LESSONS LEARNED QUARTERLY REPORT 4TH QUARTER FY 1995

Office of NEPA Policy and Assistance
U.S. Department of Energy

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INTRODUCTION

To foster continuing improvement of the Department's National Environmental Policy Act (NEPA) compliance program, the Secretarial Policy Statement on NEPA, issued June 13, 1994, requires the Office of Environment, Safety and Health to solicit comments on lessons learned in the process of completing NEPA documents from the NEPA Document Manager, the NEPA Compliance Officer, and team members after completing each environmental impact statement (EIS) and environmental assessment (EA), and to distribute a quarterly summary to all NEPA Compliance Officers and NEPA Document Managers.

This quarterly report summarizes the lessons learned for documents completed between July 1 and September 30, 1995. It is based primarily on responses to the revised questionnaire that was provided for use during January 1995, and includes information on direct and indirect NEPA process costs and on total project costs.

Some of the material presented here reflects the personal views of individual questionnaire respondents, which (appropriately) may be inconsistent. Therefore, unless indicated otherwise, views reported herein should not be interpreted as recommendations from the Office of Environment, Safety and Health.

The next quarterly report will cover EISs and EAs completed during the first quarter of fiscal year 1996 (October 1 through December 31, 1995). Please report on EISs and EAs as they are completed. Questionnaires for all such documents completed between October 1 and December 31, 1995 are due by February 1, 1996. Completed questionnaires should be sent directly to the Office of NEPA Policy and Assistance by surface mail or fax (202-586-7031) or via Internet (Joanne.Geroe@hq.doe.gov). The next quarterly report will be issued on March 1, 1996.

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ABOUT THIS LESSONS LEARNED QUARTERLY REPORT

According to Office of NEPA Policy and Assistance records, the Department of Energy (DOE) completed 29 EAs and 7 EISs during the fourth quarter of fiscal year 1995 (from July 1 to September 30, 1995). For the purposes of this report, the approval or adoption of a final EIS or the NEPA decision for an EA represents document completion.

As of November 28, 1995, the Office received 54 questionnaires covering 19 of the EAs and 6 of the EISs. Questionnaire respondents included: 13 NEPA Compliance Officers, 14 Document Managers, and 7 others (e.g., contractors, legal counsel, Office of NEPA Policy and Assistance staff, and other document preparation team members).

NEPA DOCUMENT PREPARATION TIMES

Based on information provided to the Office of NEPA Policy and Assistance, the median time for the completion of 7 environmental impact statements in this reporting period was 20 months; the completion times ranged from about 9 months to about 41 months (See Figure 1 on page 4). For the previous four reporting periods (July 1, 1994 to June 30, 1995) and this reporting period, cumulatively, the median time to prepare 18 EISs was 26 months (average 30 months).

The median time for the completion of 28 EAs (one adopted EA was not included in this calculation) in this reporting period (from the NEPA determination to the Finding of No Significant Impact) was 17 months; the completion times ranged from about 2 months to about 87 months (see Figure 3 on page 5). For the previous four reporting periods (covering July 1, 1994 to June 30, 1995) and this reporting period, cumulatively, the median time to prepare 107 EAs was 17 months (average 18 months).

Note: The number of EAs completed each quarter, and especially of EISs, is too small to discern a trend from the above data. Moreover, many of the EAs and most of the EISs completed during the last 15 months were begun before process improvements directed by the Secretarial NEPA Policy of June 1994 took full effect. Therefore, the data presented above do not readily measure results under the improved practices. The Office of NEPA Policy and Assistance separately examined DOE's experience with NEPA documents that were begun after June 1994 and reported the (inconclusive) results at the Los Alamos NEPA Meeting in September 1995. The Office will continue to study trends and will report results at appropriate opportunities, including in these Quarterly Reports.

Questionnaire respondents indicated that of the 15 EAs for which a time schedule was established for this quarter, 7 EAs were completed on schedule and 8 were not. Of the five EISs for which scheduling information was reported, two were completed on schedule and three were not. Also, for 15 EAs and 2 EISs, respondents stated that the NEPA process was initiated early enough to avoid being on the critical path. Questionnaire respondents for two EAs and one EIS disagreed as to whether the NEPA process had begun early enough, four respondents reporting that the process had begun in time and four that it had not.

Circumstances that were mentioned as hindering timely NEPA document completion were:

- contractor staff that, although technically competent, did not understand the objectives of the NEPA review;
- late but substantial comments from another Federal agency;
- change in the proposed action partly due to lack of communication between programs;
- an alternative not considered in the Draft EIS was identified as part of the preferred alternative in the Final EIS, requiring new technical analysis, substantial revision to the Final EIS, and notification to the public and State;
- incomplete, unclear and constantly changing scope; unclear and nonspecific data requests; and cumbersome communication early in the process;
- initial drafting of EA delayed because higher priority was given to another project;
- change in scope of proposed action resulting in additional analysis being done;
- lengthy workshops held in response to stakeholder request extended the time required for EA completion; and
- extensive interaction with stakeholders and a lengthy public discussion process for a politically sensitive project.

Respondents identified the following as measures that facilitated timely completion of their NEPA documents:

- employees assigned to work on the EIS;
- establishment of a working group and meetings of all team members saved time in conducting draft reviews and obtaining concurrence;
- formation of an excellent multi-disciplinary team;
- coordinating preparation of a Savannah River EIS with two other Savannah River Site NEPA documents allowed combined scoping for all three EISs and more efficient use of contractor technical resources;
- frequent teleconferences and visits to Headquarters for progress updates and comment resolution, and having DOE, Management & Operating contractors, and subcontractor EIS meetings at one location;
- meetings held with the Bureau of Land Management, U.S. Forest Service, Environmental Protection Agency and mine companies;
- frequent communication between DOE and contractor and DOE Management and Review team;
- team members conveniently located onsite and access to e-mail saved time in preparation, reviews and distribution; and
- delegation authority provided to Bonneville Power Administration, which greatly facilitated preparation of the EIS, improved timeliness, and reduced costs.

Respondents suggested the following as especially effective procedures to keep the document on schedule:

- using people who had exceptional skills at key points
- throughout the process, and dedicating personnel to the job;
- direct communication among principal staff;
- parallel reviews of the draft EIS by Headquarters and the site, and management providing adequate support to ensure the EIS had proper priority and resources;
- a list of technical support information, developed early in the process with project proponents, identifying the depth and breadth of quantitative information needed;
- having the NEPA team located onsite;
- completion of a well-instructed NEPA course; and
- a schedule provided to all team members and regular meetings held to monitor both individual and team progress.

