Campbell, Kathleen

From: Girod, Brenda
Sent: Monday, December 18, 2000 1:52 PM
To: Campbell, Kathleen
Subject: FW: PEIS LTS draft study

-----Original Message-----
From: Steven Livingstone [mailto:Steven.Livingstone@EM.DOE.GOV]
Sent: Friday, December 15, 2000 3:56 PM
To: 'bgirod@jctconsulting.com'
Subject: FW: PEIS LTS draft study

-----Original Message-----
From: Stephen Dycus [mailto:SDYCUS@vermontlaw.edu]
Sent: Friday, December 15, 2000 9:29 AM
To: Livingstone, Steven
Cc: jasapple@indiana.edu
Subject: PEIS LTS draft study

TO: Steven Livingstone, Project Manager

FROM: Stephen Dycus

DATE: December 14, 2000

RE: Draft Long-Term Stewardship Study

The October 2000 draft Long-Term Stewardship Study, prepared by DOE pursuant to the settlement agreement in Natural Resources Defense Council v. Richardson, is a marvelous, uniquely valuable survey of issues and current planning for long-stewardship of the nuclear weapons complex. It provides a good picture of work to date on this subject and lays a foundation for future efforts. The following comments suggest minor refinements. 12.1

The study should place even greater stress on the importance of ensuring that DOE sites already closed or currently undergoing cleanup develop the same kinds of long-term stewardship plans that will be adopted for new sites. See p. 16. That is what existing law requires. 12.2

Even though it may be "difficult to estimate life-cycle costs" in monetary terms (p. 19), non-monetary costs (such as risks to public health) and uncertainties must be clearly articulated in the process of selecting cleanup strategies. 12.3

On page 29, you note the assumption of continuing responsibility for long-term stewardship at various sites by different DOE offices. But this national concern with broad intergenerational consequences demands unified management by a single office accountable to all the people. Delegation to several offices is also bound to be inefficient. 12.4

In the middle of page 43, you say, "Permits do not affect property rights." This sentence is inaccurate and should be deleted. 12.5

Don't RCRA and the 1990 Pollution Prevention Act, along with the related 1993 executive order, already require DOE to minimize the generation of hazardous wastes? See Environmental Management 1994 (DOE/EM-0119), at 5; and Pollution Prevention Program: Technology Summary (DOE/EM-0137P) (1994). Your statement at the bottom of page 60 suggests otherwise. 12.6

Concerning information management (Chapter 7), the study should make clearer the need to designate an institutional manager for this task. State land records, which form a critical link in the information/stewardship process, are notoriously unreliable and need to be augmented by a federal recording system. Finally, information in these records must be periodically reviewed, updated (to reflect new physical data, advances in science and technology), translated (to accounted for changes in language), and rerecorded to ensure the durability of the recording medium. 12.7 12.8

I appreciate the opportunity to comment on this important work.

12.1 – The Department appreciates this comment. Thank you.

12.2 – 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.

12.3 – 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.

12.4 – 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.

12.5 – Text has been deleted.

12.6 – 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."

12.7 – 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.

12.8 -- See response to Comment 12.7.

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DOE OVERSIGHT DIVISION
761 EMORY VALLEY ROAD
OAK RIDGE, TENNESSEE 37830-7072

December 12, 2000

Steven Livingstone
Project Manager
US Department of Energy
PO Box 45079
Washington DC 20026-5079

Dear Mr. Livingstone

STATE OF TENNESSEE COMMENTS ON THE *DRAFT LONG TERM STEWARDSHIP STUDY*, DTD OCTOBER 2000

The Tennessee Department of Environment and Conservation, DOE Oversight Division (TDEC/DOE-O) has received and reviewed the above referenced draft study. The State submits these comments with the expectation that either the study will be revised or a response to the comments will be generated.

GENERAL COMMENTS

The document adequately frames many of the issues related to long-term stewardship that have been raised to DOE over the past several years. However, this study is only a single step in ultimately implementing an acceptable long-term stewardship program. Issues such as funding, information management, and technology development are identified as needing more extensive evaluation and development. DOE should continue the work that has been identified in this study. Because long-term stewardship will require the participation of other parties (e.g. state and local governments, local communities, etc) the State strongly recommends adequate stakeholder involvement in the review and approval phase of any stewardship plans that DOE develops in the future. 13.1 13.2

The State of Tennessee has a bias for cleanup. DOE should in their development of policies, guidance and procedures for planning and implementing long-term stewardship emphasize a preference for permanent remedies. Maximum effort to achieve unrestricted use of DOE property will minimize the need for long-term stewardship and resulting "buffer" zones. The State's preference is to avoid long-term stewardship except in cases where cleanup to unrestricted use is not practical due to current technical restraints or unreasonable costs. 13.3

Furthermore, if and when technology becomes available to economically achieve unrestricted use, the State would expect DOE to achieve this "end state." 13.4

13.1 – 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 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 may have long-term stewardship responsibility for some 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.

13.2 – 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.

13.3 – 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.

13.4 – The Department acknowledges these comments in a text box in Section 4.2.4 of the Final Study. As noted in Section 4.2.4 of the Final 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.

SPECIFIC COMMENTS

1. **Chapter 4, Page 32**

"Long-term stewardship is budgeted and managed in different ways at different sites across the DOE complex. Some sites have established long-term stewardship as a specific project with a distinct budget. Other sites include long-term stewardship as part of each cleanup project..."

The budgeting and management of the long-term stewardship projects should be handled uniformly throughout the complex thereby enabling meaningful (equitable) cost and resource allocation measures for those sites yet to go through cleanup and closures. 13.5

2. **Page 63, Gray Box, Third Bullet**

"Surplus facilities at the Oak Ridge East Tennessee Technology Park have been leased under this authority" (Hall amendment).

This is not technically true. DOE has resisted leasing under the Hall amendment and is doing a pilot under a Hall amendment equivalent process in partnership with EPA. 13.6

3. **Chapter 8, Funding and Financial Management**

Cost analysis should be extended for time periods equivalent to the longevity of the contaminant and consequent institutional controls. The present-worth method does nothing more than hide the actual long-term costs of providing stewardship. 13.7

4. **Chapter 10, Page 109, Bullets One**

"Focus on managing the problem rather than trying to solve the problem."

The State of Tennessee strongly disagrees with this statement as a "principle." Cleanup is the goal, not management of a problem. "Managing the problem" should programmatically be listed as a last resort guidance only when source removal options are exhausted. On a site-specific basis, this approach should be used only under the most stringent of justifications or when natural attenuation will eliminate risk in a specific time period. This "principle" is fundamentally inconsistent with our views and is expressly rejected. 13.8

Questions or comments concerning the contents of this letter should be directed to Randy Young or John Owsley at the above address or by phone at (865) 481-0995.

Sincerely

Earl C. Leming
Director

xc: Justin Wilson - Governor's Policy Office
John Leonard - BOE
Myrna Redfield - DOE
Ralph Skinner - DOE
Rodney Nelson - DOE
Jim Werner - DOE
Ann Beauchesne - NGA
Denise Griffin - NCSL

Ecl565.99

13.5 – 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.

13.6 – This box has been significantly changed to reflect this comment; Mound is the current example.

13.7 – 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.

13.8 – The Department acknowledges this comment in a text box in Section 10.2 of the Study. The Department agrees that remedies may need to be reassessed periodically in light of changing circumstances and information. Section 10.2 of the Study includes a discussion of these points. Chapter 2 of the Study includes a discussion of why cleanup to unrestricted use is not always possible. Advances in science and technology may provide future generations with the ability to cost-effectively achieve unrestricted use at some sites.

Campbell, Kathleen

From: Girod, Brenda
Sent: Monday, December 18, 2000 1:54 PM
To: Campbell, Kathleen
Subject: FW: NRC staff review of DOE draft study on long-term stewardship

-----Original Message-----
From: Steven Livingstone [mailto:Steven.Livingstone@EM.DOE.GOV]
Sent: Wednesday, December 13, 2000 4:35 PM
To: 'Robert L. Johnson'
Cc: 'bgirod@icfconsulting.com'
Subject: RE: NRC staff review of DOE draft study on long-term stewardship

Robert:

Thank you for kind words, we will make the correction as you noted.

Steve

-----Original Message-----
From: Robert L. Johnson [mailto:RLJ2@nrc.gov]
Sent: Wednesday, December 13, 2000 3:29 PM
To: Livingstone, Steven
Cc: Garrett Smith; James Lieberman; Larry Camper; Scott Moore
Subject: NRC staff review of DOE draft study on long-term stewardship

Steve Livingstone,

The NRC staff reviewed DOE's October 2000 draft study entitled "Long-Term Stewardship Study" in response to DOE's request for public comment. The staff found the draft study to be a useful background document for the NRC staff to understand what DOE is current planning to do for its own sites, including the issues it must address. Many of these issues are also relevant to future decommissioning and institutional controls for NRC's licensed sites that are planning license termination with restricted use. The staff has the following minor comment: 14.1

14.1	14.1 – The Department appreciates this comment. Thank you.

Footnote 78 on page 68 and footnote 90 on page 78 both contain an outdated reference to NRC's draft Decommissioning Standard Review Plan (SRP). These footnotes should be revised to reflect the reference for the recently published SRP: "NMSS Decommissioning Standard Review Plan, Chapter 16.0 Restricted Use/Alternate Criteria, U.S. Nuclear Regulatory Commission, NUREG-1727, September 2000." 14.2

14.2	14.2 – These footnotes have been changed to reflect this comment.

If you have any questions, please give me a call on (301) 415-7282.
Please confirm in an email reply to me that you have received this comment. Thanks

Robert L. Johnson 12/13/00

100% post consumer recycled paper

Dec 13, 2000

Steven Livingstone, Project Manager
DOE, Office of Long Term Stewardship (EM-51)
PO Box 45079
Washington, DC 20026

Dear Steven Livinstone,

In regards to the "Draft Long-term Environmental Stewardship Study:"

- The highest priority should be placed on selecting remedies that protect the long-term safety and health of the community. This includes sufficient and adequate funding to cleanup to a level that allows unrestricted use and avoids the need for long-term stewardship. 15.1

- Development a means where local communities will be in long-term stewardship decisions. 15.2

- Avoid transferring or relocating hazardous substances. When contaminants are left in place, compensate local governments for protective equipment, emergency preparedness, and record keeping. 15.3

Sincerely,

Thomas Family
147 St. Germain Lane
Pleasant Hill, CA. 94523

15.1 – 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.

15.2 – 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.

15.3 – 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.

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

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Phone (303) 866-4500
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December 13, 2000

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

RE: Comments on Draft Long-Term Stewardship Study

Dear Steve:

Thank you for the opportunity to comment on the Long-Term Stewardship Study draft. In general, I think that the document does an excellent job of outlining the difficult issues related to implementing long-term care of residual contamination at the Department of Energy's weapons complex and other contaminated facilities. I have the following comments on the draft. 16.1

16.1 – The Department appreciates this comment. Thank you.

1. The report notes that the potential decommissioning impacts of new facilities are too speculative to evaluate in the early stages of the planning process in an Environmental Impact Statement (p. 58). I disagree. Private entities routinely develop decommissioning plans prior to constructing new facilities, and incorporate pollution prevention concepts into the design of new facilities and processes. DOE must do the same. This nation spent approximately $300 billion to create the nuclear weapons stockpile. DOE estimates that it will cost another $200 billion to "address" the contaminated sites and facilities that we created along the way. "Address" does not mean "permanently clean up." As the study notes, we can expect that some of the engineering and institutional remedies we have adopted at these sites will fail in the long run. Given the tremendous, and largely irreversible, environmental damage caused by operation of the nuclear weapons complex during its first fifty years of existence, it is imperative that DOE ensure that the weapons complex of the future does not result in additional intractable long term stewardship needs. 16.2

16.2 – 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." As the Department develops facilities for handling long-term stewardship issues, DOE will evaluate projected impacts of those facilities through an environmental impact statement (EIS) or other appropriate NEPA document.

2. In my comments on the scope of the study, I made the following suggestion: "One reason that institutional controls fail is that, over time, the controls are forgotten. One way to perpetuate knowledge of residual contamination at former DOE facilities would be to dedicate part of each such facility as a historic site or museum that would describe the site's role in the weapons complex (or other function). The study should evaluate dedicating part of each nuclear weapons production facility in this manner as a tool to assist in maintaining long-term knowledge of site history and residual contamination." The draft study states that this comment is out of scope. I disagree. Chapter 7 contains a good discussion on the 16.3

16.3 – 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.

difficulty of maintaining awareness of long-term stewardship information needs over time, and describes actions that DOE is taking or could take to address information management. It specifically notes that "A system should be developed to enable a person with limited knowledge of DOE sites to be able to easily search, find, and understand relevant information." Again, on page 108, the report states that "Educational organizations that focus on transferring institutional knowledge from generation to generation, targeted at communities surrounding DOE sites, could reduce the possibility that remaining site hazards are forgotten."

