to assume much of this responsibility were included, and whether such entities were consulted on their perceived needs. 40.4

40.1 – The Department appreciates this comment. Thank you.

40.2 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Department's Long-term Stewardship Working Group recently identified the need for a corporate vision for long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. The corporate vision includes the appropriate organizational structure for long-term stewardship within the Department. The Department also recognizes that it is important to define long-term stewardship roles and responsibilities both within DOE and between DOE and other entities, including other federal agencies, states, Tribes, and regional governments. The Executive Steering Committee is developing a Strategic Plan for long-term stewardship; part of that effort will include identifying roles and responsibilities within DOE. The Department also notes that long-term stewardship as an issue is broader than DOE sites. For example, states and local governments already have long-term stewardship responsibilities at municipal landfills, and states will have long-term stewardship responsibility for "Superfund-lead" sites on the CERCLA NPL. Implementation of long-term stewardship across this broad spectrum of sites will require states to develop their own, independent capability to provide long-term stewardship.

40.3 – This sentence was deleted from the Study.

40.4 – The Department acknowledges this comment in a text box in Section 8.1 of the Study. The Department agrees that more information is needed on the scope of future long-term stewardship activities and better life-cycle cost estimates are needed. The Study incorporates the cost estimates from the Report to Congress on Long-term Stewardship and discusses the basis for these estimates. Accurate cost estimates are critical for long-term stewardship, particularly for ensuring accountability for the technical scope of the program. The Report to Congress on Long-term Stewardship is only the first step in developing the necessary cost figures. The Department's Long-term Stewardship Working Group recently identified funding of long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. Specific funding issues identified by the Working Group included difficulties in determining long-term stewardship costs now and in the future because there is no consistent procedure for how long-term stewardship activities are budgeted for and reported among DOE sites. This comment will be forwarded to the Executive Steering Committee for their consideration. The Report to Congress on Long-term Stewardship did not include costs to state and local governments.

4. In its discussion on rolling stewardship, the Report appears to suggest that DOE should manage hazards for the near future "rather than trying to manage hazards for centuries or millennia." Our ability to foretell what mechanisms would be effective or even necessary to protect human health and the environment from these hazardous materials centuries from now is obviously extremely limited; however, the best approach, I believe, is to take our best shot now. Thus, we should utilize the internet to make site information available, but we should also explore measures like universal symbols of hazard, granite markers and the library being established by the Clock of the Long Now group to hedge our bets. Guidelines from the National Academy of Public Administration referenced in the Report can be consulted in balancing costs to the current generations against risks and benefits to future generations, but creativity must be actively encouraged.
5. Although the Report does an outstanding job of crediting public input and responding to comments in general, it does not clearly explain why DOE considered some comments to be "out of scope." It appears that some of the comments suggest concepts and options directly related to ideas that are discussed in the Report. I would recommend that these rejected comments be reconsidered. If DOE remains convinced that they are indeed beyond the scope, it should provide some explanation, or objective criteria for how it has made that determination.

Thank you for the opportunity to comment on this worthwhile effort and good luck in finalizing the Report.

Sincerely,

VICTORIA L. PETERS
Senior Assistant Attorney General
Natural Resources and Environment Section
(303) 866-5068
(303) 866-3558 (FAX)
EMAIL: Vicky.Peters@state.co.us

40.5

40.5 – The Department acknowledges this comment in Section 7.2 of the Study. The Department has begun a process to more clearly identify and develop a consensus on long-term stewardship information needs and develop guidance for long-term stewardship information and records management. Some information management guidance will be included in the guidance for site-specific long-term stewardship plans currently under development by the Department. This comment will be considered in these efforts.

40.6

40.6 – Scoping comments considered "out of scope" for the Draft Study addressed site-specific topics or topics unrelated to long-term stewardship. Exhibit B-2 of the Final Study provides a summary of scoping comments. All comments considered out of scope include a brief explanation as to why the Department considered the comment out of scope.

Campbell, Kathleen

From: Girod, Brenda
Sent: Tuesday, December 19, 2000 10:09 AM
To: Campbell, Kathleen
Subject: FW: LTSM Stewardship Study Draft Oct 2000

-----Original Message-----
From: Steven Livingstone [mailto:Steven.Livingstone@EM.DOE.GOV]
Sent: Tuesday, December 19, 2000 10:01 AM
To: 'bgirod@icfconsulting.com'
Subject: FW: LTSM Stewardship Study Draft Oct 2000

-----Original Message-----
From: Tim Michael [mailto:tim_michael@nmenv.state.nm.us]
Sent: Monday, December 18, 2000 9:36 AM
To: Livingstone, Steven
Cc: john_parker@nmenv.state.nm.us; barbara_hoditschek@nmenv.state.nm.us
Subject: LTSM Stewardship Study Draft Oct 2000

12/14/00
LONG-TERM STEWARDSHIP STUDY DRAFT review comments
Lance Voss New Mexico Environment Department - DOE Oversight Bureau

I have reviewed the subject document and generally find it to be a well organized, useful guidance or reference source for a stewardship program, similar to various other DOE or Federal documents on the subject. 41.1

General comment:

How do DOE HQ or area offices plan to reconcile the past and on-going ER site decisions which are/have been made without taking into account the public input, cost, difficulty, and uncertainty of long term stewardship before selecting and implementing a remedial activity??? DOE has dropped the ball on stewardship planning and appears to be in no real hurry to pick it up. 41.2 The Department immediately needs to integrate future land use decisions, assured funding mechanisms, and identified "steward" participation into all current EM projects. The Department should also take the initiative to assist state and local government agencies in developing the legislation required for the maintenance of stewardship. 41.3 There is a need for consistency and implementation of stewardship at the field level, which is lacking due to field office autonomy and shifting priorities.

Field level development and implementation of stewardship is essential!!

Specific comments:

Page ii, fifth bullet. Pollution prevention related to 'new missions" should be addressed under NEPA. This discussion is not on point for this document. 41.4

Page iii, bullet six. The Project Baseline Summary discussion should be expanded or referenced to provide information on organization structure, current baseline planning window, and DOE Land Use assumptions, which underlie the project. DOE needs define future land use plans for every custody facility. 41.5

Section 2.5, page 8. "It may be difficult for people to accept restrictions on land and resource use unless they fully understand why such restrictions are necessary". This is an important realization, which emphasizes the need for integrated stewardship and land use planning with 41.6

41.1 – The Department appreciates this comment. Thank you.

41.2 – Long-term stewardship planning (see Chapter 4 of the Study) and remedy selection decisions are done on a site-specific basis with input from regulators, stakeholders, and the public. As noted in Exhibit 3-1 of the Study, the criteria used to evaluate remedial alternatives include long-term effectiveness and cost-effectiveness. The long-term effectiveness of institutional controls is one of the criteria for evaluating long-term stewardship requirements during remedy selection that have been suggested in guidance developed by DOE, EPA, and the Department of Defense (DoD) and in recommendations forwarded to the Department (see Exhibits 3-2 and 3-3 in the Study). The Department also has identified the need to promote new science and technology development to help address the uncertainties associated with maintenance of institutional and engineered controls. The Department acknowledges the public concerns about long-term effectiveness in a text box in Section 3.2 of the Study. The issue of uniform or national standards for cleanup is beyond the scope of this Study because this document focuses on long-term stewardship. In addition, the periodic assessments of the remedy required by law provide an opportunity to assure the continued effectiveness of past remedial decisions.

41.3 – The Department acknowledges these comments in a text box in Section 4.1 of the Final Study. The specific mechanisms available for oversight and enforcement of long-term stewardship vary according to the applicable regulatory regime(s) and state laws on a site-specific basis. The Department has not developed a policy on potential alternative regulatory regimes at specific sites. These comments will be provided to the senior management Long-term Stewardship Executive Steering Committee for their consideration.