NEPA COST DATA

NEPA Compliance Officers and Document Managers reported NEPA process cost data for 16 of the 29 EAs (see Figure 4 on page 5) and 6 of the 7 EISs (see Figure 2 on page 4). Of the 15 projects for which NEPA budget data were reported, 4 EAs and none of the EISs were completed within budget. For the purposes of this report, NEPA process costs are defined as the costs that would not have been incurred except for the NEPA process. Direct costs are defined as the total dollars expended for NEPA support contractors. Indirect costs are defined as any other costs incurred, including total program office and field office Federal staff resources (person-years) and their expenses.

Of the 14 EAs for which direct cost data were reported, the median direct cost was $99,000, with a range of $8,000 to $550,000. Using the direct cost data gathered for both this period and the first four reporting periods (July 1 to June 30, 1995), the median direct cost for preparation of 61 EAs was $78,500 (average cost of $134,000).

Of the 5 EISs for which direct cost data were reported, the median direct cost was $700,000, with a range of $296,600 to $4,433,700. Using the direct cost data gathered for both this period and the first four reporting periods (July 1, 1994 to June 30, 1995), the median direct cost for the preparation of 15 EISs was $675,000 (average cost of $3.7 million).

It should be noted that direct cost data were provided for 55% of the EAs and 75% of the EISs completed during this 15-month period. The wide disparity between median and average costs typically reflects a few documents that have exceptionally high costs.

Total project costs were reported for eight EAs and two EISs. Of the EAs, the NEPA process costs reported represented an average of 1.1% of the total project costs, with a range of .1% to 4.2%. Of the EISs, the NEPA process costs reported represented .01% and 6.6% of the total project costs.

REPORTING INDIRECT COSTS

During the recent Field National Environmental Policy Act (NEPA) Compliance Officers Workshop (Albuquerque,
New Mexico, August 16-17, 1995), the NEPA Compliance Officers recommended that the Lessons Learned questionnaire be revised to reflect only direct costs for contractors.

In response to this, the Office of NEPA Policy and Assistance distributed a memorandum to Field NEPA Compliance Officer Workshop participants and to the Department's NEPA community on November 1, 1995. This memorandum indicated that, although indirect costs may be difficult to estimate accurately, they could represent a significant resource expenditure for NEPA documents, particularly when NEPA documents are prepared predominantly with in-house resources. Documents prepared
in-house may account for an increasing number of projects as funds for NEPA preparation become tighter.

Accordingly, the Lessons Learned questionnaire is being revised so that NEPA Document Managers may report only direct costs when a rough estimate indicates that indirect costs are less than 10% of the total document preparation costs. The revised questionnaire will be distributed in early 1996.

The revised questionnaire will conform with cost tracking and reporting guidance to be included in Phase II of the NEPA Contracting Reform Guidance to be issued later this month. Please use the current questionnaire until the new version is made available.

Completion Time and Cost Information for EISs

Albuquerque Operations Office

1. Dual Axis Radiographic Hydrodynamic Test Facility, Los Alamos National Laboratory, Los Alamos, New MexicoBonneville Power Administration
2. Bonneville Power Administration, Puget Power and Light Northwest Washington Transmission Project, Washington
3. Business Plan, Bonneville Power Administration, Washington
4. Columbia Wind Farm, Goldendale, Washington
5. Resource Contingency Program, Hermiston Power Project, Oregon
6. Washington Windplant, Goldendale, Washington
   Savannah River Operations Office
7. Waste Management at the Savannah River Site, Aiken, South Carolina

*Indirect costs not reported.
** Cost data not reported.

Albuquerque Operations Office

- **Uranium Lease Management Program, Colorado**
- **Construction and Operation of Environmental, Safety and Health Analytical Laboratory, Pantex Plant, Amarillo, Texas**
- **High Explosive Waste Water Treatment Facility at LANL, Los Alamos, New Mexico**
- **Decontamination and Dismantlement of the Pinellas Plant, Pinellas, Florida Bonneville Power Administration**
- **South Fork Snake River Project/Palisades Wildlife Mitigation Project, Idaho Chicago Operations Office**
- **Advanced Technology Research Center, Oklahoma State University, Stillwater, Oklahoma**
- **Adoption of United States Department of Agriculture EA on Management of Wildlife Causing Damage at Argonne National Laboratory - East, Chicago, Illinois**
- **Proposed Upgrade of Waste Storage Facilities at Argonne National Laboratory-East, Chicago, Illinois**
  Nevada Operations Office
- **Solid Waste Disposal Areas 9 and 23, Nevada Test Site, Nye County, NevadaOak Ridge Operations Office**
- **Proposed Replacement and Operation of the Anhydrous Hydrogen Fluoride Supply and Fluidized-Bed Chemical Processing Systems at Building 9212 at the Y-12 Plant, Oak Ridge, Tennessee**
- **Off-Site Disposal of K-25 Pond Waste, Oak Ridge, Tennessee**
- **Storage of Excess Highly Enriched Uranium at Y-12 Plant, Oak Ridge, Tennessee**
- **High Flux Isotope Reactor Spent Fuel Reracking Program, Oak Ridge, Tennessee Oakland Operations Office**
- **Decontamination and Decommissioning of the General Atomics Hot Cell Facility, San Diego, California**
- **Operation of the Dublit III Tokamak Research Facility and Related Research at the General Atomics Plant, La Jolla, California**
- **Construction and Operation of an Office Building at the Stanford Linear Accelerator Center, Stanford, California**
- **Proposed Induction Linac System Experiments in Building 51B at Lawrence Berkeley National Laboratory, Berkeley, California Ohio Field Office**

- **Construction and Operation of a Contaminated Soil Conservation Area, West Valley Demonstration Project, West Valley, New York**
- **Mound Plant Glass Melter Project, Miamisburg, Ohio Pittsburgh Energy Technology Center**
- **Commercial Demonstration of the NOXSO SO2/NOX Removal Flue Gas Cleanup System, Newburgh, Indiana and Charleston, Tennessee**
- **Liquid Phase Methanol Demonstration Project, Kingsport, Sullivan County, Tennessee**
- **Calderon Cokemaking Process Demonstration Project, Alliance, Ohio Richland Operations Office**
- **Relocation of TRIGA Reactor Irradiated Fuel from 308 Building to the 200 West Area, Hanford Site, Richland, Washington**
- **200 Area Sanitary Sewer System, Hanford Site, Richland, Washington**
- **Transfer of Plutonium Uranium Extraction Plant and N Reactor Irradiated Fuel for Encapsulation and Storage at the K Basin, Hanford Site, Richland, Washington Savannah River Operations Office**
- **Natural Fluctuation of Water Level in Par Pond and Reduced Waste Flow in Steel Creek below L Lake at the Savannah River Site, Aiken, South Carolina**
- **Construction and Operation of the Health Physics Site Support Facility at the Savannah River Site, Aiken, South Carolina**
- **Savannah River Site Low-Level Radioactive Waste Volume Reduction, Savannah River Site, Aiken, South Carolina**
- **Independent Waste Handling Facility, 211-F, at the Savannah River Site, Aiken, South Carolina**

*This EA was adopted from the U.S. Department of Agriculture.**

No cost data were reported.

