N E P A

## National Environmental Policy Act

# LESSONS LEARNED

**U.S. Department of Energy** 

**Quarterly Report** 

September 3, 1996

For 3rd Quarter FY 1996

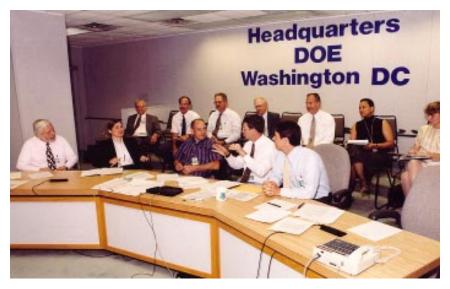
## Monthly Meetings Foster Teamwork

# A Salute to Gary Palmer

Three years ago, Gary Palmer, the Defense Programs' Deputy NEPA Compliance Officer, instituted a program for improving communication and coordination among his office, the Office of NEPA Policy and Assistance, and the Office of the Assistant General Counsel for Environment. Gary proposed that the three offices meet on a regular basis to discuss the status of DP's NEPA activities, existing and pending guidance, and other NEPA-related issues. These meetings have become a monthly mainstay, fostering teamwork among the participants and providing a mechanism for early resolution of issues.

As DP has become more involved in programmatic and site-wide environmental impact statements, its NEPA issues have become more complex, and the list of meeting participants has grown. Monthly videoconference meetings are now routinely attended by members of the Offices of Materials Disposition and

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Gary Palmer leads videoconference discussion of cross-program issues at monthly NEPA meetings (first row, I-r: Steve Ferguson, GC; Carol Borgstrom and Bob Strickler, EH; Gary Palmer, DP; David Hoel, EM; second row, I-r: Stan Lichtman, Eric Cohen, Jim Daniel and Ted Hinds, EH; Rick Kendle, EM; Sandy Dodd and Trish Coffin, DP/support).

#### Inside *LESSONS LEARNED*

Welcome again to the Quarterly Report on Lessons Learned in the NEPA process. This report includes:

- Mini-guidance on Richland's internal scoping process, visual information presentation, and responding to comments on DOE EISs - Pages 3-5
- Report from a NEPA Document Manager on resolving EPA comments Page 6
- Updates on incorporating pollution prevention in NEPA documents, NEPA litigation,
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Carol Bornetton

Office of NEPA Policy and Assistance

## Office of NEPA Policy and Assistance

## **NEPA's John Pulliam Retires**

John J. Pulliam, III, will retire in September after 30 years of service with the Federal Government. A biologist by training, John served his last seven years with DOE's Office of NEPA Policy and Assistance as Unit Leader for Energy Efficiency/Renewable Energy/Fossil Energy. John's Federal career also included 21 years with the U.S. Fish and Wildlife Service and two years in the U.S. Army. Along with his solid knowledge of NEPA and his popularity as a NEPA workshop

leader, John is noted for his expertise on endangered species, floodplain and wetlands issues, and environmental justice. Most recently, John led the effort to streamline the Department's NEPA procedures by amending 10 CFR Part 1021.

Ahead is a new career for John as Assistant Director of International Missions for Luther Rice Seminary in Atlanta, Georgia.  $\boxed{L_L}$ 



John J. Pulliam, III

## Gary Palmer (continued)

Environmental Management, Headquarters' offices in Forrestal and Germantown, and one or more field offices who are included on a rotating or "as needed" basis. Offices without a video capability can participate via a conference call. The meetings are focused by an agenda prepared and reviewed in advance, yet are informal enough to allow for a free exchange of ideas and information not on the agenda.

Gary's attention to detail has made the meetings a success. Always cooperative, he takes a proactive role in running DP's NEPA program. Henry Garson, DP's NEPA Compliance Officer, says Gary makes "order out of chaos."

The monthly videoconferences are extremely useful for both the Headquarters and field NEPA staffs. The Headquarters' personnel hear first-hand about the field's problems, concerns, issues, and success stories. The field and Defense Programs staffs listen to the NEPA Office and

General Counsel's views on current or emerging NEPA policy and legal issues

A regular attendee and supporter of the videoconferences,
Bert Stevenson, Office of Materials
Deposition, believes that one gets an understanding of what other people within DOE are doing; what works, what doesn't work; what constitutes a good or bad decision; and where the Office of NEPA Policy and
Assistance puts its emphasis when reviewing a final versus a draft

environmental impact statement.

Martha Crosland, Environmental Management's NEPA Compliance Officer, believes the meetings are a valuable communication tool—they serve to get the right people talking to one another. Steve Ferguson, Office of the Assistant General Counsel for Environment, thinks that the meetings force NEPA practitioners to discuss issues earlier rather than later. This early communication leads to consistency

of treatment and assumptions, and issue resolution.

At the July 9, 1996, videoconference, the group discussed 12 environmental impact statements, alternative formats for responding to comments received on draft environmental impact statements, how to analyze specific projects within a programmatic or site-wide environmental impact statement, and public availability of records of decisions.