41.4 – This comment is acknowledged in a text box in Section 6.1.3 of the Study. The Department agrees that the language used in the Draft Study did not adequately communicate the distinction between "pollution prevention" in the traditional sense and as applied to long-term stewardship. The Department has revised Section 6.1.3 of the Study to indicate the importance of both pollution prevention principles and the concept of Environmental Management Systems to help minimize the future long-term stewardship consequences of current mission activities. The Department also has added a footnote in Section 6.1.3 to clarify use of the term "pollution prevention.". Pollution prevention is incorporated into the design of all new DOE facilities. Review of pollution prevention options and related impacts would be evaluated in any NEPA document looking at these new facilities.

41.5 – As noted in Section 4.2.2 of the Study, site-specific long-term stewardship plans are required by law for uranium mill tailings sites and must be approved by the Nuclear Regulatory Commission. The Department also requests the development of a site-specific long-term stewardship plan before accepting long-term stewardship responsibilities for any site. As the EM mission at a site is completed, current plans call for the EM program and the site landlord (if different from EM) to develop a long-term stewardship baseline for each site. The baseline will describe the scope of applicable long-term stewardship requirements, the technical activities and the projected schedule to meet these requirements, and expected costs. The Department acknowledges these comments in a text box in Section 4.2 of the Final Study and will consider the recommendations they provide in developing the guidance that will specify the format and content for site-specific long-term stewardship plans.

the ER site characterization and risk assessment process. As a result of DOE's failure to do so, many "closed" sites may have to be revisited or and many site "remediations" may prove to have been unnecessary. DOE should also evaluate the need for greater technical consistency as well as appropriate "scope and scale" of risk assessments performed throughout the complex which will be decision documents tied to stewardship. 41.6

Page 47, the concept of layering and redundancy in all aspects of the stewardship can not be overstated in this document or process. 41.7

Page 52, the need for effective Conceptual Site Models is critical to all EM projects including stewardship. They are particularly important for the presentation of sites for public consideration and comment. It is suggested that the document be revised to include the use of "cartoon" style conceptual models in addition to the pathway flow diagram presented. This would provide a better graphical simulation of site conditions, concerns, and pathways, etc. for both characterization and assessment planning as well as public understanding of site conditions and status. 41.8

Page 64, the bullet regarding the nature and extent of residual contamination and other site hazards emphasizes the need for technically sound, defensible RFI reports and decision-making. The lack of integrated stewardship planning in past N&E determination and decision-making will complicate site programs. Addressing this problem should be a priority. 41.9

Page 30, the capabilities and functions of the Office of Long-term Stewardship should be expanded to the level necessary to support stewardship development and management. It should act as a center for information to support technically adequate and consistent stewardship programs. 41.10

Tim Michael, NMED DOE Oversight Bureau, Phone (505)827-1536

41.6 – See response to Comment 41.5.

41.7 – The Department acknowledges this comment in Section 5.3 of the Study. The Department believes that Section 5.3 of the Study appropriately discusses the difficulties and challenges associated with ensuring the long-term maintenance of institutional controls, including roles and responsibilities for enforcement. The determination of the type of institutional controls and enforcement of these controls (e.g., by DOE or external parties) will be determined on a site-specific basis as part of remedy selection and long-term stewardship planning and may change over time.

41.8 – As noted in Section 4.2.2 of the Study, site-specific long-term stewardship plans are required by law for uranium mill tailings sites and must be approved by the Nuclear Regulatory Commission. The Department also requests the development of a site-specific long-term stewardship plan before accepting long-term stewardship responsibilities for any site. As the EM mission at a site is completed, current plans call for the EM program and the site landlord (if different from EM) to develop a long-term stewardship baseline for each site. The baseline will describe the scope of applicable long-term stewardship requirements, the technical activities and the projected schedule to meet these requirements, and expected costs. The Department acknowledges these comments in a text box in Section 4.2 of the Final Study and will consider the recommendations they provide in developing the guidance that will specify the format and content for site-specific long-term stewardship plans. In addition, the specific example provided in the Study was not meant to imply that other styles or formats for conceptual site models were not effective.

41.9 – See response to Comment 41.5.

41.10 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Department's Long-term Stewardship Working Group recently identified the need for a corporate vision for long-term stewardship as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. The corporate vision includes the appropriate organizational structure for long-term stewardship within the Department. The Department also recognizes that it is important to define long-term stewardship roles and responsibilities both within DOE and between DOE and other entities, including other federal agencies, states, Tribes, and regional governments. The Executive Steering Committee is developing a Strategic Plan for long-term stewardship; part of that effort will include identifying roles and responsibilities within DOE. The Department also notes that long-term stewardship as an issue is broader than DOE sites. For example, states and local governments already have long-term stewardship responsibilities at municipal landfills, and states will have long-term stewardship responsibility for "Superfund-lead" sites on the CERCLA NPL. Implementation of long-term stewardship across this broad spectrum of sites will require states to develop their own, independent capability to provide long-term

Campbell, Kathleen

From: Girod, Brenda
Sent: Tuesday, December 19, 2000 1:46 PM
To: Campbell, Kathleen
Subject: FW: Late comments

ATTACHMENT.TXT

-----Original Message-----
From: Steven Livingstone [mailto:Steven.Livingstone@EM.DOE.GOV]
Sent: Tuesday, December 19, 2000 1:11 PM
To: 'bgirod@icfconsulting.com'
Subject: FW: Late comments

-----Original Message-----
From: Carol Lyons [mailto:CLYONS@ci.arvada.co.us]
Sent: Tuesday, December 19, 2000 12:10 PM
To: Livingstone, Steven
Cc: TaylorBC@stripe.Colorado.edu; Sullivan, Greg
Subject: Late comments

December 19, 2000

Hi Steve,

Due to an inexcusable lapse in my brain functions, I overlooked comments provided by Dr. Bryan Taylor to be included in our Rocky Flats History Group comments. I wonder if it would be hopelessly late to submit these comments. Dr. Taylor is a professor in the Department of Communications at the University of Colorado (Boulder) AND a member of the Rocky Flats Citizens Advisory Board. His contact information is:

Phone: 303-492-8738
Address: Dept. of Communication, CB270
University of Colorado
Boulder, CO 80309-0270

My apologies. I hope it's not too late. Thanks again for all your help:
Carol.

COMMENTS FROM BRYAN TAYLOR:

1) It is imperative that the cultural history of Rocky Flats (RF) be preserved and centralized in order to maintain cultural memory of the site's mission and the urgency of effective LTS. Additionally, a centralized site such as a museum would serve an important function of educating and recruiting future stewards, who will likely not encounter the history of RF except through deliberate institutionalized educational programs such as K-12 curricula. In the absence of this socialization and other reminders, the cultural imperative for LTS will disintegrate, with potentially devastating consequences for the health and safety of area residents. 42.1 42.2

2) Ideally, a RF museum or visitor's center could and should be integrated with environmental education programming associated with potential preserves and refuges created at the site. In the absence of one, the other will be less meaningful and effective for visitors. 42.3

3) Potentially, an RF museum serves an important institutional control function as a centralized site for document storage and retrieval. A single, integrated, multi-functional (and redundantly-authorized / funded) site has a better chance of surviving the ravages of time than dispersed institutional sites. In this way, the institution could serve multiple stakeholders (visitors, local governments, regulators, area residents, developers, historians and scholars, etc.) simultaneously. 42.4

42.1 – This comment is acknowledged in a text box in Section 7.2 of the Study. The Department agrees that museums may be a way to meet legal requirements to maintain an information repository and to provide knowledge about sites to communities during long-term stewardship. Museums already exist at certain DOE sites (e.g., Sandia National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, and the Hanford Site), although information management is not currently part of their mission. The advantages and disadvantages of establishing a museum need to be assessed on a site-specific basis, since museums are not appropriate for all sites. The establishment of an information repository is a separate mission but could be incorporated with the development of a museum, visitor's center, or library. The Department agrees with the specific comment that a discussion of museums is not "out of scope" and has included such a discussion in Section 7.2 of the Study. Any decision to establish a museum at a specific site would need to consider issues such as mission, location, and funding sources, but the Department has not developed a policy on this. This comment will be provided to the senior management Long-term Stewardship Executive Steering Committee for their consideration.

42.2 – See response to Comment 42.1.

42.3 – See response to Comment 42.1.

42.4 -- See response to Comment 42.1.