Environmental Assessments

NEPA DOCUMENT CONTENT

In response to our request that respondents describe specific problems and innovative approaches used regarding 1) determining reasonable alternatives, 2) data collection, and 3) impact analysis, a wide variety of helpful information was provided, as discussed below.

Determining Reasonable Alternatives: A respondent reported that numerous meetings with Headquarters, onsite personnel and stakeholders helped define the broad scope of the EIS. Personal meetings and training with stakeholders were very effective, as were concurrent scoping sessions held on three related EISs.

One respondent commented that the main innovative internal scoping approach, which actually encompassed all aspects of content, was to establish an interdisciplinary team. The individuals on the interdisciplinary team each brought a unique perspective to the document.

Another respondent noted the value of public meetings in which all involved Federal agencies participated. These meetings were successful because the public could talk to everyone in the same place.

Data Collection: A respondent reported that a team of Management and Operating contractor technical

specialists was moved to the EIS contractor facility to develop data. This process expedited meeting the EIS contractor's data requests because the flow of information was immediate.

Another respondent noted that obtaining needed data from a U.S. Forest Service/ Bureau of Land Management Plan saved time and money. Additionally, early communication to DOE participants concerning data needs for NEPA analyses facilitated data collection.

Impact Analysis: One respondent described an efficient impact analysis process for each resource category

(e.g., ecological resources) that was used in preparing the Savannah River Waste Management EIS. The process consisted of several steps: developing 30-year minimum, expected, and maximum waste forecasts; screening more than 80 and selecting approximately 20 reasonable waste management technologies; developing treatment, storage, and disposal configurations based on alternative waste management strategies; and describing the affected environment for each resource category. Assessment techniques varied according to the resource category. Impacts to geological, ecological, land use, and cultural resources were evaluated qualitatively and compared among the various combinations of alternatives and waste forecasts. The effect to a particular resource was measured as the amount of land occupied by the resource that would be required for waste management activities under each alternative/waste forecast.

Another respondent noted reduced costs and improved efficiency when cumulative impact studies were shared with another adjacent wind power project.

THE DOCUMENT PREPARATION PROCESS

Respondents noted the following as measures that facilitated effective DOE teamwork:

- regular weekly meetings of a small core group to monitor strategy and the need for changes, as well as analytical problems or processing glitches; willingness of Headquarters Defense Programs and General Counsel staff to offer advice and comments on EAs; close coordination between legal counsel and Document Managers enhanced by electronic technology.
- using e-mail to transfer draft documents and comments, phone conference call minutes, and notification of the NEPA Compliance Officer of the status of the document preparation process; an EA reviewer working closely with the Document Manager to mark up the draft EA sections that needed revisions instead of generating a list of comments on the draft EA and formally transmitting them to the EA writer; and
- informal communications among the review team members enabling the EA writer to develop close working relationships with the EA reviewers. One factor that hampered DOE teamwork was the change of DOE review team personnel throughout the review cycle, which caused a lack of continuity and subsequent inefficiency in document preparation, comment resolution and document completion.

Regarding the facilitation of effective teamwork between DOE and its support contractors, one respondent described guidelines clarifying where DOE and contractor responsibilities began and ended, and appreciated contractors who informed DOE personnel when the personnel moved beyond what the contractors considered their own responsibilities.

Respondents also commented on factors that inhibited effective teamwork between DOE and contractors. One respondent noted that contractors received conflicting comments from different DOE

customers and that comments were received after the EA had already gone to reproduction. “It would have been helpful to have a single DOE coordination point where comments could have been reviewed for redundancy and conflicting direction before being forwarded to the contractor.” [Editor’s Note: This function is a part of the NEPA Document Manager’s responsibilities.]

Another respondent commented on the difficulties in communicating through the Management and Operating contractor when what was needed was to talk to the contractor who wrote the EA. The respondent noted, however, that the situation improved “when formalities were dispensed with and DOE began talking directly to the EA writer.”

Respondents indicated the following as successful aspects of the public participation process:

- making project information readily available to the public in a special place in the facility Reading Room;
- meeting with small groups of people using an open house type of public meeting;
- well-attended joint public meeting held by the U.S. Department of Agriculture (USDA) and DOE to take comments on a draft EA, addressing all comments in the final EA, which was fairly well received, and positive press reports on the USDA/DOE process;
- supplying EAs to libraries and informing the public by public notice that an EA was at a particular library;
- placing an advertisement in the newspaper; and
- holding a well-attended open house at the project site, thereby allowing people to talk on an informal basis and to find out about the project.

Unsuccessful aspects of the public participation process included the DOE’s inability to generate good attendance at public meetings; the lack of formal time limits established for agency response; and public notices published in newspapers that seemed to go unnoticed.

Twelve respondents stated that the public responded favorably to the NEPA process, while four reported negative public reactions. Nine respondents reported minimal or no public response to the NEPA process. One respondent commented: “The public liked the early involvement, informal and friendly public meetings, being kept informed during the EIS process, the different ways they could give their comments, and TV commercials.” Another respondent noted, “Some members of the public were concerned that the process had cost too much and that the EIS was not meaningful or necessary. Relatively few public comments were received. The EIS was not very successful as a public communications tool.”

Regarding the availability of adequate resources to carry out the NEPA process, 10 respondents indicated that this was a problem, while 35 respondents stated that resource availability was not a problem. Deficiencies noted by one respondent included the following: “Personnel were always shifting from the Waste Management EIS to their normal job, which took precedence. Dedicated personnel who have EIS priority or a floating schedule for EIS completion are needed. Funds were insufficient and there was always a scramble to determine how and where to get funding. A computer capable of handling the calculations for the cost and emissions was not available.” Another respondent commented: “There were no dedicated staff until well into the NEPA process. Competition for qualified people on other higher priority projects was a problem. Initial estimates for the project were accurate, but the actual budget was considerably less than what was required.”