The Office of NEPA Policy and Assistance endorses this use of multi-program videoconferencing as a productive way to maintain open, effective communications between Headquarters and the field offices, and to save time and money. The NEPA Office salutes Gary Palmer for having the vision to initiate this innovative format and encourages others to establish similar procedures. For further information, please contact Gary Palmer at (202) 586-1785. LL

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## Office of NEPA Policy and Assistance Mini-Guidance

## Richland's Effective Internal Scoping Process

The Richland Operations Office conducts an effective internal scoping process that helps streamline the NEPA process for their proposed projects. Key features include:

- Meeting early with all appropriate personnel (NEPA Compliance Officer, legal counsel, DOE project staff, and appropriate management and operations and support contractors).
- Using a checklist to identify potential environmental impacts, key issues, any special data needs, and the expected depth of analysis (including page lengths).

- Developing a purpose and need statement and a preliminary range of alternatives.
- Writing an internal scoping report that recommends the initial level of the NEPA document and the NEPA Document Manager. (The NEPA Compliance Officer and project representative sign the report, which the Richland Operations Office Manager uses in making the official determinations.)
- Identifying document preparers and reviewers, planning public participation, and establishing a schedule.

Others may wish to consider whether aspects of Richland's approach might improve the internal scoping procedures each DOE Headquarters and field office has established under DOE Order 451.1, section 5a(3). A Richland internal scoping report, "Internal Scoping for Powerhouse Decommissioning at the Hanford Site (July 1996)," would be a good model to study. (Contact Paul Dunigan, Richland NEPA Compliance Officer, at (509) 376-6667.) | L<sub>I</sub> |

## Visual Excellence Conveys the Message

Important decisions require both a sound analysis and effective communication with decision makers. NEPA documents provide a vital link in DOE's decision process. Well-designed visual presentations help to summarize volumes of information or illustrate complex concepts in a simple form.

Visual elements of a document—design of the text, graphics, tables, and maps—may either help or hinder a reader. A friendly design illuminates the message within the data and encourages comparisons of important details. The Office of NEPA Policy and Assistance offers basic advice on the use of graphics and presentation of data in Section 9 of "Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements" (the "Green Book" of May 1993).

In addition, the writings and training offered by Edward Tufte, professor of political science, statistics, and graphic design at Yale University, provide more detailed guidance for presenting technical information. Tufte's excellent one-day class covers making effective presentations on paper and in person. His training topics include: complexity and clarity; tables, graphs, and maps; design of information displays in public spaces; and use and abuse of color, type fonts, computers, handouts, overheads, and animation.

This instruction is based on Tufte's books: "The Visual Display of Quantitative Information," "Envisioning Information," and "Visual Explanations." The classroom experience and reading "The Visual Display of Quantitative Information" are particularly relevant and useful for NEPA Document Managers, NEPA Compliance Officers, and others involved in communicating the findings of the NEPA process. For more information, please contact Yardena Mansoor, Office of NEPA Policy and Assistance, at (202) 586-9326.

#### Send Us Your Examples

The Office of NEPA Policy and Assistance is developing recommendations on effective user-friendly visual presentations: graphs, tables, figures, maps, flow diagrams, layout, and formatting. We intend to produce a reference collection of good and bad examples in a future guidance document. Please send your contributions to Yardena Mansoor, Office of NEPA Policy and Assistance (EH-42), 1000 Independence Ave., SW, Washington, DC 20585-0119.

## Office of NEPA Policy and Assistance Mini-Guidance

## Responding to Comments on DOE EISs

DOE's final environmental impact statements (EIS) must respond to public comments on the draft EISs. The following guidance explains why DOE must respond to substantive comments and offer suggestions on response formats.

#### Regulatory Background

The Council on Environmental Quality's (CEQ) NEPA regulations require Federal agencies to assess and consider comments received on a draft EIS. The comments must be considered both individually and collectively. An agency must respond to the comments by modifying EIS alternatives including the proposed action, developing additional alternatives, supplementing or improving the analyses, making factual corrections, or explaining why the comments do not warrant further agency response (40 CFR 1503.4 (a)). All substantive comments received on a draft EIS (or a summary of the comments if they are exceptionally voluminous) should be attached to the final EIS regardless of whether the agency believes they merit individual discussion in the body of the document (40 CFR 1503.4(b)).

In its "40 Most Asked Questions" (Questions 25 and 29a) (46 FR 18026, March 23, 1981), CEQ notes that responses to comments should result primarily in changes to the text of the EIS, "not simply a separate answer at the back of the document." However, CEQ also suggests that specific answers to "each significant comment" be included in the final EIS and may be placed in an appendix. Agencies may group similar comments together and prepare a single answer for each group.

#### Planning and Content

- Preparing responses to comments can be expensive and time-consuming, so the approach to organizing the responses should be planned carefully, taking into account the complexity of the issues involved, the number of comments anticipated, and other relevant factors.
- Response formats should be user-friendly.
   Commentors should be able to easily find DOE's responses to their particular statements. Readers

should be able to determine which commentor made a particular comment. Comments may be—but are not required to be—reproduced (perhaps reduced in size) and included with the final EIS.

 Responses should be respectful in tone, informative and factual. Responses should state whether, how, and where DOE changed the EIS as a result of comments.

#### