NEPA

National Environmental Policy Act

LESSONS LEARNED

U.S. DEPARTMENT OF ENERGY QUARTERLY REPORT

June 1, 1999; Issue No. 19 For Second Quarter FY 1999

Consolidated Decision Ends "Tritium Trilogy" Tale

By: Jay Rose, *Office of Defense Programs*

When Secretary of Energy Bill Richardson signed the Consolidated Record of Decision for Tritium Supply and Recycling on May 6, 1999, he ended a three-year decision making process. This effort had been a high priority for the Office of Defense Programs (DP) since December 1995, when former Secretary O'Leary announced the Department's decisions stemming from the Tritium Programmatic EIS (DOE/EIS–0161) – an announcement that set off a "chain reaction" that would rock DP's world. The programmatic decision triggered the need for DP to prepare simultaneously three related, high-profile project EISs, which became known as the "Tritium Trilogy."

The story begins with the Tritium Programmatic Record of Decision (60 FR 63878; December 12, 1995), in which DOE selected a "dual track" strategy to further evaluate the two most promising tritium supply alternatives: (1) irradiating tritium-producing rods in a commercial light water reactor, and (2) developing a new tritium production linear accelerator, identifying the Savannah River Site in South Carolina as the location for the accelerator, should DOE decide to build one. In addition, DOE decided to construct a new tritium extraction capability at Savannah River.

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Mexican spotted owls are among the protected species at Los Alamos National Laboratory.

NEPA and Habitat Management Plan: Environmental Synergy

By: Elizabeth Withers, *NEPA Compliance Officer, Los Alamos Area Office, with* John Stetson, *Pacific Western Technologies, Ltd.*

On the day DOE issued the Draft EIS for the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility at Los Alamos National Laboratory (LANL), LANL biologists discovered a nesting pair of Mexican spotted owls (*Strix occidentalis lucida*) – which had only recently been listed as threatened – in the canyons directly below the proposed site. Today, this nest site, at the edge of a major explosives testing facility, is one of the most successful breeding nests of spotted owls in the entire Jemez Mountain range.

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Inside *LESSONS LEARNED*

Welcome to the second quarter FY 1999 Quarterly Report on lessons learned in the NEPA process. In addition to the articles beginning on page 1, this issue includes:

Carol Borgstrom

Director
Office of NEPA Policy and Assistance

Stakeholder Appreciates Fossil Energy's Response

During an EIS public scoping period in March and April of this year for the Arizona-Sonora Interconnect Project (Public Service Company of New Mexico; DOE/EIS-0307), Arizona citizens and interested groups expressed strong concerns about one of three alternative transmission corridors that an applicant under Fossil Energy's Presidential permit program had proposed. (DOE issues Presidential permits under Executive Order 10485 for construction, connection, operation, and maintenance of electric transmission facilities at the U.S. international border.) Fossil Energy staff has worked with the applicant, Public Service Company of New Mexico, to determine additional reasonable alternative corridors and recently notified the public that it would seek additional scoping comments. One citizen's favorable response follows:

On April 13, 1999 I sent an e-mail to you expressing my opposition to proposed transmission towers on highways 82 & 83 in Santa Cruz County, Arizona.

Today I received an e-mail from you titled "Information Letter Regarding Public Service Company of New Mexico's Proposed Arizona-Mexico Transmission Project." In that e-mail you indicated that "residents and interested groups provided thoughtful comments that have led DOE and PNM to identify three additional alternative corridors for study in the EIS (Alternatives 4, 5, and 6 on the DOE Fact Sheet)."

I realize the final decision has not been made, but I feel like I Have Been Heard and Responded To. I can't ask for more than that (except of course to get my own way).

Thank you, thank you! Perhaps there is something to all this new technology after all.

Be Part of Lessons Learned

We Welcome Your Contributions

We welcome suggestions and contributed drafts for the *Lessons Learned Quarterly Report.* Draft articles for the next issue are requested by July 30, 1999. To propose an article for a future issue, contact Yardena Mansoor at yardena.mansoor@eh.doe.gov or phone 202-586-9326.

Third Quarter Questionnaires Due July 30, 1999

Lessons Learned Questionnaires for NEPA documents completed during the third quarter of fiscal year 1999 (April 1 to June 30, 1999) should be submitted as soon as possible after document completion, but no later than July 30, 1999. The Questionnaire is available interactively on the DOE NEPA Web at http://tis.eh.doe.gov/nepa/ under DOE NEPA Process Information.

For Questionnaire issues, contact Hitesh Nigam at hitesh.nigam@eh.doe.gov or phone 202-586-0750.

Feedback on LLQR

Do you have a comment or a suggestion? Please submit feedback to either of the contacts listed above.

LLQR Online

Current and past issues of the *Lessons Learned Quarterly Report* are available on the DOE NEPA Web at http://tis.eh.doe.gov/nepa/ under DOE NEPA Process Information.

LLQR Index

A cumulative index of the LLQR is provided in the September issue each year.

Historic Preservation Section 106 Regulations Revised

The Advisory Council on Historic Preservation has revised its regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act. This final rule (64 FR 27044; May 18, 1999), which becomes effective June 17, 1999, implements the 1992 amendments to the Act and streamlines the previous regulations. A major new section, 36 CFR 800.8, allows agencies to comply with Section 106 requirements within the NEPA process.

Enhanced Coordination of National Historic Preservation Act and NEPA Processes

In the preamble to the revised regulations, the Council states its belief that "it has streamlined coordination with the NEPA process to the largest extent possible without unduly sacrificing the key components of the section 106 process." Under 36 CFR 800.8, an agency may use the process and documentation required for an EA or EIS to comply with Section 106 in lieu of the procedures set forth in 36 CFR 800.3 to 800.6, provided that the agency notifies the public and the Council and meets certain "standards." The standards address procedures for identifying historic properties, providing for early consultations, conducting public participation and agency reviews, resolving objections, and mitigating adverse impacts.

Native American Roles Defined and Strengthened

Also, under the revised Section 106 review process, state and local governments, Native American tribes, and the public will be more directly involved in Federal activities affecting historic properties. The regulations now particularly emphasize the role of Native American tribes. There are specific provisions for obtaining a tribe's consent when an action occurs on, or affects historic properties on, tribal lands, and for consulting with Native American tribes that attach religious and cultural significance to historic properties off tribal lands. The revised regulations also provide for a Tribal Historic Preservation Officer (THPO) to substitute for the State Historic Preservation Officer (SHPO) when the tribal official has assumed the responsibilities of the SHPO for tribal lands.

Greater Deference to Federal Agency–SHPO/THPO Decision Making

The Advisory Council will also no longer review routine decisions agreed to by the Federal agency and the SHPO or THPO. Instead, the Council will focus on "those situations where its expertise and national perspective can enhance the consideration of historic preservation issues."

The Office of NEPA Policy and Assistance is sending copies of the revised regulations to NEPA Compliance Officers and others in the DOE NEPA Community. For more information on the National Historic Preservation Act, the Advisory Council, and the Section 106 process, visit the Advisory Council Web Site at http://www.achp.gov or contact Lois Thompson, Office of Environmental Policy and Guidance, at lois.thompson@eh.doe.gov or phone 202-586-9581. For questions on incorporating Section 106 process requirements into the NEPA process, contact Katherine Nakata at katherine.nakata@eh.doe.gov or phone 202-586-0801.

Section 106/36 CFR Part 800 Requirements

Section 106 of the National Historic Preservation Act requires Federal agencies to "take into account" the effects of its undertakings on historic properties – i.e., properties listed in or eligible for the National Register of Historic Places – and to afford the Advisory Council on Historic Preservation an opportunity to comment on those undertakings and effects. The Advisory Council, an independent Federal agency created by the National Historic Preservation Act, promulgates regulations entitled "Protection of Historic Properties" (36 CFR Part 800) that implement Section 106. The National Park Service, which administers and maintains the National Register of Historic Places, establishes the criteria for listing properties (36 CFR Part 60).