Several respondents identified needs for guidance. One respondent noted: “Confusion existed regarding ‘Green Book’ guidance on accident analysis, specifically regarding the meteorological conditions to be

assumed in an accident analysis to be reported in a DOE NEPA document. Existing guidance should be revised." [Editor's Note: The Office of NEPA Policy and Assistance is working on enhanced accident analysis guidance. Also see related comments on

page 15 of this Report.] The respondent also noted the need for further guidance on the assessment of cumulative impacts. Specific guidance needs were identified for the sufficiency of assessing cumulative impacts for only one EIS alternative, the scope of the "other past, present, and reasonably foreseeable future actions" that must be addressed in assembling cumulative impacts, and determining which sources of information on possible future DOE actions should be used as a basis for identifying "reasonably foreseeable" future DOE actions.

Another respondent disclaimed further NEPA guidance needs explaining "...perhaps that was because most of the team and the NCO attended the onsite NEPA training provided last year. Such a course might be worthwhile for all future NEPA teams. Not only did we learn how to avoid doing 'NEPA by rumor,' in general our project was the in-class example which provided us with invaluable resources and strategies."

EFFECTIVENESS OF THE NEPA PROCESS

Click Here for Picture
[0=Not Effective; 5=Highly Effective]

When asked how the NEPA process was used in agency planning and decision making, 32 respondents stated that the process was useful, in the following ways:

- to establish the preferred alternative, which caused real thinking about the direction of the EIS because of the analysis, and led to very focused decision making:
- to decide which treatment process was best from both a technical and cost perspective;
- to focus on and resolve issues with the public and Indian tribes;
- to identify and mitigate potential adverse impacts to the environment (process results will be integrated into future transmission plans);
- to answer a question about whether to continue a leasing program and also resulted in positive public awareness of the program;
- to examine all alternatives;
- as a driving force behind key environmental controls (or modifications) for the project - NEPA made the project more conservative than environmentally risky; and
- to identify the need for additional air pollution control equipment.

The adjacent figure illustrates how respondents rated the effectiveness of the NEPA process with respect to influence on decision making on a scale of 0 to 5 ("0" viewing the NEPA process as "another permit" for a decision already made, and "5" using NEPA as an important planning tool).

One respondent commented that the NEPA process was not effective for a particular project because the EA analysis only helped to support a decision that had, informally, already been made. The NEPA process was described by one respondent as "a regulatory device similar to a permit."

One respondent who gave the NEPA process a high effectiveness rating stated: "NEPA allowed us to focus on the public access and tribal/use issues that made the project objectionable to some groups, and resolve those issues."

Another such respondent noted that integrating the NEPA and applicable State Environmental Policy Act requirements was extremely effective in influencing and speeding the overall environmental review process. Additionally, a respondent considered the NEPA process to be effective because "not only did the NEPA process help DOE make a decision about the leasing program, the decision was made with regard to effects on the environment and public concerns."

One respondent suggested that "NEPA needs to be a true part of the upfront planning in projects taken on by DOE. Full consideration of the possible negative effects that may occur due to a new project need to be explored at the onset." Another respondent stated: "The project was Congressionally directed - DOE didn't initiate any action to request or support the project. Congress directed DOE to make funds available for the project. The NEPA process was simply just another permit for a decision already made by Congress."

OTHER LESSONS LEARNED

Some respondents offered the following miscellaneous comments regarding lessons learned in the process of completing NEPA documentation:

A forceful politically active public can at times request solutions that have greater environmental impact or which cause less vocal citizens to be impacted (e.g., the "not in my backyard (NIMBY)" syndrome). The NEPA process provides a means of objectively reviewing and reporting information. NEPA can be used to reveal those conditions and lead to better overall decisions.

Develop an appropriate tiering strategy for the decisions and actions that lay ahead of the agency. Find the right level of detail for the decisions at hand.

Draft EIS comments received from the Department of Interior after the final EIS had been sent to the printer had to be addressed, which required publication of an addendum to the final EIS. Whenever an agency that has jurisdiction by law or special expertise regarding impacts does not respond during the normal comment period, it would be prudent to contact them regarding their intent to comment before finalizing the document.

An "independent" review of the draft NEPA document was arranged with non-site (objective party) DOE NEPA practioners, who assisted in identifying areas in the draft document that could be strengthened.

Maximize use of teleconferences or video conferencing. Assure team is well represented by various disciplines, but minimize the number of conferences as appropriate to reduce cost and coordination efforts.

A well-defined procedure is needed to keep the document on schedule. Procedures cannot be invented as the process progresses from start to finish.

FEATURE STORIES

Waste Isolation Pilot Plant Supplemental Environmental Impact Statement (SEIS):

Turning a Public Participation Blunder into a Success

by Harold Johnson, NEPA Compliance Officer, Carlsbad Area Office

DISCUSSION

The Carlsbad Area Office demonstrated its sensitivity to stakeholder concerns by providing a previously unscheduled opportunity to comment on the scope of the Waste Isolation Pilot Plant SEIS, in Broomfield, Colorado on October 11, 1995. Several interested groups felt they had not been afforded an adequate opportunity to participate in the originally-scheduled scoping meeting for this project because two other DOE meetings and a Rocky Flats Citizens Advisory Board subcommittee meeting had been scheduled the same day. To correct this blunder, Carlsbad area staff coordinated with local interest groups and the Rocky Flats Office to set up the October 11 meeting, scheduling it to avoid conflicts with other meetings and to suit the schedules of the interest groups.

The meeting was held at the Broomfield Colorado Community Center, a setting in which the stakeholders suggested they would be more comfortable than the customary conference facilities. The setting was informal. DOE staff greeted the stakeholders at the door, and explained the meeting format. Fact sheets and forms for written comments were on a table immediately inside the door.

The DOE representatives included the NEPA Compliance Officer (who chaired the meeting), a public affairs staff member as a facilitator, a transportation expert (transportation was one of the major concerns identified by stakeholders), and note takers. DOE personnel and approximately 20 stakeholders sat interspersed around a large table.

The chairperson opened the meeting by introducing the DOE participants, explained the planned scope of the SEIS, and stated that the purpose of the meeting was to receive comments. At the suggestion of one of the stakeholders, the stakeholder participants introduced themselves and stated what they wanted to gain from the meeting. The chairperson announced that, to ensure all present an opportunity to comment, individual comments would be limited to 10 minutes. Commenting began and proceeded for two hours. DOE representatives asked clarifying questions and answered questions from the stakeholders. While the interaction did not identify new issues or alternatives, it did focus the Carlsbad Area Office's attention on aspects of issues of particular concern to the stakeholders in the Denver area, and will enable them to more clearly address those concerns in the SEIS. At the end of the meeting, several stakeholders expressed their appreciation that DOE had returned to meet with them.

LESSONS LEARNED

The lessons learned from this experience were numerous.

Public Coordination. Identifying and working with interest groups in the vicinity of NEPA meetings is beneficial. The groups will work to get people to come to the meeting, and the people who attend from these groups are likely to represent a wide range of opinion within the community. The local groups helped identify a meeting facility that was comfortable and familiar to them, and much less costly than the usual hotel forum. Community centers or (if a large turnout is anticipated) local school lunchrooms or auditoriums are also comfortable and less costly meeting places.

Appropriate Facilites. Many people come to NEPA meetings as much to hear what others have to say as to make comments themselves. People are less likely to make the same comment if they can hear other people’s comments. A small meeting room without a sound system may suffice if everyone sits around the same table, but for larger meetings some type of sound system is likely to be needed.

Objectivity. Don't try to "sell" the proposed action at the meeting; rather take comments and answer questions. Not only does promoting one alternative call DOE's objectivity into question, it may also

offend some stakeholders and lead to an argumentative atmosphere.

Respect. Treat stakeholders as neighbors. Sit at the same table and dress as they do (no ties on most occasions). Listen to them with respect and show that you are listening by asking them to clarify points you don't understand, or to identify their sources of information. Don't argue with them.

Dual Axis Radiographic Hydrodynamic Test Facility EIS

A Case Study by Diana Webb, NEPA Document Manager, Los Alamos National Laboratory

INTRODUCTION

The Department of Energy (DOE) began conceptual design for the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility at its Los Alamos National Laboratory (LANL) in the early 1980s as part of its nuclear weapons research and design mission. DOE prepared several environmental reviews, intended to satisfy the requirements of the National Environmental Policy Act (NEPA), throughout the 1980s. In 1988, Congress appropriated funding for DARHT, and DOE began construction in 1994. In October 1994, a coalition of citizen interest groups asked why no environmental impact statement (EIS) had been prepared prior to start of construction. In November 1994, DOE issued its Notice of Intent to prepare an EIS for the (by then partially-constructed) facility; at essentially the same time, stakeholders filed a lawsuit seeking an injunction against further construction until, among other things, the EIS was completed. In January 1995, an injunction was granted. DOE completed the EIS in August 1995 and issued its Record of Decision in October 1995. DOE has asked that the injunction be lifted and the court is considering this matter.

The "lessons learned" from the DARHT EIS project fall into three categories: 1) how DOE found itself in the predicament of having started construction of a major project without, in retrospect, an adequate NEPA review; 2) how DOE prepared a high-quality environmental impact statement in 10 months; and 3) how DOE used this NEPA process to support its role of environmental stewardship.

PAST ENVIRONMENTAL REVIEW FOR DARHT

Background. DOE's environmental review of DARHT began soon after preliminary design was started in the early 1980s. At that time, for projects that were clearly expected to result in insignificant environmental impacts, DOE's NEPA procedures provided that a memorandum to file (MTF) could be written and no further NEPA review was required. Unlike an EA, a MTF did not identify alternatives to the proposed action. In 1990, DOE rescinded the use of MTFs as NEPA reviews, partly because the agency had accumulated enough NEPA history to expand its list of CXs, and partly because DOE felt that MTFs were being used improperly in lieu of EAs.

Earlier Reviews for DARHT. The DARHT facility of the 1990s is far different from the DARHT facility envisioned in the early 1980's. Initially, plans called for a small x-ray machine, about the size of a semi-truck trailer, to be installed near an existing small x-ray machine. DOE/AL executed a corresponding MTF in 1983 after seeking DOE/Headquarters concurrence. In 1984 the project was revised to provide for a new stand-alone facility at a different location, and procuring two new x-ray machines instead of using an existing machine. One new x-ray machine was to be fixed, and the other mounted on a moveable "carriage" on a track; both would be about the same size as the 1982 version. The MTF was revised to describe the new project and DOE concluded that the impacts would be no different than originally discussed. In 1987 the project was again revised to include linear induction technology to power the two x-ray machines; the machines would be housed in halls about 250 feet long

at a slightly different location. DOE again determined that the impacts were substantially unchanged. In response to a DOE/Headquarters request to all field offices, in

1989 DOE/AL reviewed all then-recent MTFs and confirmed that the MTF for DARHT was appropriate and that no further NEPA review was required. In April 1994, DOE began constructing the two 250 foot-long, 3-story accelerator halls and procuring and assembling accelerator equipment.

Lessons Learned. In 1990, DOE rescinded the use of MTFs as a NEPA review device because it was often misapplied and did not allow for analysis of alternatives, "the heart of the NEPA process." A second lesson applies to reviews done under current procedures, and relates to changes in the proposed action. DARHT is a classic case of incremental changes to an original proposal leading to a vastly different project from that originally envisioned and reviewed. For various reasons, DOE often takes many years to implement a project. While NEPA review should properly be done early enough in the process to assist with agency decision making, in the event of a project delay or incremental change, DOE should take a last look before implementing a project to ensure that the NEPA review is still adequate.

DARHT EIS

Background. In late October 1994, three citizens groups wrote to the Secretary of Energy requesting, among other things, that construction be halted until DOE prepared an EIS on the DARHT facility. After considering the options, and noting that if the project were starting anew that an EIS would probably be prepared, DOE decided in mid-November 1994 to prepare an EIS. To preserve project schedules, however, DOE decided to continue with construction while the EIS was underway. However, in the interests of expediency, DOE decided to prepare the DARHT EIS as quickly as possible and developed an aggressive 11-month schedule to reach a ROD.

On November 16, 1994, two citizens groups filed suit to enjoin DOE from proceeding with the DARHT project until it completed an EIS and subsequent ROD. On November 22, 1994, DOE published its Notice of Intent to prepare the DARHT EIS in the

Federal Register and began the public scoping process for the EIS. The public scoping period ran until January 10, 1995, about two weeks longer than the minimum 30 days to accommodate the holiday break. On January 27, 1995, the Court issued a preliminary injunction stopping DOE from further construction and related work, such as procurement, pending completion of the DARHT EIS and ROD. DOE immediately decided to shave an additional six weeks off of the already-tight EIS schedule (some of this time was eventually added back to the schedule).