These are precisely the functions of museums, and they serve it well. Such museums could be modeled after the many excellent Presidential libraries in this country, which frequently have both museum and research facilities. Both aspects would be useful in the long-term stewardship context. In addition to maintaining information and enhancing community awareness, such a facility could perform the long-term monitoring and remedy reassessment functions that the report acknowledges will be required. By maintaining a physical presence at each site, DOE could help avert the possibility that stewardship concerns will be forgotten over time. As noted above, creation of the nuclear weapons arsenal also created vast amounts of potentially irreparable environmental contamination and a huge complex of aging facilities whose decommissioning is problematic, to say the least. It is important that the citizens of this country be reminded of these consequences so that we do not repeat the mistakes of the past.

3. The report notes the importance of evaluating institutional controls early in the remedy selection process. In addition to evaluating the true costs of implementing long-term stewardship, the environmental decision-maker should also analyze the legal enforceability of any proposed institutional controls. Because institutional controls depend on state law, the environmental regulator (or DOE) should request a written opinion from the state attorney general as to whether the proposed method is legally enforceable by the relevant environmental regulator against subsequent owners of the land. Further, the analysis of institutional controls should include an analysis of the consequences of failure of institutional or engineering controls.

4. The study does not adequately recognize the role that states will play in monitoring and enforcing institutional controls. Institutional controls will be imposed as part of cleanup decisions rendered by states and by EPA. Like any other aspect of a cleanup decision, they must be enforceable by the environmental regulator that made the decision. Therefore, the document should recognize that states will be among the primary enforcers of institutional controls.

5. On page 47, the report states that deed restrictions are not relevant for sites that will remain in DOE ownership. It is true that the federal government would continue to be bound by institutional controls imposed in a legally binding decision document under an environmental law, even if the land is transferred from DOE to another federal agency. A proprietary control, such as a deed restriction is primarily necessary to ensure an institutional control can be enforced against subsequent owners of the land. However, because federal agencies may grant easements to private parties, such as utilities, over land that remains in federal ownership, it may still be necessary to impose a proprietary institutional control on land that

16.4 16.4 – See response to Comment 16.3.

16.5 16.5 – 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, DOE routinely reviews the enforceability of any control as part of the transfer process and the development of deeds, easements, restrictions, or notifications. Institutional controls are subject to the required periodic assessments to ensure the remedy remains effective.

16.6 16.6 – The Department acknowledges this comment in Section 5.3 of the Study. The discussion of the role of state governments in long-term stewardship in Section 4.2.3 of the Study has been modified to note that states may be responsible for the enforcement of some institutional controls. However, state law may or may not provide states with enforcement powers. This will have to be addressed on a site-specific basis, since it is beyond the scope of this Study to resolve.

16.7 16.7 – The Department acknowledges this comment in Section 5.3 of the Study. The Department agrees that deed restrictions may not be relevant while DOE or the federal government are responsible for managing the property. The Department disagrees with the second part of this comment. Easements on federal property to non-governmental entities are usually allowed only for roads and utilities and have no impact on easement rights retained during a transfer unless they are on the same parcel. The rights that are retained or transferred are handled on a parcel level basis, and a "one size fits all" policy could not address all variations.

will remain in federal ownership to ensure that the control will be binding on the holder of any such easement.

6. The report should address the potential advantages of centralizing responsibility for implementing long-term stewardship requirements such as monitoring, maintenance, and continued research and development in a single-special purpose agency whose sole mission would be long-term stewardship. Such an agency would help address the problems related to the ability of organizations to maintain vigilance in executing a given function over time. (These problems are highlighted in the National Research Council study on Long-term Institutional Management of DOE Legacy Waste Sites at pages 79-81).

Sincerely,

DANIEL S. MILLER
First Assistant Attorney General
Natural Resources and Environment Section
(303) 866-5110
(303) 866-3558 (FAX)

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AG File: P:\NR\NRMILL\DS\INSTCONT\DOELTSCOMMENT.DOC

16.8 – 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 may have long-term stewardship responsibility for some "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. Potential options to consider include a centralized agency to steward Federal sites. However, a detailed discussion of the advantages and disadvantages of such a centralized agency is beyond the scope of the Study, which is required to focus on DOE sites. The Department's Long-term Stewardship Working Group has recommended to the senior management Executive Steering Committee that DOE should undertake to interact with other federal agencies to develop a consensus approach to long-term stewardship across the federal government.

CITY OF ARVADA

OFFICE OF THE CITY MANAGER
303 431 3000 PHONE ▲ 303 431-3911 FACSIMILE
TDD: 303 431-3917

December 14, 2000

Mr. Steven Livingstone
Project Manager
Office of Long Term Stewardship
U.S. Department of Energy
P.O. Box 45079
Washington, DC 20026

via fax with confirming letter by mail

Long-Term Stewardship Study Draft for Public Comment

Dear Steve:

On behalf of the Rocky Flats History Project, I would like to submit the following comments on the Long-Term Stewardship Study Draft for Public Comment.

Thank you for the obvious hard work and high level of effort that went into preparation of the document. We hope to have the opportunity to work with you in the future.

Please contact me if you have any questions or would like more information.

Sincerely,

Carol E. Lyons

Carol E. Lyons
Rocky Flats Coordinator
Coordinator, Rocky Flats History Project

attachment
cc: Rocky Flats History Project Distribution

Long-Term Stewardship Study Draft for Public Comment

Comments from:
Rocky Flats History Project
c/o Carol E. Lyons
City of Arvada
P.O. Box 8101
Arvada, CO 80001

A safe and thorough cleanup of contaminated sites is the first priority. We recommend that, to every extent feasible, contaminated sites be cleaned so that no long term stewardship is necessary. If that is not possible, then cleanup should be implemented which minimizes long term stewardship requirements. 17.1

17.1 – 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.

We share the Department of Energy's concern that successful long-term, environmental remediation and stewardship hinge on the sustainability of the long-term stewardship process itself. We agree with the Draft Study that effective long-term stewardship must provide for ongoing community support, open and public access to information, and the continuous oversight of the long-term monitoring which must be done as part of the cleanup process.

Public and Community Support

Long-term public support and understanding is a necessary precondition for the success of long term stewardship; as important as the technical feasibility of the various remediation technologies being investigated or the successful acquisition of stable, long-term funding for stewardship.

As stated in the Draft Study, "...the extent to which long-term stewardship can remain effective will depend in large part on the degree of understanding and appreciation that local communities have for potential environmental risks and benefits....." (p. 93) To achieve an adequate "degree of understanding and appreciation," we recommend that DOE provide support to the local community to fulfill DOE's obligations for the long term. We recommend that DOE's long term stewardship program incorporate the design and implementation of substantive, ongoing, active public education for the local and regional communities. 17.2

17.2 – 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.

Open Access to Information

We support the Draft Study's recommendation that stewardship be implemented to provide open access to information and cultural resources. We further agree that public access to information at each DOE site is also critical, as noted on page 8: "Successful implementation of long-term stewardship will be aided by open public access to the specific information about the residual hazards at DOE site, including how they were generated..." 17.3

17.3 – 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.

We recommend that DOE work with the local community to assure that this is implemented, and provide the long term funding and necessary in-kind support to implement this recommendation. 17.4

17.4 – See response to Comment 17.3.

Long-term Monitoring and Data Repository

The Draft Study indicates that DOE understands the importance of distinct organizations for implementation of long term stewardship oversight and education, as noted on page 108: "...[it is critical to] separate the responsibilities for implementing long-term stewardship from responsibilities to educate the public about the residual hazards at sites and the rationale for long-term stewardship..."

We recommend that DOE provide support to the community to satisfy the stewardship requirements for ongoing community support and open access to information, including a central facility for maintaining the information related to ongoing stewardship activities. This would include a long-term, accessible data repository in support of post-closure monitoring requirements and a facility to house and administer real time environmental data collection of land, air and water quality. 17.5

17.5 – See response to Comment 17.3.

Funding and Implementation

We recommend that DOE establish the broad range of procedures, processes, mechanisms, strategies necessary to address the requirements for effective long term stewardship unique to each contaminated site. This process will require new and different mechanisms for funding, as well. Future funding may need to be provided through programs that DOE (and the federal government) is not familiar with, but long term stewardship requires new strategies (see Exhibits 8-4 and 8-5, pages 90-91). 17.6

17.6 – 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.

We recommend that DOE work with local communities and organizations and with state governments and organizations to develop and implement the methods for long term future funding to pay for long term stewardship. One method may be to direct funding and support to existing or new organizations involved in related activities, which could also fulfill DOE's obligations as part of a broader charter. 17.7

17.7 – 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.

Museum, research, and library facilities, separately and combined, provide the possible framework for implementation of DOE requirements. A multipurpose facility like a Presidential Library, with a museum accessible to the general public to help interpret significant historical events of each President's term in office and house detailed historical records available to professional historians, is an appropriate model. Such a facility may also host ongoing scientific research into new technologies which could be applied to future cleanup efforts and could reduce DOE's stewardship mortgage. It is critical to successful long-term stewardship that institutional memory be maintained over generations. A living, active community center that addresses both historical and environmental concerns about the site and educates new visitors to the site, could serve this very important role. 17.8

17.8 – 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. In addition, 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 and has included such a discussion in Section 7.2 of the Study.

St. Charles County Government

Department of Community Health
and the Environment
Gil Copley, Director
Division of Environmental Services
Mike Duvall, Director

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: Public Comment on Draft long-term Stewardship Study of October 2000

Dear U.S. Department of Energy:

We appreciate the opportunity to review and comment on this document. We have found the document to more satisfactorily address some concerns our local government previously had in reviewing long-term stewardship documents provided by Department of Energy for our local site, the Weldon Spring Site Remedial Action Project (WSSRAP) in St. Charles, Missouri.

We would suggest that the draft include a section by which individual DOE stewardship documents omit terms "should" or "may" when referring to activities that will be necessary to ensure site safety in succeeding generations. Language in site stewardship documents would more effectively use terms "shall," "will" or "must" when referring to activities known to be required. 18.1

Due to the long-term nature of stewardship, we propose that language be placed in a document saying that DOE has both the authority and obligation to provide financial assistance to state and local governments regarding stewardship activities. 18.2

We praise you for your efforts so far, but ask you consider these comments carefully in developing the final document. Our office will remain in a local oversight position for WSSRAP and we look forward to continuing these efforts with full resources available to serve the public.

Respectfully submitted,

M. Duvall

Michael Duvall, Director
St. Charles County Government
Division of Environmental Services

Mary A. Halliday

Mary A.Halliday
Environmental Program Educator
Division of Environmental Services

18.1 – We appreciate your comment and we will consider it in the future as we develop long-term stewardship documents.

18.2 – 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.

NGA Center
for Best Practices

National Governors' Association
Center for Best Practices
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December 14, 2000

Mr. Steve Livingstone
Project Manager
U.S. Department of Energy
P.O. Box 45097
Washington, D.C. 20026-5079

Dear Mr. Livingstone:

Thank you for providing the opportunity to comment on the Department of Energy's (DOE) Draft Long-Term Stewardship Study. I am writing on behalf of the NGA Federal Facilities Task Force, which has worked with DOE since the passage of the Federal Facilities Compliance Act (FFCA) in 1992, to convey the general LTS concerns/principles enumerated below. In addition to these general comments, states will also file their individual concerns under separate cover.

We would like to commend the Department on its articulation of a strong framework through which important stewardship questions can be addressed. Additionally, the comprehensive approach the Department has taken in the study will allow the document to serve as an important reference for policymakers at the federal, state, and local level. 19.1

i. The Importance of Long-Term Stewardship (LTS)

We would like to begin our comments by emphasizing the importance of LTS to DOE's Environmental Management (EM) program. DOE needs to ensure that LTS is fully institutionalized as a clearly identifiable DOE program that is both robust and enduring. As many sites will require extensive monitoring and maintenance into the indefinite future to ensure the effectiveness of today's risk reduction activities, addressing the question of long-term stewardship correctly is of paramount importance if we are to sustain any of the benefits yielded through DOE EM efforts to date. Moving forward with remediation decisions that rely on institutional controls and other LTS measures will require that questions regarding enforcement, monitoring, technological development, and funding be addressed in a thorough fashion. 19.2

19.1 – The Department appreciates this comment. Thank you.

19.2 – 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 may long-term stewardship responsibility for some "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.

II. The Role of State Governments in LTS

The Study notes "State governments also may assume a more prominent role in managing long-term stewardship information and in promoting education and training to ensure the continuity of long-term stewardship across multiple generations." We find the general tone concerning the role of the states in LTS to be overly constrained. Institutional controls will be imposed as part of cleanup decisions rendered by states and the EPA. Like any other aspect of a cleanup decision, institutional control must be enforceable by the environmental regulator that made the decision. The Study should therefore recognize that states will be among the primary enforcers of institutional controls. DOE should further expect that states will generally assume an active role in resolving a range of LTS issues, including the outreach and public education efforts that are necessary to ensure public support for, and involvement in, LTS planning and implementation. The states are committed to working with local and tribal governments throughout the LTS process.

19.3

19.3 – The Department acknowledges this comment in Section 5.3 of the Study. The discussion of the role of state governments in long-term stewardship in Section 4.2.3 of the Study has been modified to note that states may be responsible for the enforcement of some institutional controls. However, state law may or may not provide states with enforcement powers. The Study cannot assume any specific long-term stewardship roles for state, Tribal, or local governments in the absence of site-specific agreements.