In the Section 106 process (specified in 36 CFR Part 800), the responsible Federal agency identifies historic properties, reviews background information, and conducts consultations. The purpose of the review and consultation is to identify historic properties that could be affected by a proposed Federal action and to seek ways to avoid or minimize adverse effects. In addition to the Advisory Council, which oversees and administers the process, the agency may consult with the State Historic Preservation Officer (and, if applicable, the Tribal Historic Preservation Officer) and other participating parties.

The "Tritium Trilogy" (continued from page 1)

Three Coordinated EISs Tiered from the Programmatic EIS

Based on commitments in the Programmatic EIS Record of Decision, DP proceeded to tier three project-specific EISs: the "Tritium Trilogy" (text box, below).

While it is not unusual to tier a project-specific EIS from a Programmatic EIS, the tritium NEPA strategy was unusual because the three project-specific EISs shared more than just a similar schedule. What really "rocked" DP's NEPA world was the degree of inter-relatedness among the three tiered EISs – they even shared alternatives:

- No Action for the Commercial Reactor EIS was the Proposed Action for the Accelerator EIS, and No Action for the Accelerator EIS was the Proposed Action for the Commercial Reactor EIS.
- The alternatives for a new tritium extraction capability at the Savannah River Site included not only those in the Tritium Extraction EIS, but also an alternative in the Accelerator EIS that incorporated tritium extraction capability within the accelerator facility.
- The tritium extraction facility was to be capable of extracting tritium not only from commercial reactor targets but also from the alternative accelerator production targets.

The relationships among these technically complicated proposed actions and alternatives would normally indicate that the proposals should be analyzed in a single EIS. After considerable thought, however, DOE decided that three narrowly focused – but carefully coordinated – EISs would be easier to write and to understand, and more useful to the public and DOE. The bottom line was to prepare three tiered, project-specific EISs with common goals: consistency, clarity, accuracy, legal adequacy, and complete analysis of potential impacts to affected resource areas.

Communicate Clearly

The most important factor in successful cooperation is full and open communication. Projects often suffer difficulties or delay because someone, somewhere, did not communicate fully and openly. In the case of the Tritium Trilogy, without such communication, the no action alternatives in the Commercial Reactor EIS and the Accelerator EIS could have been inconsistent, or the alternative of combining the tritium extraction capability with the accelerator facility might not have been analyzed.

Meet Early on "Framework" Issues

One of the best methods for resolving technical and management issues is to meet with the Environment, Safety and Health (EH) Office of NEPA Policy and Assistance, General Counsel (GC), and any other involved Program Offices well before preparing the Notice of Intent. This enables the EIS Document Manager to brief the "team" on the purpose and need and proposed actions, and for the team to design an appropriate NEPA strategy. This "internal scoping" process promotes common understandings among the participants and provides time to resolve issues before public scoping begins. The result is a smarter NEPA Document Manager, better informed EH and GC participants, more effective coordination with other involved offices, a carefully crafted NEPA strategy, a productive public scoping process, and ultimately, a better-informed public and decision maker.

Build Consistency into Your NEPA Documents

Once the interrelationships among the three EISs were recognized (working them out, of course, was an ongoing process), the documents could be prepared better. Communication was the key element in good management. Because both the Accelerator EIS and the Tritium Extraction EIS concerned the Savannah River Site, the two EIS preparation teams shared "affected

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The "Tritium Trilogy"

Final EIS for the Accelerator Production of Tritium at the Savannah River Site
(DOE/EIS–0270)
NEPA Document Manager: Richard Rustad, SR

Final EIS for the Construction and Operation of the Tritium Extraction Facility at the Savannah River Site
(DOE/EIS–0271)
NEPA Document Manager: John Knox, SR

Final EIS for the Production of Tritium in a Commercial Light Water Reactor
(DOE/EIS–0288)
NEPA Document Manager: Jay Rose, DP

The "Tritium Trilogy" (continued from previous page)

environment" data. This enabled each document team to use resources efficiently while providing accurate and consistent data. With respect to the Commercial Reactor EIS, coordination with the Tritium Extraction EIS preparation team was essential because the tritium extraction facility would extract tritium from the rods that were irradiated inside a commercial reactor. It would have been problematic if the Commercial Reactor EIS discussed irradiating 4,000 rods per year while the Tritium Extraction EIS discussed a capability to extract 2,000 rods per year. Likewise, it would be inconsistent for the Tritium Extraction EIS to evaluate operations beginning in 2002 if the commercial reactors were not expected to provide irradiated rods to the tritium extraction facility until 2005.

Make Complex Matters Clear

DOE's complex and dynamic proposed actions can be quite challenging to understand and explain. But if our plans do not make sense to us, how can we expect the public to do any better?

To aid understanding, each of the project-specific tiered EISs contained a common preface to explain the relationships among the projects. Staff from the Savannah River Site, DP, the DOE NEPA Office, and GC participated in preparing this common preface.

After publishing the three draft EISs, DOE received many comments that applied to more than one of the EISs. Many public comments on the Commercial Reactor EIS and the Accelerator EIS overlapped on issues such as nonproliferation, cost, or technical capability. This crosscutting required close teamwork among the NEPA Document Managers to ensure that responses in both EISs were accurate and consistent. We did not want two EISs to give different answers to the same comment!

Finally, after issuing the three Final EISs, DOE published a consolidated Record of Decision (text box) to avoid confusion that might have resulted from three separate RODs. While this, too, challenged our communication skills, the goal – to inform stakeholders and to direct those who must carry out the decisions – was worth it.

In conclusion – while the Tritium Trilogy may have rocked DP's NEPA world – in the end the Department kept the beat.

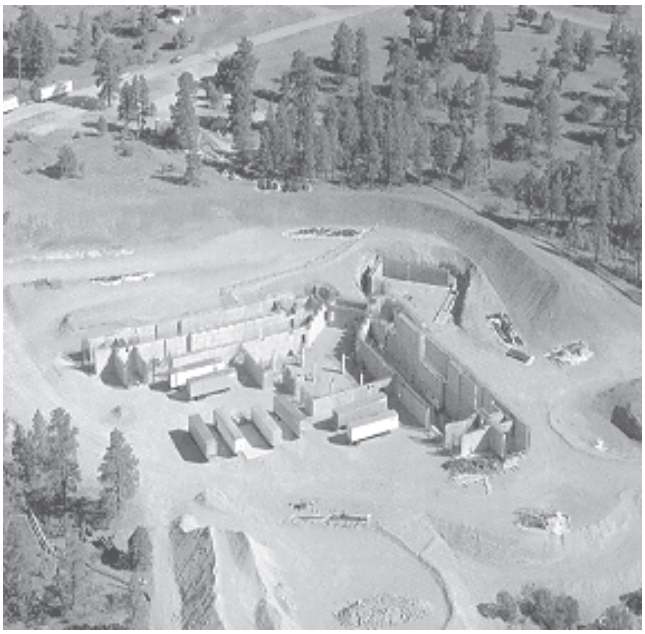
Consolidated Record of Decision for the Tritium Supply Program

DOE's Consolidated Record of Decision for Tritium Supply and Recycling (64 FR 26369; May 14, 1999) describes DOE's plans for a new domestic source for tritium to support the nuclear weapons stockpile. First, this Record of Decision documented Secretary Richardson's December 22, 1998, announcement selecting the commercial light water reactor alternative as the primary tritium supply, and designating an accelerator system at the Savannah River Site as the backup tritium supply source (although the decision did not authorize accelerator construction). Further:

- The Tennessee Valley Authority's Watts Bar Unit 1, Sequoyah Unit 1, and Sequoyah Unit 2 reactors are the specific commercial light water reactors that will provide irradiation services needed to produce tritium.
- The H-Area within the Savannah River Site will be the location for a new tritium extraction facility.
- DOE selected specific technologies and a specific location at the Savannah River Site for the accelerator production of tritium, should an accelerator be needed.