Before the DARHT EIS, no EIS had been prepared for a project at LANL for over 15 years. A Sitewide EIS had been completed in 1979, but the environmental baseline and facility descriptions were sketchy and out-of-date. Although many EAs had been prepared for projects at LANL, and a data-collection effort had begun for a new Sitewide EIS, no environmental baseline information had been compiled for the DARHT project area. Therefore, the DARHT EIS had to be prepared from a blank slate.

Organization. The EIS project was managed from DOE/LAAO with general oversight from DOE/AL. Support services were provided by Battelle Memorial Institute through its Albuquerque office and its Pacific Northwest Laboratory (PNL) in Richland, Washington. The DOE Document Manager set up a matrix organization: LANL prepared non-analytical baseline project and environmental information; DOE prepared policy material, such as the purpose and need chapter; PNL provided environmental analysis; and Battelle/AL provided overall project management support and document integration.

Importance of the Project. DOE had determined that it needed to achieve the capability provided by DARHT as quickly as possible; therefore, DOE needed to make the most efficient use of its time to prepare the DARHT EIS as quickly as possible. At the same time, in an era of budget cuts, DOE could not afford to spend a great deal of money on preparing the EIS.

Lessons Learned. The DARHT EIS is considered by most reviewers to be a quality document. The EPA gave the draft EIS a "Lack of Objections" rating and wrote a letter in support of the final EIS. The Department of Justice, in preparing material to request that the injunction be dissolved, indicated that the final EIS and its accompanying comment response document were more than adequate. To achieve the goal of preparing a quality EIS on the DARHT facility in a very short time DOE had to make every day count, and take no missteps that would cause delays. To accomplish this, DOE put into place many recommendations from the various NEPA quality process management teams from the past few years.

Teamwork. The success of the DARHT EIS is one of teamwork. Over the course of preparing the EIS, over 100 DOE and laboratory people worked on the document at some point in time, in addition to the support services contract staff. The matrix organization served to cut through management layers to focus expertise on the appropriate subject matter at the appropriate time. The collegial approach built trust among participants, and led to a sense of ownership of the process and the document by all concerned. This approach also integrated the NEPA process with the DOE and LANL program and project management elements of DARHT.

Concurrent Review. The operations office and Headquarters staff review was collapsed into a one-week on-site concurrent review for the draft EIS instead of proceeding in sequence. DOE/AL and DOE/Headquarters were willing to commit experienced reviewers to provide an intensive, quick turn-around effort. Battelle provided real-time revisions, and the PNL and LANL subject matter experts were available for ongoing "breakout sessions" to discuss specific topics with reviewers. Using this approach, the team revised the entire text twice in one week.

Project Office. The on-site team (including DOE, LANL, and Battelle personnel) worked in a dedicated office space away from their regular office assignments. This allowed people to focus on the project, provided opportunity for frequent interactions, and established a recognized place for dispute resolution. As people from different organizations worked closely together, they got to know and trust each other.

Process Ownership. The Document Manager was given the responsibility for making sure that a quality document was produced to meet the schedule. To make this happen, the Document Manager had to "own," rather than "administer," the process. This entailed early identification of problems, and quickly identifying and pursuing alternative approaches to keep the project on track.

DOE as Author. DOE was primary author of all policy sections, such as the purpose and need chapter, which accounted for about one-third of the document. This sped review and approval of the document. It is unreasonable to expect that an external support services contractor could adequately describe internal policy issues unique to DOE without a great deal of direction and review.

Classified Material. DOE prepared a classified supplement to the DARHT EIS. DOE took the additional step of making the draft classified supplement available to cleared reviewers of other agencies responsible for protecting the health and welfare of the general population; in this case, the state, the regional office as well as the Headquarters office of the EPA, and various American Indian tribal governments. DOE issued an unclassified summary of the environmental impacts from the draft classified supplement, and included these in the final EIS. This helped to dispel other agency concerns regarding the project.

Contracting. To meet the aggressive schedule, DOE determined that there was no time to put the EIS contract out for competitive bid, and no justification to go through a sole source contract. DOE was able to task Battelle for EIS support services through a Pacific Northwest National Laboratory management contract. Although this arrangement was very successful, to meet the tight timeframe for the DARHT EIS, DOE would have more flexibility over the long run by establishing EIS contracting mechanisms ahead of time with more than one source, in case a given contractor were unavailable to accept a specific job.

Budget. DOE was able to keep costs well under the initial budget estimate because the DARHT EIS was prepared so quickly, DOE made efficient use of LANL and DOE personnel, and the support services contractor was willing to take cost-saving measures to stay within budget.

Quality Driver. In spite of extremely tight schedules, preparation of the DARHT EIS was quality-driven, not schedule-driven. In every case, schedule took second priority to "doing it right." This helped build trust in the process. However, the team adopted the DP tenet of "better is the enemy of good enough" in order to come to timely closure on content and editorial matters.

ENVIRONMENTAL STEWARDSHIP

Background. In addition to the procedural provisions that give rise to the EIS process, NEPA promotes efforts to prevent damage to the environment. The DARHT project provided means for DOE to provide leadership in environmental stewardship in two specific areas: cultural resource management, and threatened and endangered species habitat management.

With about 2,000 documented cultural resource sites, LANL is rich in prehistoric ruins, including early American Indian pueblos. DOE was aware that cultural resource sites were in the vicinity of the DARHT and specifically oriented the facility to protect one especially important site. LANL archaeologists had consulted with local tribes regarding other cultural resource sites near DARHT, and DOE and LANL have begun regular consultations with local tribes to ensure protection and access to culturally-important sites under the American Indian Religious Freedom Act.

The day that the draft DARHT EIS was issued, during ongoing field surveys LANL biologists discovered a pair of Mexican spotted owls in the vicinity of the DARHT facility. Accordingly, DOE and LANL carried out the entire Endangered Species Act consultation process with the U.S. Fish and Wildlife Service (USFWS) during the already-minimal public comment period on the draft EIS. By working closely together, which had not occurred in the past, DOE and USFWS were able to agree on specific mitigation measures to protect threatened and endangered species. One key provision was an agreement to prepare a laboratory-wide management plan to protect all threatened and endangered species. (During the consultation process, the owls successfully raised two owlets.)

Lessons Learned. The DARHT EIS process provided a successful vehicle for interagency coordination on environmental stewardship issues affecting LANL. In addition, the DOE landlord program office, in this case Defense Programs (DP), acknowledged that the benefit of environmental stewardship activities accrue to the site as a whole, although they may be triggered by a specific project. To ensure continuity of focus and funding, DP included key environmental stewardship provisions in the DARHT ROD and carried these through the Mitigation Action Plan. The result will be better management of these resources across the entire site, and better relations with sister agencies.