III. Explicit LTS Requirements & Remediation Projects

States believe that the remedy selection process must include specified LTS criteria. While the present process does contain some LTS considerations, many important LTS elements are omitted. Without the clear inclusion of LTS considerations in the remedy selection process, it will be difficult for states to move forward with remediation decisions that are reliant on long-term institutional control. The Study should include a specific set of tasks that DOE will perform, with stakeholder participation, to establish uniform LTS criteria that can be used in the remedy selection process.

19.4

19.4 – The Department has not identified a specific set of tasks for this purpose, and the Study is not the appropriate place to do so. The Department acknowledges this comment in a text box in Section 3.2 of the Study.

A careful evaluation of clean up to unrestricted use, which would allow for avoidance of LTS costs, should serve as the point of departure for LTS evaluation. In addition to evaluating the true costs of implementing long-term stewardship, any ROD should also analyze the legal enforceability of any proposed institutional controls. Such analysis should include a written opinion from the state attorney general that the proposed method is legally enforceable by the relevant environmental regulator against subsequent owners of the land. The analysis of institutional controls should include an evaluation of the consequences of failure of institutional or engineering controls.

19.5

19.5 – 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.

19.6

19.6 – The Department acknowledges this comment in Section 5.3 of the Study. The Department agrees that both DOE and affected parties should understand the enforceability of institutional controls in affected states, and Section 5.3 of the Study has been modified to note this. The Department also agrees with the last statement in this comment.

IV. Funding & LTS

LTS funding issues are of critical importance. While budget appropriations may sustain current stewardship activities, continuing uncertainty around long-term funding issues raises questions around the reliability of risk reduction efforts that are dependent on LTS measures. Until long-term funding mechanisms are in place, remedies that rely on institutional control and other LTS activities cannot be viewed as legitimate long-term solutions. Without a clear funding mechanism in place to ensure continued funding, regulatory officials and stakeholders are unable to select with confidence remediation measures that would rely on LTS. The Study should outline a specific set of tasks that DOE will perform in order to facilitate the resolution of LTS funding issues at sites. 19.7

V. Technology Development & LTS

The Study states "The majority of the EM program's science and technology effort is focused on supporting near and short term objectives, not long-term stewardship." Significant investment in LTS technologies will be required to ensure that DOE's obligations are effectively and efficiently fulfilled. Some areas that require additional investment can be easily identified. For example, as the Study notes, DOE is not taking the appropriate steps to [illegible] the functional life and failure [illegible] of institutional controls. The Department clearly needs to be gathering and evaluating this and other data so that it can gauge the effectiveness of various LTS technologies. More generally, DOE's research and development agenda needs to include information management technologies to ensure the effective long-term protection of LTS information. 19.8

While some needs are readily apparent, it is of critical importance that DOE expeditiously complete its "roadmap" exercise and establish a LTS baseline against which science and technology investments can be assessed. Once this comprehensive baseline is available, investments must be carefully tailored to fulfill priorities that clearly relate to needs identified within this planning document. 19.9

19.7 – 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.

19.8 – The Department acknowledges these comments in a text box in Section 4.2.4 of the Final Study. As noted in Section 4.2.4 of the Final 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.

19.9 – See response to Comment 19.8.

VI. LTS at NNSA sites

The Study notes "the recent creation of the NNSA, with independent lines of authority within DOE, may pose additional challenges to the implementation of long-term stewardship at sites where NNSA is the landlord." State concerns regarding LTS apply to all relevant sites, regardless of their internal DOE designation. DOE should ensure that questions regarding oversight and enforcement of LTS obligations are resolved in an expedited fashion. 19.10

Additionally, DOE must take appropriate steps to provide for publicly accessible LTS information management at NNSA sites. 19.11

19.12

19.13

stewardship concerns will be forgotten over time.

19.10 – The Department acknowledges this comment in a text box in Section 4.1 of the Study. The Department recognizes the importance of adequate mechanisms for oversight and enforcement of long-term stewardship requirements, particularly following a change in property ownership or the organization responsible for stewardship. The various requirements and approaches to oversight, enforcement, and public information updates for long-term stewardship will be addressed by the senior management Long-term Stewardship Executive Steering Committee during the Department's strategic planning process. This comment will be provided to the Executive Steering Committee for their consideration.

19.11 – 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.

19.12 – DOE's NEPA reviews for proposed facilities will analyze decommissioning as much as is reasonable, considering that some aspects of decommissioning are likely to be speculative when facilities are proposed because decommissioning would occur many years (e.g., 40 years or more) after a facility is proposed, and techniques available for eventual decommissioning are unknown at the time of a NEPA review. DOE, however, will always address the feasibility of decommissioning in its NEPA reviews for proposed facilities, so that DOE would not unknowingly create a unique problem, such as a new class of waste.

19.13 – 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.

Thank you for the opportunity to comment on what we believe is a laudable effort to capture LTS issues across the DOE complex. If you have any questions regarding these comments, please feel free to contact me at 202/624-5370 or by e-mail at abeauchesne@nga.org.

Sincerely,

Ann M. Beauchesne

Program Director
Natural Resources Policy Studies Division

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December 14, 2000

Steven Livingstone
Project Manager
Office of Long Term Stewardship (EM-51)
US Department of Energy
P.O. Box 45079
Washington, D.C. 20026-5079
Submitted via e-mail 12-15-00

Dear Mr. Livingstone,

DSCSOC wishes to thank the Department of Energy for the opportunity to comment on DOE's "Draft Long-Term Environmental Stewardship Study." DSCSOC is the US EPA TAG group for the UCD/DOE LEHR Superfund site on the UC Davis Campus.

DSCSOC submits the following comments:

- **The highest priority should be placed on selecting remedies that protect the long-term safety and health of the community and the environment surrounding the DOE facility. All aspects of establishing, maintaining and funding long-term stewardship should be considered during the remedy selection process that is part of the cleanup.** 20.1
- **Whenever possible, DOE facilities should be cleaned up to the 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, DOE should include in the final remedy decisions documents details regarding the stewardship plan and funding.** 20.2
- **DOE should develop a program to look for solutions that would minimize or eliminate the need for long-term stewardship.** 20.3
- **If DOE leaves hazardous chemical contaminates in place, DOE should provide funding in its final remedy decisions to monitor these contaminates and to continue researching for a remedial treatment that destroys these contaminates to avoid the need for long-term stewardship.** 20.4
- **DOE should develop a mechanism including funding where local communities will be involved in long-term stewardship decisions. The** 20.5

20.1 – 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.

20.2 – 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. In addition, site-wide future land use and LTS planning with locally affected parties is needed while site-specific decisions are being made.

20.3 – The Department acknowledges these comments in a text box in Section 4.2.4 of the Final Study. As noted in Section 4.2.4 of the Final 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.

20.4 – See response to Comment 20.3.