LANL Habitat Plan (continued from page 1)

Looking back over the DARHT project's history, we can discern many NEPA lessons learned. (See, for example, the case study on DARHT in the *Lessons Learned Quarterly Report*, December 1995, page 12, and the Legal Update in June 1996, page 8.) But while the DOE NEPA process for the DARHT facility EIS ended – at least in a technical sense – in January 1996 with the issuance of the Mitigation Action Plan, the environmental stewardship and efficiency initiated by this NEPA process continue.



The nesting site (not shown) is at the edge of the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility.

NEPA Process Leads to Site-wide Habitat Management Plan

LANL sits atop the Pajarito Plateau at an elevation of about 7,000 feet. Erosion has produced a series of finger-like mesas separated by deeply incised canyons. The remote setting, combined with limited public access, made the site suitable for its original defense-related mission and also preserved threatened and endangered species habitats.

After the discovery of the Mexican spotted owls in 1995, DOE and the U.S. Fish and Wildlife Service (USFWS) agreed through the Endangered Species Act consultation process on specific mitigation measures for management of threatened and endangered species habitat. The Record of Decision for the DARHT Facility EIS (60 FR 53588; October 10, 1995) documents these commitments. The Mitigation Action Plan, which followed from the Record of Decision, specifies DOE's plans for implementing these measures.

In accordance with the Record of Decision and the Mitigation Action Plan, DOE and LANL in March 1996 began to develop a site-wide management plan for the long-term protection of LANL's threatened and endangered species. (LANL also contains habitat for bald eagles, peregrine falcons, southwestern willow flycatchers, and several state-listed species.) Under the direction of LANL Project Manager Teralene Foxx, LANL's Ecology Group completed the plan in October 1998 – slightly under the budget of $3 million and within the timeframe of three years. The plan sets goals and objectives, defines species-specific "Areas of Environmental Interest" – areas within LANL that are being protected because of their significance to biological and other resources (map, next page) – and defines levels of monitoring. According to the LANL group leader, Diana Webb, it is the first comprehensive, "fence-to-fence" management plan to consider all threatened and endangered species at a large DOE site. An important milestone was reached in February 1999 when the USFWS concurred with the plan. "Having this inter-agency agreement in hand means that we no longer have to address Endangered Species Act compliance under the piecemeal, case-by-case approach that we formerly used," Ms. Webb said.

Benefits Prove Long-lasting

The Habitat Management Plan has already saved time and money (box, next page). Previously, LANL prepared about 10 to 12 Biological Assessments per year at costs of $30,000 to $50,000 each. USFWS concurrence required three to six months. With the Habitat Management Plan now in hand, only large projects will require Biological Assessments – and these will have a substantial baseline on which to build. The Geographic Information System

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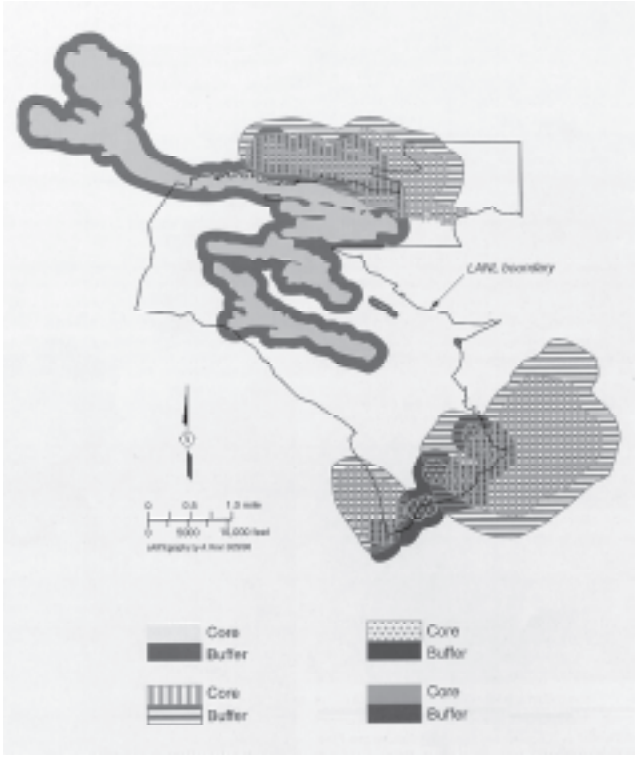
LANL Habitat Plan (continued from previous page)

database and mapping system used in this effort are available for future studies. Already two major EISs – the LANL Site-wide (DOE/EIS-0238, January 1999) and the Conveyance and Transfer of Certain Land Tracts at LANL (DOE/EIS-0293, Draft, February 1999) – have integrated this information into their Ecological Resources analysis. As a result of the Habitat Management Plan process, coordination between DOE and USFWS has been streamlined.

The NEPA process for the DARHT facility not only analyzed impacts to valuable biological resources, but also provided a legacy of mitigation measures developed through inter-agency coordination. We now have a better understanding of threatened and endangered species at LANL. More importantly, the site-wide management program for protection of biological resources will provide important information for decision making regarding future proposed actions.

For more information about the NEPA process for the DARHT facility, contact Elizabeth Withers at ewithers@doe.lanl.gov or phone 505-667-8690. For copies of the Threatened and Endangered Habitat Management Plan Overview and a compact disc of LANL's reports (box, below), or for any related questions, contact Teralene Foxx at foxxt@lanl.gov or phone 505-667-3024.



Buffer areas protect core "Areas of Environmental Interest" within Los Alamos National Laboratory.

Habitat Management Plan Promotes Efficiency in NEPA Reviews

The Habitat Management Plan has proven beneficial to NEPA reviews at LANL, including EAs and categorical exclusions. For an ongoing EA on siting a new power line to the Laboratory, for example, information in the plan enabled the Laboratory Utilities Division to avoid critical habitats from the beginning, thus avoiding potential redesign costs and delays. These avoidances, although not directly quantifiable, are nevertheless important benefits.

Compact Disc Earns Award

LANL published the 30 separate reports related to the Habitat Management Plan (more than 1,850 pages) on compact disc, saving $40,000. Some 254,000 sheets of paper – 25 trees – were spared, as well as the associated printing chemicals. For this innovation, LANL's Environmental Management Division presented the LANL Ecology Group with a pollution prevention award on Earth Day 1999.

In addition, the team received Certificates of Appreciation for contributing to DOE's Pollution Prevention Program from Daniel W. Reicher, Assistant Secretary for Energy Efficiency and Renewable Energy.

Applying "Plain Language" to NEPA *Federal Register* Notices

By: Rita Smith, *DOE Federal Register Liaison, Office of General Counsel*
Yardena Mansoor, *Office of NEPA Policy and Assistance*

One year ago, the President directed Federal Agencies to use "plain language" to make government writing more "responsive, accessible, and understandable" to the public (63 FR 31883; June 10, 1998). His "Plain Language in Government Writing" memorandum set specific requirements for new regulations and documents that explain how to obtain a government benefit or service, or comply with a regulation. The memorandum also expressed a broad policy for all Federal government writing: ***language must serve the purpose of the communication and must be appropriate for the intended reader.***

The memorandum states that the benefits of plain language writing include saving the Government and private sector time, effort, and money. In recent *Federal Register* notices regarding NEPA matters, DOE has made progress in applying the Plain Language recommendations, but we have plenty of room for improvement. By targeting the content of NEPA notices to their purpose and readership, DOE can issue more effective notices.