UPDATES FROM THE OFFICE OF NEPA POLICY AND ASSISTANCE

The Need for Consistency in Accident Analyses

An important inconsistency in the accident analyses of two draft environmental impact statements was discovered shortly before these high-visibility documents were to be issued within a month of each other during this quarterly reporting period. Although both were prepared by the same contractor and examined, in part, the management of the same type of material in the same facility, the documents were prepared with substantially different estimated consequences to members of the public from the maximum reasonably foreseeable facility accident. One document based the accident analysis on an existing Safety Analysis Report while the other postulated new accident scenarios and made different assumptions regarding source term and meteorological conditions.

Although both results may be technically defensible, the analyses, ideally, should have been identical. The proposed operation of the facility at issue is highly controversial and such an apparent inconsistency might have posed problems. Ultimately, the Department stood behind both sets of results and provided an explanation of the differences in the later document.

This example highlights the need for NEPA document preparers to coordinate with and draw upon related work in progress, or that has been recently completed, to promote efficiency and to ensure an appropriate degree of consistency. Regarding accident analyses please note that the Office of NEPA Policy and Assistance is working on enhanced accident analysis guidance.

Secretarial Policy on Enhanced Public Involvement in the EA Process -- a Reminder

Based on information provided to the Office of NEPA Policy and Assistance, it appears that Field Offices often do not provide the public enhanced opportunities to participate in the EA process that are required by the June 1994 Secretarial Policy Statement on NEPA.

Section V.A. of the Secretarial NEPA Policy requires NEPA Document Managers to take appropriate action to encourage and facilitate public participation throughout the NEPA process. Section V.B. of the Policy states: "**Whenever possible**, the Department of Energy will provide enhanced opportunities for public involvement in the environmental assessment process, which **ordinarily** will include **at a minimum**:

1. Early public notice of the Department of Energy's intent to prepare an environmental assessment (concurrent with state/tribal notification); and
2. Opportunity for interested parties, on request, to review environmental assessments (concurrent with state/tribal review) prior to Department of Energy approval." (emphasis added)

A variety of methods may be used to meet the minimum requirements of the Secretarial Policy: publishing brief notices of the availability of EAs and information about proposed projects in local newspapers and various newsletters, providing information to public libraries, and discussing proposed projects and EAs at community meetings. Readers are encouraged to share their own experiences and suggestions.

Guidance on enhanced public involvement is available in Effective Public Participation under the National Environmental Policy Act, (also known as "the gold book") issued by the Office of NEPA Policy and Assistance in December 1994, and Questions and Answers on the Secretarial Policy Statement on the National Environmental Policy Act," (Qs & As) questions 42 through 44 issued by the Office of NEPA Policy and Assistance in June 1994.

Although this reminder focuses on meeting the minimum requirements of the Secretarial NEPA Policy, additional (beyond the minimum) public involvement opportunities are often appropriate. The response to question #43 in the Qs & As states: "these minimum opportunities for public involvement should always be appropriate absent extraordinary circumstances...The amount of any additional public involvement in an environmental assessment depends on the circumstances, including the potential impacts of the project, public interest in the project, and the similarity of the proposed action to others requiring preparation of an environmental impact statement." The Council on Environmental Quality NEPA regulation requires agencies to involve the public in the preparation of an environmental assessment "to the extent practicable" [40 CFR [[section]] 1501.4(b)], and points out that, "depending on the circumstances, this could include seeking input on the scope of the document (including alternatives and potential impacts), meetings, workshops, or document reviews."

Upcoming Changes to the Stakeholders Directory

We are revising the Directory of Potential Stakeholders for Department of Energy Actions under the National Environmental Policy Act (also known as "the yellow book") and will issue the Fifth Edition in January 1996. There will be several changes, but want to inform the Department's NEPA community of two of those now. First, the Occupational Safety and Health Administration (OSHA) has requested that we remove them from the Directory. Departmental elements should not routinely send copies of NEPA documents to OSHA for their review, unless OSHA specifically requests. Second, when providing NEPA documents to the State of Tennessee, send three copies to each of the two contacts listed in the Directory within the Tennessee Department of Environment and Conservation (Dodd Galbreath and Earl Leming). These primary contacts will then inform the Department by facsimile which of 13 secondary Tennessee Agency contacts should receive a copy of the document. Comments from the secondary contacts on Draft Environmental Impact Statements will be coordinated by the primary contacts listed in the Directory. Preapproval review comments on Environmental Assessments are coordinated on a case-by-case basis.

Document Distribution

Recent experience highlights two concerns regarding the distribution of NEPA documents. First, NEPA Document Managers should assure that all appropriate Federal agencies receive copies for review, especially agencies with jurisdiction by law [40 CFR 1021.301]. In one recent case, the Department was just barely able to forward a Draft EIS to agencies (that were mentioned in the Draft EIS as having jurisdiction, but were not sent copies of the document) in time that their reviews did not delay the project. Second, DOE has not consistently sent the Department of the Interior the number of copies of NEPA documents for review that they have requested. (The requested number varies with the location of the proposed action.) Interior's requested procedures are provided in the Directory of Potential Stakeholders for Department of Energy Actions under the National Environmental Policy Act (see above). Department of the Interior organizations frequently play significant roles in DOE’s plans and operations, and obtaining their timely comments on NEPA documents can be important to meeting our objectives.

LESSONS LEARNED QUESTIONS AND ANSWERS: Please remember that you may send questions to be answered in the Lessons Learned Report to:

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Office of NEPA Policy and Assistance (EH-42)
U.S. Department of Energy
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Washington, D.C. 20585

Telephone: 202-586-8397
Fax: 202-586-7031
E-mail: joanne.geroe@hq.doe.gov

REMINDER: Lessons Learned Questionnaires for all NEPA documents completed during the first quarter of FY 96 (October 1, 1995 to December 31, 1995) should be submitted as soon as possible after document completion, but no later than February 1, 1996. (Fax: 202-586-7031) The Lessons Learned Questionnaire is now available on the DOE NEPA Web [http://www.eh.doe.gov/nepa] on the Internet.