20.5 – 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.

communities should be involved 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 be involved in periodic reviews, such as the five-year review cycle under CERCLA and performance of the long-term stewardship activities. Additionally, independent technical expertise should be provided to communities to assist them in evaluating the many technical documents that form the basis for key decisions. 20.6

- DOE should develop Contingency Plans at the time cleanup decisions are made. DOE should plan for uncertainty and fallibility of some aspects of its long-term stewardship program 20.7
- DOE should commit funding for long-term stewardship. 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. The local community should have a role in managing the funds and in defining any future investigation, evaluations and testing at the site. 20.8
- Periodically re-evaluate the remedy. This re-evaluation should include changes in health/environmental standards associated with contaminants that are left in place, changes in technology that were not available at the time when initials cleanup decisions were made but if implemented would eliminate the need for long-term stewardship activities, and performance of the remedy in place. It should include funding to investigate and remediate contamination in place not previously considered to be a threat. 20.9
- DOE should provide a reliable, up-to-date record of the management at a facility that is fully accessible to the community. 20.10
- DOE should develop a policy and regulations on property transfers where DOE is responsible for perpetuity unless the new owner has altered the property, violated a legal deed restriction or contaminates the environment. 20.11

Sincerely,

Julie Roth

Julie Roth, Ex. Dir.

20.6 – See response to Comment 20.5.

20.7 – 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. In addition, Section 5.4.2 of the Study notes the importance of managing and responding to uncertainties during long-term stewardship.

20.8 – 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.

20.9 – The Department acknowledges this comment in a text box in Section 10.2 of the Study. The Department agrees that remedies may need to be reassessed periodically in light of changing circumstances and information. Section 10.2 of the Study includes a discussion of these points.

20.10 – 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.

20.11 – This comment is acknowledged in a text box in Section 6.2 of the Study. Section 6.2 of the Study recognizes the many issues, public concerns, and uncertainties associated with ensuring the continued provision of long-term stewardship after property transfers. The Department's Long-term Stewardship Working Group recently identified the issue of how DOE will ensure adequate protection of human health and the environment at sites transferred to the private sector as one of the most important issues that should be addressed by the senior management Long-term Stewardship Executive Steering Committee. This comment will be provided to the Executive Steering Committee for their consideration.

LOC INC
Oak Ridge Reservation
Local Oversight Committee

December 14, 2000

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

Subject: Endorsement of comments by Oak Ridge Site Specific Advisory Board (ORSSAB) on the draft Long Term Stewardship Study of October 2000

Reference: Letter of December 14, 2000 from Luther V. Gibson, Chair, ORSSAB, to Steven Livingstone, Project Manager; Subject - Comments on the draft Long Term Stewardship Study of October 2000

Dear Mr. Livingstone:

The Oak Ridge Reservation Local Oversight Committee (LOC) Citizens' Advisory Panel (CAP) has voted to endorse the comments on the Long Term Stewardship Study of October 2000 (see reference) that were transmitted to ORSSAB by its Stewardship Committee. Several CAP and LOC members have been active participants on the ORSSAB's Stewardship Committee and assisted in developing these comments. Please note that the LOC Board has not had the opportunity to review these comments, and so they should be considered as submitted by the CAP only. 21.1

The CAP additionally emphasizes the need for ongoing and meaningful public participation as DOE undertakes stewardship planning and activities. In particular, local governments must be included in the stewardship decision-making and implementation. This can be accomplished directly or through organizations like the LOC. 21.2

The LOC is a non-profit regional organization established to provide local government and citizen oversight of the environmental management activities and input into decision-making at the DOE's Oak Ridge Reservation. The Board of Directors of the LOC is composed of the elected and appointed officials of the seven surrounding counties and is chaired by the Mayor of the City of Oak Ridge. The Chair of the LOC's Citizens' Advisory Panel also serves on the LOC Board. Funding for the LOC is provided by the State of Tennessee under the Tennessee Oversight Agreement. Board members represent approximately 700,000 citizens.

Sincerely,

Norman A. Mulvenon

Norman A. Mulvenon
Chair, LOC Citizens' Advisory Panel

cc: LOC Document Register
LOC Board
LOC CAP
John Owsley, Director, TDEC DOE-O
Justin Wilson, Special Policy Advisor to the Governor
Leah Dever, Manager, DOE ORO
Ralph Skinner, DOE ORO
Pat Halsey, FFA Administrative Coordinator, DOE ORO
Luther Gibson, Chair, ORSSAB
James Werner, Office of Long-Term Stewardship, DOE HQ

21.1 – Please see responses to comment letter 22.

21.2 – 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.

Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

December 13, 2000

Mr. Steven Livingstone,
Project Manager
U.S. Department of Energy
P.O. Box 45070
Washington D.C. 20026-5070

Comments on the draft Long Term Stewardship Study of October 2000

Dear Mr. Livingstone:

This report is an excellent effort to illuminate the large issues for Department of Energy Long Term Stewardship (LTS) and to indicate the available broad policy directions. We did not detect a major point that is not covered somewhere at least by implication. A few ideas, however, were treated too lightly or indirectly to command the future attention they deserve. A few sentences changed or added could eliminate these residual concerns.

22.1

Citizen requests for better LTS coverage in Proposed Plans (PP) and Records of Decision (RODs) are dismissed on pages 15 and 17 in Section 3.2 with an argument based on a flawed statement of the request. Nobody expects a detailed stewardship plan in a ROD that would locate signs, fenceposts, the exact width of buffer zones, or list the botanical and biological species that will be monitored forever. Yet the impossibility of including such detail has been given as the reason for not including meaningful stewardship discussions in the crucial decision documents that describe the whole remediation strategy for an area (i.e., Proposed Plans and RODs). How can stewardship be considered in remedy selection (as the LTS study suggests on page 16) if these documents do not clearly commit to maintaining a level of remediation through time that is sufficient to achieve the chosen Remedial Action Objectives? Here, "remediation" includes all the monitoring, maintenance of both institutional and physical controls, information storage and retrieval, public education, and reconsideration of alternatives to which your Study refers. (An analogous issue must exist at sites not regulated under CERCLA.) We believe that a post-ROD document, to which the public has no formal input, is no place to be defining high level goals for long-term stewardship as is suggested near the end of page 17.

22.2

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22.1 – The Department appreciates this comment. Thank you.

22.2 – 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. Note also that The Department agrees that Records of Decision and other 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.

On page 41 and Exhibit 5-1, the authors of the Study acknowledge that persons outside the originally contaminated area are protected from hazards primarily by "engineering controls" designed to stabilize the contaminants, rather than by "institutional controls" that keep people away from hazards. However, the rest of the report dwells far too much on the latter type of remedy. Unless contaminated properties are transferred to owners who prove to be complacent and uncooperative, the engineering controls and their maintenance will be the more important for DOE sites, just as they are for strip mines and old hazardous waste dumps that lack effective liners and caps. Where hazardous contamination will be left in place at weapons sites, engineered physical controls will be added; storms and floods are bound to challenge the halfway measures that must be used to control contaminant transport. We believe the Study should emphasize LTS for "engineering controls."