In this article, we first outline content features of three types of EIS-related *Federal Register* notices and then present some plain language recommendations for writing them. (While the principles of plain language apply to all writing in the NEPA process, in this article we focus on NEPA *Federal Register* notices.)

Three EIS-related *Federal Register* Notices

DOE publishes three kinds of *Federal Register* notices in the EIS process: Notice of Intent to prepare an EIS, Notice of Availability including public involvement procedures (optional), and Record of Decision. Each notice has a distinct purpose and targeted readership, and consequently a desired content, both in terms of substance and style.

Purpose and Readership . . .

A **Notice of Intent** announces the beginning of an EIS process, invites public participation, and provides information to help the public decide whether and how to participate. The reader is not necessarily familiar with the NEPA process or the matter to be addressed in the EIS.

DOE usually publishes a **Notice of Availability** of a draft or final EIS (although a DOE notice is not required) to supplement the required Environmental Protection Agency (EPA) Notice of Availability. A DOE Notice announces the availability of the document and describes public participation activities. The readership includes people who are already informed about the EIS through their involvement in scoping and those who are not informed.

A **Record of Decision** announces and explains the decision. Readers are likely to have some knowledge of the subject.

. . . Have Implications for Substance and Style

Typically, a Notice of Intent identifies the purpose and need for agency action, the sites involved, a proposed action and alternatives that DOE proposes to evaluate, and categories of impacts that DOE would consider. A Notice of Intent also provides public participation information, such as a scoping meeting schedule and commenting procedures. A Notice of Intent should provide enough background information and technical detail for a reader with little previous knowledge of the subject.

EPA's Notice of Availability lists the EIS subject, potentially involved location(s), comment period closing date, and contact person. In contrast, a DOE Notice of Availability usually presents an overview of the EIS and provides detailed public involvement information (including schedule and procedures for a public hearing on a draft EIS), how to obtain copies of the EIS, where to examine background documents, and how to submit comments. A DOE Notice of Availability normally provides enough information for the public to decide whether to obtain the full EIS or its summary. It need not summarize the EIS or the procedural history of the NEPA process.

A Record of Decision states the decision, describes the alternatives considered, identifies the environmentally preferable alternative, explains how the agency balanced various factors in making its decision, and addresses minimizing environmental harm through mitigation. It provides a concise history of the review conducted, decisions made, any decisions deferred, and any additional NEPA review planned. Records of Decision often provide more technical details than the notices discussed above.

Plain Language Recommendations (continued from previous page)

We base these recommendations in part on the Plain Language Action Network resources (address below).

Use Common, Everyday Words to Aid Understanding

- Use ordinary (normally short) words and phrases.

Instead of:	Try using:
adjacent to	next to
due to the fact that	because
initiate	start, begin
in the event that	if
prior to	before

- Minimize technical terms, even if plain language requires more words. An ordinary dictionary may not include technical terms. For example, instead of "nonelutable resin," try "resin from which adsorbed material cannot be separated."
- Use technical terms when needed to specify meaning. For example, "poplar" refers to a different tree in the South (*Liriodendron tulipifera*) than in the rest of the country (genus *Populus*).
- When describing a material or process, choose one appropriate term and stick with it through the document. Otherwise, the reader is likely to assume that different terms mean different things. You may list the equivalent terms, then state which one will be used throughout the notice. For example, solids that settle at the bottom of a liquid-filled tank might be called settled solids, sludge, tank bottoms, or fines; precipitate (the noun) and precipitant mean the same thing; calcining and sintering are two names for one type of thermal treatment.
- Reduce the use of abbreviations, including acronyms. DOE recently published a Record of Decision with 12 abbreviations in three sentences! Use an abbreviation for a term, project, or facility that will be named repeatedly throughout the notice. Typically, "DOE," "EIS," and commonly used site abbreviations are appropriate. Define an abbreviation the first time you use it.

Bravo!

The preliminary draft EIS for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain (DOE/EIS-0250), currently in preparation, uses only 16 abbreviations! Typical DOE EISs use considerably more.

Keep Sentences Short and Simple

- Keep subject, verb, and object together. Avoid separating them with parenthetical expressions, exceptions, or modifiers.
- Divide a long sentence into shorter sentences.
- Use the active voice instead of passive voice. Instead of "an EIS will be prepared" or "comments may be submitted," say "DOE will prepare an EIS" or "you may submit comments."

Construct Strong, Logical Paragraphs

- Use a topic sentence. Move unrelated information to another paragraph.
- Show logical relationships between sentences. One effective technique is to begin a sentence with a reference to something in the previous sentence – for example, "This waste. . ." or "These shipments. . . ." Another technique is to use words or phrases that indicate *sequence*, such as "first," "then," or "now;" *causality*, such as "therefore" or "as a result;" or *contrast*, such as "in contrast" or "unlike the previous case."
- Use parallel structure and avoid repetition. Typically a notice describes alternatives, each in a paragraph that mentions all relevant features. Instead, first list the features common to all alternatives, then list the unique features of each alternative.

Write to Express, Not to Impress!

Plain language problems may arise when we write as if the work were intended only for our peers or to demonstrate a depth of knowledge to someone who can fully judge its accuracy. Keep in mind, however, that NEPA public notices are primarily intended for a lay public.

Resources

For the Presidential Memorandum on Plain Language, recommendations, resources, and examples, see www.plainlanguage.gov, the Plain Language Network Web Site. (The DOE NEPA guidance on an EIS Summary, September 1998, also includes the Memorandum.) For additional information on preparing *Federal Register* notices, contact Rita Smith, 202-586-3277 or e-mail rita.smith@hq.doe.gov. LL

Distributing a Record of Decision Makes Sense

Distributing copies of the Record of Decision to organizations and individuals who received a Final EIS is logical and courteous, though not required. After all, people to whom we send a Final EIS either have expressed their interest in the proposed action earlier or DOE has concluded on its own that they should receive the document. In either case, the small additional effort and expense to inform these people of the outcome of the NEPA process normally is easily justified. Of course, the NEPA Document Manager also should make the Record of Decision available in the relevant public reading rooms. The Office of NEPA Policy and Assistance posts Records of Decision on the DOE NEPA web at http://tis.eh.doe.gov/nepa/ under DOE NEPA Analyses.

A Helpful Hint for EIS Glossaries

We have encouraged including a glossary to aid lay readers' understanding of specialized terms used in a NEPA document. Marking in bold or italics the first occurrence of terms that are defined in the glossary will effectively signal the reader to consult the glossary, if needed. This system would be explained in a footnote or text box at the beginning of the NEPA document and the glossary. This is an easy but excellent way to make a NEPA document more user-friendly.

When preparing a glossary for a NEPA document, consult "Glossary of Terms Used in DOE NEPA Documents," September 1998. The glossary is available on the DOE NEPA web at http://tis.eh.doe.gov/nepa/ under DOE NEPA Tools.

New Books for the NEPA Practitioner's Bookshelf

Three recently published NEPA-related books, described briefly below, are likely to interest readers of *Lessons Learned*. The Office of NEPA Policy and Assistance from time to time makes this type of information available (without endorsement). "Suggestions for the NEPA Practitioner's Bookshelf" (August 1996) is available in the DOE NEPA Compliance Guide (on the DOE NEPA Web at http://tis.eh.doe.gov/nepa/ under NEPA Tools) and upon request from the Office of NEPA Policy and Assistance. Also see *Lessons Learned Quarterly Report*, September 1998, page 5.

The National Environmental Policy Act: An Agenda for the Future

Lynton Keith Caldwell; February 1999
Indiana University Press
601 N. Morton Street
Bloomington, IN 47404-3797
Phone: 800-842-6796
Internet: http://www.indiana.edu/~iupress/

ISBN 0-253-33444-6
272 pages, $29.95

Why has "environment" been a difficult issue for U.S. public policy, and what is needed to solve the problem? This book, by one of NEPA's "founding fathers," analyzes where and how NEPA has affected national environmental policy, and where and why the Act's intent has been frustrated. Professor Caldwell discusses the roles of Congress, the President, and the courts in implementing NEPA. He also looks at the conflicted state of public opinion regarding the environment and suggests what must be done to develop a coherent and sustained environmental protection policy.

The NEPA Planning Process – A Comprehensive Guide with Emphasis on Efficiency

Charles H. Eccleston; January 1999
John Wiley & Sons, Inc.
605 Third Avenue
New York, NY 10158
Phone: 800-225-5945
E-mail: kjeon@wiley.com

John Wiley & Sons Inc.,
Product Code 0-471-25272-7
424 pages, $59.95

According to the author, this book provides "a comprehensive, single-source guide for navigating the complexities of the entire NEPA process." Mr. Eccleston, a contractor employee at DOE's Hanford Site, integrates historical, legal, regulatory, guidance, and anecdotal material from a variety of sources. He presents many DOE examples, including references to DOE's NEPA

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NEPA Bookshelf (continued from previous page)

regulations, specific DOE NEPA documents, the sliding scale concept, the EA Process Improvement Team, the EA quality review (*Lessons Learned Quarterly Report*, March 1997, page 8), supplement analyses, and this *Lessons Learned Quarterly Report*. The book contains compilations of NEPA-related information and references, offers methods and tools for streamlining NEPA compliance, and reports on recent developments in the assessment of cumulative impacts, environmental justice, adaptive management, pollution prevention, and integrating NEPA with ISO-14000.

Toward Environmental Justice – Research, Education, and Health Policy Needs

Committee on Environmental Justice
Institute of Medicine; [March] 1999
National Academy Press
2101 Constitution Avenue, N.W., Box 285
Washington, DC
Phone: 202-334-3313 or 800-624-6242
Internet: http://www.nap.edu

ISBN 0-309-06407-4
137 pages, $37.95

This book presents the results of a study sponsored by the National Institutes of Health, Department of Energy, Environmental Protection Agency, and Centers for Disease Control and Prevention. These agencies asked the Institute of Medicine's Committee on Environmental Justice to "assess the potential adverse human health effects caused by environmental hazards in communities of concern and to recommend how they should be addressed in terms of public health, biomedical research, education, and health policy perspectives."

The book begins with a literature review of disparities between the general population and minority and low-income populations in health status and exposure to environmental health hazards. The Committee concludes, based on the literature and site visits (including one to DOE's Hanford Site), that identifiable communities of concern (1) are exposed to higher levels of "environmental stressors" than others, and (2) are less able to deal with these hazards because of "limited knowledge of exposures and disenfranchisement from the political process." The Committee then suggests methodologies for environmental health risk assessment, including a discussion of the inherent obstacles, and offers recommendations and implementing strategies. Finally, the Committee analyzes the lack of medical and public education on environmental health hazards and the challenges faced by policymakers with inconclusive data, and again offers recommendations and implementing strategies.

The full text of the book is available at the above Internet address.

DOE-wide NEPA Contracts Update

These recently awarded tasks have not been previously reported here. For more information on the use of the DOE-wide NEPA contracts, contact Dawn Knepper at knepper@doeal.gov or 505-845-6215. For a complete list of tasks to date, see *Lessons Learned Quarterly Reports,* June 1998, page 6; September 1998, page 7; and March 1999, page 9.

Task Description	DOE Contact	Date Awarded	Contractor Team
Idaho High-level Waste and Facilities Disposition EIS – RCRA Support	Tom Wichmann, ID 208-526-0535 wichmatl@inel.gov	1/28/99	Tetra Tech, Inc.
Idaho High-level Waste and Facilities Disposition EIS – Accident Analyses	Tom Wichmann, ID 208-526-0535 wichmatl@inel.gov	1/28/99	Tetra Tech, Inc.
Nevada Test Site ROD Amendment	John Neave, EM 301-903-7678 john.neave@em.doe.gov	3/18/99	Battelle
Site-wide EIS for the Y-12 Plant	Gary Hartman, OR 423-241-9153 hartmangs@oro.doe.gov	3/22/99	Tetra Tech, Inc.
Environmental Studies	Federal Energy Regulatory Commission	4/13/99	Tetra Tech, Inc.

DOE Litigation Update

By: Stephen Simpson, *Office of NEPA Policy and Assistance*

Court Allows WIPP to Open

The United States District Court for the District of Columbia recently issued an Order allowing the Department of Energy to open the Waste Isolation Pilot Plant (WIPP) for the disposal of transuranic waste.

The Order concerns an injunction entered in a lawsuit filed in 1991 by the States of New Mexico and Texas, three Members of Congress, and four environmental groups that challenged DOE's decision to begin a test program at WIPP. The plaintiffs alleged violations of the Federal Land Policy and Management Act (FLPMA), NEPA (with respect to the first WIPP Supplemental EIS), and the Resource Conservation and Recovery Act (RCRA). The injunction was based on violations of FLPMA and RCRA. On appeal, the FLPMA violation was affirmed, but the RCRA violation was reversed and remanded to the District Court. After the appeal, the lawsuit lay dormant until May 1998, when DOE filed a Motion for Expedited Status Conference.[1] Further proceedings followed, including a motion by the plaintiffs alleging that DOE's plans to dispose of non-mixed transuranic waste at WIPP violated both the injunction and RCRA.

On March 22, 1999, Judge John Garrett Penn ruled that the injunction applied only to the WIPP test phase (which DOE cancelled in 1993). Because the enactment of the WIPP Land Withdrawal Act (1992) addressed the FLPMA violation, Judge Penn held that the injunction did not prevent the shipment of transuranic waste to WIPP for disposal. Judge Penn also held that (1) WIPP has "interim status" as a disposal facility under RCRA, and (2) irrespective of whether WIPP has "interim status," the Los Alamos National Laboratory waste that DOE intended to send as the first shipments to WIPP is not a hazardous waste under RCRA. The first shipment of transuranic waste from Los Alamos arrived at WIPP on March 26, 1999.

Judge Penn's decision does not end this litigation, however. He has not yet ruled on DOE's Motion for Entry of Final Judgment or on a Motion to Intervene that Citizens for Alternatives to Radioactive Dumping (CARD) filed on June 9, 1998, challenging the adequacy of the WIPP Disposal Phase Final Supplemental EIS. (See related article in the *Lessons Learned Quarterly Report*, September 1998, pages 11-12.) CARD made no effort to schedule its Motion for a hearing and did not participate in any other aspect of the case.

The status of other NEPA litigation involving the Department of Energy has not changed since the last *Lessons Learned Quarterly Report*. The pending litigation includes cases challenging the Experimental Breeder Reactor-II and the decontamination and decommissioning of three buildings at the K-25 site (*Lessons Learned Quarterly Reports*, March 1999, page 10; September 1, 1998, pages 11-12; and December 1, 1997, page 16). LL

Stephen Simpson Taking Position at the Department of the Interior

Stephen Simpson, who has written the Litigation Updates columns since they first appeared three years ago, is leaving DOE in mid-June to join the Office of the Solicitor, Division of Indian Affairs, at the Department of the Interior as an Attorney-Advisor. He will work on issues relating to NEPA, along with leasing of Indian land, acquisition of land in trust for Tribes, and other environmental laws. Steve looks forward to applying DOE NEPA lessons learned in a new context. The Office of NEPA Policy and Assistance, where he has served for eight years, wishes him well in his new position.

[1] On January 23, 1998 (63 FR 3624), DOE issued a Record of Decision deciding to open WIPP for disposal operations, based on the WIPP Disposal Phase Final Supplemental EIS (DOE/EIS-0026-S2). The Environmental Protection Agency certified that WIPP will comply with the applicable radioactive waste disposal regulations (40 CFR Part 191) on May 18, 1998 (63 FR 27354).

Transitions at the Council on Environmental Quality

George Frampton Confirmation Hearing Held

The Senate held a confirmation hearing April 28, 1999, on George T. Frampton, Jr. as Chairman of the President's Council on Environmental Quality (CEQ). Mr. Frampton has been serving as Acting Chair since November 1998. (See *Lessons Learned Quarterly Report*, December 1998, page 11.)

In his nomination hearing, Mr. Frampton said that the "vision embodied in NEPA is that Federal agencies make important decisions affecting the environment in a democratic way, only after a thorough examination of the likely impacts of alternative courses of action. By putting sound information before the public and government managers, informed public input to such decisions would be guaranteed."

He also emphasized the "practical, problem-solving side of CEQ's mandate: seeing to it that Federal departments and agencies are on the same page, working together." (As of June 1, 1999, the Senate had yet to act on Mr. Frampton's nomination).

Ray Clark Takes Environmental Position at the Pentagon

Ray Clark, former Acting Chair at CEQ and most recently Associate Director for NEPA Oversight, has taken a position with the Army as Principal Deputy Assistant Secretary for Installations and Environment. He will manage activities related to installation real estate and programs for environment, safety, and health, including Army NEPA activities. Mr. Clark joined CEQ in January 1992.

EH Electronic Publishing Standards and Guidelines Updated

An update to the Environment, Safety and Health Electronic Publishing Standards and Guidelines is available on the DOE NEPA Web (http://tis.eh.doe.gov/nepa/ under NEPA Tools). A handy Guidelines-at-a-Glance has been added. The update also reflects experience from publishing EH documents on the Web and advances in Web technology.

The NEPA Document Electronic Publishing Standards and Guidelines that was issued in October 1998 to clarify and supplement the EH Guidelines remains in effect. NEPA Compliance Officers should continue to use the DOE NEPA Document Certification and Transmittal Form to transmit five hard copies and the electronic files to the Office of NEPA Policy and Assistance for: EAs, findings of no significant impact, draft and final EISs, records of decision, mitigation action plans and corresponding annual mitigation reports, and supplement analyses and any determinations based on them (DOE Order 451.1A). For assistance or further information on NEPA Web publishing, please contact Lee Jessee, DOE NEPA Webmaster, at lee.jessee@eh.doe.gov or phone 202-586-7600.

Training Opportunities

The NEPA Toolbox: EAs with Focus
Denver, CO: August 10-11, 1999
Fee: Regular $750; early $695

The NEPA Toolbox: Cumulative Impacts Analysis
Denver, CO: August 12-13, 1999
Fee: Regular $750; early $695

Environmental Training and Consulting International, Inc.
Phone: 303-321-3575
Fax: 303-321-4589
E-mail: info@envirotrain.com

NEPA Tools and Techniques
Kansas City, MO: June 24, 1999
Fee: $75

NEPA Legal Issues: Reducing Your Vulnerability to Litigation
Kansas City, MO: June 24, 1999
Fee: $75

National Association of Environmental Professionals
Phone: 888-251-9902
Internet: www.naep.org
(under "1999 Annual Conference")

Documents Issued, Second Quarter FY 1999

EAs and EISs Completed January 1 – March 31, 1999

EAs

Albuquerque Operations Office/Defense Programs
DOE/EA-1264 (2/10/99)
Rapid Reactivation Project at Sandia National Laboratories, Albuquerque, New Mexico
Cost: $80,000
Time: 9 months

Golden Field Office/Energy Efficiency and Renewable Energy
DOE/EA-1116 (2/22/99)
Geothermal Demonstration Project in Steamboat Hills, Nevada
Cost: $115,000
Time: 64 months

DOE/EA-1277 (3/02/99)
Expanded Ponnequin Wind Energy Project, Weld County, Colorado
Cost: $25,000
Time: 6 months

Richland Operations Office/Environmental Management
DOE/EA-1276 (2/11/99)
Widening Trench 36 of the 218-E-12B Low-Level Burial Ground, Hanford Site, Richland, Washington
Cost: $25,000
Time: 6 months

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 EIS

Category 1 – Adequate

Category 2 – Insufficient Information

Category 3 – Inadequate

(See March 1997 *Lessons Learned Quarterly Report* for a full explanation of these definitions.)

Final EISs

Defense Programs
DOE/EIS-0288 (EPA Rating: EC-2)
Production of Tritium in a Commercial Light Water Reactor
February 1999 (64 FR 12318; 3/12/99)
Cost: $3.2 million ($0.3 million Federal, $2.9 million contractor)
Time: 13 months

Defense Programs/Albuquerque Operations Office
DOE/EIS-0238 (EPA Rating: EC-2)
Los Alamos National Laboratory Site-wide, Los Alamos, New Mexico
January 1999 (64 FR 8356; 2/19/99)
Cost: $23.5 million ($2.1 million Federal, $21.4 million contractor)
Time: 44 months

Defense Programs/Savannah River Operations Office
DOE/EIS-0270 (EPA Rating: EC-2)
Accelerator Production of Tritium at the Savannah River Site, Aiken, South Carolina
February 1999 (64 FR 12318; 3/12/99)
Cost: $3.2 million ($0.4 million Federal, $2.8 million contractor)
Time: 30 months

Defense Programs/Savannah River Operations Office
DOE/EIS-0271 (EPA Rating: EC-2)
Construction and Operation of a Tritium Extraction Facility at the Savannah River Site, Aiken, South Carolina
March 1999 (64 FR 12318; 3/12/99)
Cost: $1.4 million ($0.5 million Federal, $0.9 million contractor)
Time: 31 months

Environmental Management/Idaho Operations Office
DOE/EIS-0290 (EPA Rating: EC-2)
Advanced Mixed Waste Treatment Project, Idaho National Engineering and Environmental Laboratory
January 1999 (64 FR 7190; 2/12/99)
Cost: $2.2 million ($0.5 million Federal, $1.7 million contractor)
Time: 14 months

Nuclear Energy
DOE/EIS-0269 (EPA Rating: EC-2)
Alternative Strategies for the Long-term Management and Use of Depleted Uranium Hexafluoride Resources at Several Geographic Locations
March 1999 (64 FR 19999; 4/23/99)
Cost: $6.0 million (No breakdown of cost available)
Time: 38 months

Western Area Power Administration
DOE/EIS-0297 (EPA Rating: EO-2)
Griffith Power Plant and Transmission Line Project, Mohave County, Arizona
March 1999 (64 FR 15969; 4/2/99)
Time: 12 months
[**Note**: The costs of this EIS were paid by the applicant; therefore, cost information does not apply to DOE.]