EISs COMPLETED BETWEEN JULY 1 AND SEPTEMBER 30, 1995

EIS (Title and Document Number)	Field Office	Program Office
Dual Axis Radiographic Hydrodynamic Test Facility, Los Alamos National Laboratory, Los Alamos, New Mexico DOE/EIS-0228	Albuquerque Operations Office	Defense Programs
Bonneville Power Administration, Puget Power and Light Northwest Washington Transmission Project, Washington DOE/EIS-0173	_____	Bonneville Power Administration
Business Plan, Bonneville Power Administration, Washington DOE/EIS-0183*	_____	Bonneville Power Administration
Columbia Wind Farm, Goldendale, Washington DOE/EIS-0206	_____	Bonneville Power Administration
Resource Contingency Program, Hermiston Power Project, Oregon DOE/EIS-0230	_____	Bonneville Power Administration

Washington Windplant, Goldendale, Washington DOE/EIS-0205		Bonneville Power Administration
Waste Management at the Savannah River Site, Aiken, South Carolina DOE/EIS-0217	Savannah River Operations Office	Environmental Management

ENVIRONMENTAL PROTECTION AGENCY (EPA) RATING DEFINITIONS:

Environmental Impact of the Action

LO -- Lack of Objections

EC -- Environmental Concerns

EO -- Environmental Objections

EU -- Environmentally Unsatisfactory

Adequacy of the Impact Statement

Category 1 -- Adequate

Category 2 -- Insufficient Information

Category 3 -- Inadequate

***** This EIS was completed during the third quarter of 1995, but was omitted from the last Lessons Learned Report. Therefore, it is being included in this report.

****** As of December 1, 1995, EPA has not provided a rating.

EAs COMPLETED BETWEEN JULY 1 AND SEPTEMBER 30, 1995

EA (Title and Document Number)	Field Office	Prog
Uranium Lease Management Program, Colorado DOE/EA-1037	Albuquerque Operations Office, Grand Junction Project Office	Environm Manageme
Construction and Operation of Environmental, Safety and Health	Albuquerque Operations Office, Amarillo Area Office	Defense

Analytical Laboratory, Pantex Plant, Amarillo, Texas DOE/EA-0970		
High Explosive Waste Water Treatment Facility at LANL, Los Alamos, New Mexico DOE/EA-1100	Albuquerque Operations Office, Los Alamos Area Office	Environm Manageme
Decontamination and Dismantlement of the Pinellas Plant, Pinellas, Florida DOE/EA-1092	Albuquerque Operations Office, Pinellas Area Office	Environm Manageme
South Fork Snake River Project/Palisades Wildlife Mitigation Project, Idaho DOE/EA-0956	_____	Bonnevil Administ
Advanced Technology Research Center, Oklahoma State University, Stillwater, Oklahoma DOE/EA-0936	Chicago Operations Office	Energy R
Adoption of United States Department of Agriculture EA on Management of Wildlife Causing Damage at Argonne National Laboratory - East, Chicago, Illinois DOE/EA-1128	Chicago Operations Office	Energy R
Proposed Upgrade of Waste Storage Facilities at Argonne National Laboratory-East, Chicago, Illinois DOE/EA-1073	Chicago Operations Office	Environm Manageme
Solid Waste Disposal Areas 9 and 23, Nevada Test Site, Nye County, Nevada DOE/EA-1097	Nevada Operations Office	Waste Ma
Proposed Replacement and Operation of the Anhydrous Hydrogen Fluoride	Oak Ridge Operations Office	Defense

Supply and Fluidized-Bed Chemical Processing Systems at Building 9212 at the Y-12 Plant, Oak Ridge, Tennessee DOE/EA-1049		
Off-Site Disposal of K-25 Pond Waste, Oak Ridge, Tennessee DOE/EA-0966	Oak Ridge Operations Office	Environm Manageme
Storage of Excess Highly Enriched Uranium at Y-12 Plant, Oak Ridge, Tennessee DOE/EA-0929	Oak Ridge Operations Office	Defense
High Flux Isotope Reactor Spent Fuel Reracking Program, Oak Ridge, Tennessee DOE/EA-0900	Oak Ridge Operations Office	Nuclear
Decontamination and Decommissioning of the General Atomics Hot Cell Facility, San Diego, California DOE/EA-1053	Oakland Operations Office	Environm Manageme
Operation of the Dublit III Tokamak Research Facility and Related Research at the General Atomics Plant, La Jolla, California DOE/EA-1076	Oakland Operations Office	Energy R
Construction and Operation of an Office Building at the Stanford Linear Accelerator Center, Stanford, California DOE/EA-1107	Oakland Operations Office	Energy R
Proposed Induction Linac System Experiments in Building 51B at Lawrence Berkeley National Laboratory, Berkeley, California	Oakland Operations Office	Energy R

DOE/EA-1087		
Construction and Operation of a Contaminated Soil Conservation Area, West Valley Demonstration Project, West Valley, New York	Ohio Field Office	Environm Manageme
DOE/EA-1072		
Mound Plant Glass Melter Project, Miamisburg, Ohio DOE/EA-0821	Ohio Field Office	Environm Manageme
Commercial Demonstration of the NOXSO SO2/NOX Removal Flue Gas Cleanup System, Newburgh, Indiana and Charleston, Tennessee	Pittsburgh Energy Technology Center	Fossil E
DOE/EA-1080		
Liquid Phase Methanol Demonstration Project, Kingsport, Sullivan County, Tennessee DOE/EA-1029	Pittsburgh Energy Technology Center	Fossil E
Calderon Cokemaking Process Demonstration Project, Alliance, Ohio DOE/EA-1091	Pittsburgh Energy Technology Center	Fossil E
Relocation of TRIGA Reactor Irradiated Fuel from 308 Building to the 200 West Area, Hanford Site, Richland, Washington DOE/EA-0985	Richland Operations Office	Environm Manageme
200 Area Sanitary Sewer System, Hanford Site, Richland, Washington DOE/EA-0986	Richland Operations Office	Environm Manageme
Transfer of Plutonium Uranium Extraction Plant and N Reactor Irradiated Fuel for Encapsulation and Storage at the K Basin, Hanford	Richland Operations Office	Environm Manageme

Site, Richland, Washington DOE/EA-0988		
Natural Fluctuation of Water Level in Par Pond and Reduced Waste Flow in Steel Creek below L Lake at the Savannah River Site, Aiken, South Carolina DOE/EA-1070	Savannah River Operations Office	Environm Manageme
Construction and Operation of the Health Physics Site Support Facility at the Savannah River Site, Aiken, South Carolina DOE/EA-1022	Savannah River Operations Office	Environm Manageme
Savannah River Site Low-Level Radioactive Waste Volume Reduction, Savannah River Site, Aiken, South Carolina DOE/EA-1061	Savannah River Operations Office	Environm Manageme
Independent Waste Handling Facility, 211-F at the Savannah River Site, Aiken, South Carolina DOE/EA-1062	Savannah River Operations Office	Environm Manageme