22.3

22.3 – 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.

On page 48 and particularly in Exhibit 5-4, the authors indicate the fragility and possible uselessness of land use control measures such as deed restrictions. We recall that the paper of Mary English, your Reference 49, indicates that easements and other deed restrictions have been found to fail over time unless the owner that originates the restriction (here usually the federal government) consistently enforces the restrictions in the civil courts. This finding is very important, and suggests a strong and difficult condition for the usefulness of deed restrictions. We have found many references to deed restrictions in government regulations and decision documents, but recall only one case that indicated the intent of the agency to inspect and then enforce the restriction (groundwater licenses in Union Valley in Oak Ridge). If Ms. English is correct for an important fraction of the cases, this consistent enforcement caveat needs emphasis. It is just the type of condition that engineers and members of the public are unlikely to think of. (Another approach would be for the DOE to convince state legislatures to enable third party lawsuits to enforce deed restrictions for a class of lands that includes DOE sites. Local governments normally cannot and do not try to enforce such restrictions.)

22.4

22.4 – Please see response to comment letter 22.3

Please mention the significance of cost inflation to the considerations involving trust funds in Section 8 around page 91. The trust described in Exhibit 8-5 for stewardship of the Oak Ridge Reservation Environmental Management Waste Management Facility can succeed only if the terms of agreement are broadly interpreted to include using a portion of the trust income to increment the principal. This reinvestment would counteract the expected gradual increase over time in the dollar cost of maintenance and monitoring. The Tennessee trust fund agreement is a real breakthrough, and interestingly it is one in which the local public played no role except to be concerned before and to cheer after it was signed.

22.5

22.5 – The Department acknowledges this comment in a text box in Section 8.2 of the Study. The text in Exhibit 8-3 was modified to note this point.

The likely importance of continuing local public involvement in effective LTS is introduced in the sidebar on page 91. We applaud those comments, but would go further. We think some sort of citizen stewardship board will be needed at the highly contaminated sites. Successful organization of such boards will be difficult, and some encouragement by the federal government may be required. Local governments could combine to provide such informal oversight, but experience with county government suggests that long term problems rarely get the attention of local political leaders. Usually they are busy paving roads, operating jails, hiring school teachers, and pursuing economic development. Often, some citizen group must activate the elected leaders.

22.6

22.6 – Please see response to comment letter 22.2

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We are pleased that the Natural Resources Defense Council lawsuit settlement has led to a useful [redacted]

Luther V. Gibson, Jr.

Luther V. Gibson, Chair

Cc: Pat Halsey, DOE/ORO
Connie Jones, EPA Region 4
Norman Mulvenon, LOC
Oak Ridge SSAB Stewardship Committee Members
John Owsley, TDEC
Myrna Redfield, DOE/ORO
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Department of Comprehensive Planning

Nuclear Waste Division

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(702) 455-5175 • Fax (702) 455-5190

John L. Schlegel, Director • Dennis Bechtel, Planning Manager

December 14, 2000

U.S. Department of Energy
PO Box 45079
Washington, DC 20026-5079

Attention: Steven Livingstone

Re: Comments by Clark County, NV to the Department of Energy (DOE) Long-Term Stewardship Study

Dear Mr. Livingstone:

Attached are comments from Clark County, NV to the draft Department of Energy draft Long-Term Stewardship Study.

The Office of Environmental Management, Office of Long-Term Stewardship is to be commended for producing a comprehensive analysis of stewardship issues. The study successfully captures major issues associated with long-term stewardship.

Our comments relate to process as well as degree of emphasis that we feel DOE needs to place on specific issues. The Nevada Test Site (NTS) in adjacent Nye County, is unique in that it is one of several sites throughout the nation whose future mission is unclear. Currently, the NTS is planned to retain an on-going mission of weapons testing.

Locally, we trust that this ongoing testing mission does not lead to ignoring the important stewardship requirements for the NTS site. Years of testing, of course, has lead to substantial contamination of subsurface soils and probably groundwater resources. While the NTS is an extremely large site, some testing did occur in areas (e.g., Pahute Mesa) adjacent to existing communities. Likewise, the areas of contamination are presently ill-defined. 23.1

It is important that stewardship needs, particularly the better characterization of areas of contamination and the definition of monitoring areas are not forgotten at sites like the NTS. This, I feel, fits proactively with your desire to plan stewardship activities concurrently with both cleanup and ongoing missions. 23.2

Once again, thank you for your comprehensive treatment of these important issues. If there are questions about our comments, please don't hesitate to contact me.

Sincerely,

Dennis Bechtel
Planning Manager

Enclosures
c w/encs: John Schlegel

dow121499db

BOARD OF COUNTY COMMISSIONERS
BRUCE L. WOODBURY, Chairman • CRIS KOMAR, Vice-Chair

23.1 – 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. The specific comments in this section have 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.

23.2 – See response to Comment 23.1.

U.S. Department of Energy
Long-Term Stewardship Study
Comments by Clark County, Nevada

General Comments

We would like to commend the Department of Energy (DOE) on the production of an important and comprehensive document on stewardship issues. We feel that it treats important concepts on stewardship topics that need to be addressed, particularly at those sites where dangers will exist for many generations. The following expresses our interests in stewardship as well as comments on specific

Clark County, Nevada, which includes the cities of Boulder City, Henderson, Las Vegas, Mesquite and North Las Vegas, has a population of almost 1.5 million, 70 percent of Nevada's population, and is its most productive economic area. Clark County is adjacent to Nye County, the site of the Nevada Test Site (NTS), and contributes more than 90 percent of the workers and support of NTS activities.

Clark County participates with Nye County and other citizens of Nevada on the NTS Community Advisory Board which, of course, coordinates with other site-specific advisory boards throughout the nation. We feel that stewardship activities are extremely important in maintaining the health and safety of our citizens and the sustainability of our environment.

The NTS, of course, is one of a number of sites that will continue to maintain an ongoing mission of testing the effectiveness of our nuclear weapons stockpile. We are also faced, however, with a need to better understand the residual contamination present at the site, and its effect on adjacent communities (e.g., Beatty, Armagosa Valley). While the NTS is an extremely large area, some of the testing, notably in the Pahute Mesa locale, is relatively close to inhabited areas.

Although the NTS is currently isolated, recent dramatic population growth in Southern Nevada makes even currently low-populated areas such as Nye and northern Clark County potential areas of expanded population growth over the next several decades. Stewardship needs, particularly contaminant characterization, monitoring, and potential cleanup, therefore, become extremely important. Likewise, there are a number of locations on the NTS, which are being considered for other non-nuclear uses that may need to be remediated or characterized to sustain this other development.