Other EIS-related Documents, January 1 – March 31, 1999

Notices of Intent

DOE/EIS-0305
Transuranic Waste Treatment Project at the Oak Ridge Reservation, Oak Ridge, Tennessee
1/27/99 (64 FR 4079)

DOE/EIS-0307
Public Service Company of New Mexico, Arizona-Sonora, Mexico, Transmission Lines
2/12/99 (64 FR 7173)

DOE/EIS-0082-S2
Supplemental EIS for the Salt Disposition Alternatives (formerly known as Alternatives to the In-Tank Precipitation Process) at the Defense Waste Processing Facility, Savannah River Site, Aiken, South Carolina
2/22/99 (64 FR 8558)

DOE/EIS-0306
Treatment and Management of Sodium-Bonded Spent Nuclear Fuel, Idaho Falls, Idaho
*(*Formerly known as *Electrometallurgical Treatment of Sodium-Bonded Spent Nuclear Fuel at Argonne National Laboratory-West, Idaho National Engineering and Environmental Laboratory)*
2/22/99 (64 FR 8553)

DOE/EIS-0309
Site-wide for the Y-12 Plant, Oak Ridge, Tennessee
3/17/99 (64 FR 13179)

DOE/EIS-0304
City of Lakeland McIntosh Unit 4 PCFB Demonstration Project, Lakeland, Florida
3/26/99 (64 FR 14710)

Draft EIS

DOE/EIS-0293
Conveyance and Transfer of Certain Land Tracts Located at Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico
February 1999 (64 FR 9483; 2/26/99)

Records of Decision

DOE/EIS-0183
Power Subscription Strategy under the Bonneville Power Administration's Business Plan
1/04/99 (64 FR 149)

DOE/EIS-0277
Management of Certain Plutonium Residues and Scrub Alloy Stored at the Rocky Flats Environmental Technology Site, Rocky Flats, Colorado; second ROD (for seven categories of residues)
2/11/99 (64 FR 8068)

Supplement Analyses

DOE/EIS-0246-SA-01
Irregular Everett Island Property Project, Wildlife Mitigation Programmatic EIS in Idaho, Montana, Nevada, Washington, and Oregon
(Decision: No further NEPA review required)
February 1999

DOE/EIS-0246-SA-02
Boyle Acquisition, Wildlife Mitigation Programmatic EIS in Idaho, Montana, Nevada, Washington, and Oregon
(Decision: No further NEPA review required)
February 1999

DOE/EIS-0157-SA-01
Site-wide for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore, California
(Decision: No further NEPA review required)
March 1999

DOE/EIS-0251-SA-01 (also relates to DOE/EIS-0203)
Container System for the Management of DOE Spent Nuclear Fuel Located at the Idaho National Environmental and Engineering Laboratory, Container Systems for the Management of Spent Nuclear Fuel EIS **and** *Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs EIS*
(Decision: No further NEPA review required)
March 1999

DOE/EIS-0265-SA-12
Ahtanum Creek Watershed Assessment, Yakima County, Washington, Watershed Management Program in Oregon, Idaho, Washington and Montana EIS
(Decision: No further NEPA review required)
March 1999

What Worked and Didn't Work in the NEPA Process

To foster continuing improvement in the Department's NEPA Compliance Program, DOE Order 451.1A requires the Office of NEPA Policy and Assistance to solicit comments on lessons learned in the process of completing NEPA documents and distribute quarterly reports. This Quarterly Report covers documents completed between January 1 and March 31, 1999. Comments and lessons learned on the following topics were submitted by questionnaire respondents.

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

Scoping

What Worked

- *Publication of a scoping document*. We published a document describing the scoping process, comments received, and DOE's disposition of comments well before the Draft EIS.
- *Combining scoping meetings for related documents.* We held scoping meetings for two related EISs simultaneously in the same locations.
- *Workshop on an additional alternative.* A public workshop helped define an additional alternative that was responsive to public comments.

What Didn't Work

- *Identifying which activities to analyze.* For a supplement analysis on a site-wide EIS, one of the most difficult issues was resolving the difference between what program managers wanted to do versus what would be approved and funded over the next five years.

Data Collection/Analysis

What Worked

- *Coordination.* The Management and Operations (M&O) contractor established a liaison with the project research and safety analysis team, which greatly facilitated data gathering. The program had an environmental coordinator who chaired working group meetings that were used to relay data needs and schedules.
- *A comprehensive first data call.* A comprehensive first data call led to fewer needs later in the process.
- *One manager for two related documents.* Having the same DOE NEPA Document Manager manage an EA and a related EIS improved the consistency of technical information and expedited EA preparation.
- *Key Parameter Teams.* Key Parameter Teams for each resource area included a Federal employee, an EIS contractor employee, and an M&O contractor employee [who served as a data source] to align the type of impact to be analyzed with the analytical methods and available data.
- *Using the M&O contractor as a data source.* The M&O contractor was a very effective source for operations descriptions and other technical information.

What Didn't Work

- *Lack of a baseline.* The site did not have an up-to-date environmental baseline, which added time and cost to the NEPA review.

Schedule

Factors that Facilitated Timely Completion of Documents

- *Using preliminary data*. Use of early design data facilitated timely completion of the EIS, although there was some risk that the data would change.
- *An abbreviated Final EIS.* Use of an abbreviated Final EIS that provided responses to comments and text changes without reprinting the Draft EIS text saved printing and preparation time.
- *Close communication.* Close communication between contractor teams preparing related documents saved time and reduced duplication of effort.
- *Program Office coordination.* One of the most helpful elements in the process was the Program Office's coordination with other DOE Headquarters organizations, such as EH and GC. This facilitated teamwork and greatly simplified the review process and resolution of internal comments.

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What Worked and Didn't Work in the NEPA Process

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Factors that Inhibited Timely Completion of Documents

- *Late completion of transmittal letters and press releases.* Transmittal letters and press releases for Draft and Final EISs were not completed until the week of distribution.
- *New alternatives.* Late addition of a new alternative delayed the EIS.
- *Changes in alternatives.* A major rewrite of the No Action alternative prior to issuance of the Draft EIS made for a tight schedule.
- *Extended public comment period.* An extended public comment period over a holiday season delayed completion of the EA.
- *Lack of coordination.* Members of the Management and Review Team sometimes provided comments directly to the contractor, which made it difficult for the NEPA Document Manager to ensure that all comments were properly addressed.
- *Revisions during the concurrence and approval phase.* Document preparation included both DOE site and Headquarters and contractor staff early in the process. However, the document still required extensive revision during concurrence and approval.
- *Changing management decisions.* Some management team participants were later overruled by their senior management.
- *Multiple programs.* It was difficult to accommodate proposed changes resulting from other programmatic NEPA processes that considered our site as an alternative site for their action.

Factors that Facilitated Effective Teamwork

- *Strong points of contact.* Strong points of contact in the Program Office, the Project Office, and the Office of NEPA Policy and Assistance facilitated teamwork and information flow.
- *Using one contractor for related documents.* The same contractor prepared two related EISs, which facilitated teamwork.
- *DOE subject matter experts.* DOE subject matter experts were useful in facilitating teamwork between M&O and EIS contractors.

Factors that Inhibited Effective Teamwork

- *Competition between project offices.* Two DOE offices for different tritium-related technologies were inherently adversarial, which inhibited communication and teamwork.
- *Multiple office involvement.* The management team had representatives from several different program offices, which slowed the process and inhibited teamwork.

Process

Successful Aspects of the Public Participation Process

- *Having project team members at public meetings.* Having members of the project team present aided information exchange, as questions could be answered on the spot by the experts themselves.
- *Discussions with stakeholders.* Presentations and discussions with individual stakeholder groups were informative for both DOE and the interested parties.
- *Workshop on an additional alternative.* A workshop on an alternative added in response to scoping comments was successful.
- *Going beyond the requirements.* Although not required for a supplement analysis, Headquarters required a formal public participation process because of known public concerns. While a public meeting had not been anticipated in the original schedule, it did help the public gain a better understanding of the issues involved.

Unsuccessful Aspects of the Public Participation Process

- *Lack of a coherent story.* DOE was unable to communicate a coherent story on the relationships of related EISs and the program as a whole.
- *Perception that DOE is not listening.* Generally only the same small percentage of the public participates in the process, and the reaction of that small percentage is that DOE is not listening.