23.3

23.3 – See response to Comment 23.1.

Comments on Specific Issues

There are many opportunities available to improve DOE LTS performance. The following sections evaluate some overall strategic policy recommendations to ensure that LTS activities can be conducted effectively.

1. **National LTS Program.** A strong national program is needed to coordinate efforts among individual sites and provide more coherent guidance on LTS issues. This essentially runs counter to current DOE policy arrangements that permit individual sites to have strong control over crafting solutions for their individual problems. As DOE discovered belatedly with cleanup, however, greater efficiencies and reduced costs can be effectuated with headquarters coordinating research and deploying technologies for common problems. With great competition for funding [redacted] is imperative that "lessons learned" at individual sites be available for application across the complex, and that this be coordinated by "headquarters". 23.4

2. **Stable Long-Term Funding.** As discussed previously, funding requirements for LTS may be well exceed the present estimates of cleanup costs. Total reliance on the annual appropriations process, however, will continue to result in inconsistent funding availability for LTS requirements. Even a recognized, important program remediating, dangerous contamination at nuclear weapons sites has been subject to the vagaries of political whim and more immediate priorities. An example close to home in a related program, are the funding battles that are waged annually for Yucca Mountain site characterization. Although the Nuclear Waste fund generates over $700 million annually from a one mill fee per kilowatt hour fee charged to the users of nuclear power, and from a one-time charge to utilities, less than half of the amount is generally appropriated by Congress for studies and research. For FY 2001, Congress appropriated only $391 million of some $750 million potentially available. The remainder was used as an offset to the federal deficit. [redacted] needed. A trust fund, with resources provided by the federal government and managed by an outside entity, may be one source of long-term funding stability. 23.5

3. **Science and Technology (S & T).** More emphasis needs to be placed on S & T research to reduce the cost of future stewardship requirements. There are a host of contamination problems that either have no solution, or solutions that are so cost-prohibitive that they will be unable to be resolved given the competitiveness of the federal budgeting process. An example cited previously is the extensive groundwater contamination 23.6

23.4 – 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.

23.5 – 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.

23.6 – The Department acknowledges this comment in a text box in Section 4.2.4 of the Study. The Department has identified two preliminary goals for new science and technology for long-term stewardship: (1) reduce long-term stewardship costs, and/or (2) increase long-term stewardship effectiveness. These preliminary goals may change in the future as DOE gains more experience with long-term stewardship. Section 4.2.4 also notes that expertise and solutions may come from the private sector.

problems that are pervasive at almost every DOE site. Increasing funding to enable new technologies to be discovered and implemented is, therefore, a fundamental need.

Associates with this is providing more emphasis on capturing expertise available in the private sector (e.g., Superfund cleanup solutions are a possible source) both to encourage their involvement, and to learn from their experience in helping to resolve these complex cleanup issues.

4. **Institutional and Educational Structures.** Because the period of residual risk at many DOE sites can extend to centuries, it is important that institutional and educational capabilities are developed and maintained to perpetuate institutional and cultural memory. It should be remembered that a primary reason for the billions of dollars being spent on characterization costs is both a lack of adequate record keeping and the loss of institutional memory at most DOE sites. Ant his after only half a century of manufacturing and testing nuclear weapons.

Likewise, the educational system should have a role in ensuring that the dangers and problems associated with the nuclear weapons sites are not forgotten. DOE recognizes that the maintenance of institutional and educational capabilities is critical. In DOE's draft Strategic Plan it is noted that *"Actions will be taken to support efforts to maintain the necessary expertise (e.g., engineers and scientists) to manage LTS over at least the next century* ***and to develop and implement strategies for keeping LTS awareness and information exchange active.."*** Since the life of federal departments such as DOE are probably finite, strategies will also need to be developed to ensure that future agencies, perhaps at the local level, will be in existence to sustain the management of future sites. 23.7

5. **Data and Information Needs.** Accurate and comprehensive information is fundamental in managing future stewardship activities. Richard Hengner, in his discussion titled *Managing Data for Long-Term Stewardship*, observed that *poor information management practices will make the transition from cleanup to LTS difficult,"* and *"Affected parties will need open access to information about [illegible] and historical production missions."* It is unfortunate that a considerable amount of useful LTS information has ei8ther been lost in the many decades of weapons development. Examples of this are all too prevalent. Witness the recently publicized situations at the Paducah in Kentucky and Hanford, Washington sites where DOE is trying to recreate an understanding of the contaminant levels and affected areas at these sites. It is, therefore, incumbent upon DOE to develop and manage information both to better understand cleanup and stewardship needs, and to inform the public and Congress about potential dangers. 23.8

23.7 – 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.

23.8 – See response to Comment 23.7.

An associated problem is ensuring that the data is managed in such a way to assure that it will be available over the period of time of the potential risk. With the rapid change in technology, it is likely that data stored on a particular storage medium today will be unavailable for future research because of obsolescence. Ensuring data availability will be fundamental in managing future stewardship requirements. 23.8

6. **Lessons Learned.** There are a number of examples of stewardship being undertaken by other federal agencies from which DOE could benefit. Superfund activities undertaken by the U.S. Environmental Protection Agency, for example, and the numerous base closings by the Department of Defense offer valuable lessons on stewardship. Both federal branches have also had to deal with severe contamination problems, and in many cases have offered potentially relevant solutions. Utilizing the experience of these agencies. And others, can further reduce cost and time of implementation. 23.9

7. **Public Involvement.** Finally, DOE needs to maintain a strong public involvement program on stewardship issues. As noted previously, DOE has performed commendably during site cleanup by the creation of Site Specific Advisory Boards (SSAB), whose memberships comprise a broad spectrum of residents of communities surrounding sites. These Boards serve important roles in advising DOE on cleanup issues. There has been recent talk, however, of disbanding these groups once remediation activities are completed. DOE would be well advised to retain the SSAB's for LTS advice and recommendations. 23.10

As part of its LTS efforts, DOE also needs to develop a strategy for long-term public involvement to the communities at large including producing periodic informational updates on monitoring activities. 23.11

23.9 – The Department acknowledges this comment in a text box in Section 4.2 of the Study. The Study has included examples of successful efforts to assist individual sites in establishing these partnerships. Developing partnerships, however, is both difficult and time-consuming, and it may be years before partnerships function smoothly. Potential options for managing long-term stewardship include a centralized agency to steward Federal sites. However, a detailed discussion of the advantages and disadvantages of such a centralized agency is beyond the scope of the Study, which is required to focus on DOE sites.

23.10 – 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.

23.11 – See response to Comment 23.10.