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What Worked and Didn't Work in the NEPA Process

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- *Perceptions of individual employees versus DOE.* Members of the public view openness and honesty as attributes of individual DOE employees, not as characteristics of DOE as a whole.
- *Underlying negative opinion.* Positive aspects of public involvement still do not overcome the perception that "none of this ever results in real change; DOE still does what it wants to do."

Usefulness

Agency Planning and Decision Making—What Worked

- *Preferred Alternative.* The NEPA process clarified the appropriateness of the Preferred Alternative.
- *Timeliness.* The EA was allowed to proceed independently of a related EIS, which allowed for a timely and cost-effective decision.
- *Tiered decision making.* Tiering from a programmatic document simplified preparation of the project-specific document.
- *Defining needs.* The process forced the program to clearly define their programmatic needs.
- *Positive expectations.* Future NEPA reviews should be cheaper and more straightforward with the Site-wide EIS now in place.

Agency Planning and Decision Making—What Didn't Work

- *Making the decision in advance.* It is not clear that the project-specific EIS had any real effect on technology or siting decisions.
- *Other drivers in the process.* The project need was clearly driven by programmatic requirements, and true project planning occurred via engineering and programmatic analyses before the start of the NEPA process.

Enhancement/Protection of the Environment

- *Incorporating protection in the planning process.* The NEPA process made the project managers more aware of how the project can affect the environment.
- *Preferred Alternative.* The Preferred Alternative was found to provide the greatest protection of the environment in the long term.

Cost

Factors that Facilitated Cost Savings

- *Using conference calls to resolve review comments.* Travel money was saved by using conference calls to resolve comments on the Draft and Final EISs.

Effectiveness of the NEPA Process

For the purposes of this section, "effective" means that the NEPA process was rated 3, 4, or 5 on a scale from 0 to 5, with 0 meaning "not effective at all" and 5 meaning "highly effective" with respect to its influence on decision making.

- For this quarter, in which there were four EAs and seven EISs, five of the nine respondents rated the NEPA process as "effective."
- One respondent rating the process as "effective" indicated that the NEPA process forced facility engineering personnel to take a "hard look" at the cost effectiveness of the proposal. Another noted that the process helped the program identify programmatic activities that would mature into firmly proposed projects over the next five years.
- A respondent who rated the process as "5" observed that the process addressed cross-cutting issues such as usefulness and waste management, and the document preparers focused on the usefulness of the document to those who implement the NEPA process at the site.
- One respondent who felt that the decision was made before the NEPA process was completed rated the process as "0," but stated that if the process had been used as intended, the rating would have been a "4."

Lessons Learned Questionnaire in Revision

The Office of NEPA Policy and Assistance is revising the **Lessons Learned Questionnaire**.
Please provide any suggestions to Hitesh Nigam at hitesh.nigam@eh.doe.gov, phone 202-586-0750, or fax 202-586-7031.

EIS Cohort Results

The June 1997 *Lessons Learned Quarterly Report* initiated reporting on a cohort of the first 24 (now 23) EISs started after July 1, 1994; Notices of Intent for these EISs were issued between July 1, 1994, and March 31, 1997. The cohort consists of 10 programmatic or site-wide and 13 project-specific documents. One EIS was removed from the cohort because DOE was not the lead agency.

Table 1. First EIS Cohort Results for Completed Documents

EIS Type	Number Completed	Completion Times (months)			Costs ($M)		
		Median	Average	Range	Median	Average	Range
Total	20 (of 23)	19	20	9 to 44	$3.1	$5.9	$0.02 to $23.5
Programmatic or Site-wide	9 (of 10)	21	23	12 to 44	$8.2	$10.3	$0.1 to $23.5
Project-specific	11 (of 13)	19	18	9 to 31	$2.4	$2.4	$0.02 to $4.5

Based on the elapsed preparation times to date for the three ongoing documents, we have determined that the median completion time of the entire cohort will be 21 months when all EISs are completed, regardless of the actual completion dates. More specifically, the cohort median completion times will be 22 months for programmatic and site-wide documents, and 19 months for project-specific documents. This represents a substantial improvement over the 33-month median completion time for the last 15 DOE EISs completed before July 1994, most of which were project-specific.

New Cohort

Because we now know the median completion time for the above cohort, it can be used as a baseline against which to compare future results. Beginning with this *Lessons Learned Quarterly Report*, we will track a new cohort consisting of 25 EISs started between April 1, 1997 and March 31, 1999 (Table 2). DOE initiated 26 EISs in this time frame, but one has been canceled. As with the first cohort, EISs that were adopted, canceled, or for which DOE was not the lead agency are not included. Table 2 provides information about the distribution of the new cohort EISs among DOE program offices. We will continue to track and report on this new cohort from time to time. In the future, we will refer to the first cohort as Cohort 94 and the new cohort as Cohort 97.

Table 2. New EIS Cohort by Program Office
(EISs started between 4/1/97 and 3/31/99)

EIS Type	Number Started	Programmatic/ Site-wide	Project-specific	Number Completed (through 6/1/99)
Total	**25**	**4**	**21**	**5**
Bonneville Power Administration	2	1	1	0
Defense Programs	5	2	3	1 (13 months)
Energy Efficiency & Renewable Energy	1	0	1	0
Environmental Management	6	0	6	1 (14 months)
Fossil Energy	4	0	4	0
Fissile Materials Disposition	1	1	0	0
Nuclear Energy	2	0	2	0
Office of Science	2	0	2	1 (21 months)
Western Area Power Administration	2	0	2	2 (12 and 14 months)

Recent EIS Milestones (April 1 to June 1, 1999)

Notices of Intent

DOE/EIS-0283
Supplement to the Draft Surplus Plutonium Disposition Programmatic EIS
4/6/99 (64 FR 16720)

Draft EISs

DOE/EIS-0281
Sandia National Laboratories Site-wide, Albuquerque, New Mexico
April 1999 (64 FR 18900; 4/16/99)

DOE/EIS-0222
Hanford Remedial Action and Comprehensive Land Use Plan Programmatic, Hanford Site, Richland, Washington
April 1999 (64 FR 19999; 4/23/99)

DOE/EIS-0283
Supplement to the Draft Surplus Plutonium Disposition Programmatic
April 1999 (64 FR 26410; 5/14/99)

Final EISs

DOE/EIS-0247
Construction and Operation of the Spallation Neutron Source, Oak Ridge National Laboratory, Oak Ridge, Tennessee
April 1999 (64 FR 19999;4/23/99)

DOE/EIS-0294
Sutter Power Plant and Transmission Line Project, California
April 1999 (64 FR 19999; 4/23/99)

Supplement Analysis

DOE/EIS-0236-SA-06
Pit Manufacturing Facilities at Los Alamos National Laboratory, Stockpile Stewardship and Management Programmatic EIS
(Decision: No further NEPA review required)
April 1999

Records of Decision

DOE/EIS-0290
Advanced Mixed Waste Treatment Project, Idaho National Engineering and Environmental Laboratory
4/7/99 (64 FR 16948)

DOE/EIS-0251 (also relates to DOE/EIS-0203)
Multi-purpose Canister or Comparable System for Idaho National Engineering and Environmental Laboratory Spent Nuclear Fuel
5/4/99 (64 FR 23825)

Consolidated ROD for the following three EISs:
5/14/99 (64 FR 26369)

DOE/EIS-0288
Production of Tritium in a Commercial Light Water Reactor

DOE/EIS-0270
Accelerator Production of Tritium at the Savannah River Site, Aiken, South Carolina

DOE/EIS-0271
Construction and Operation of a Tritium Extraction Facility at the Savannah River Site, Aiken, South Carolina

Withdrawal of Notice of Intent

DOE/EIS-0302
Transfer of the Heat Source/Radioisotope Thermoelectric Generator Operations at the Mound Site EIS
5/18/99 (64 FR 26954)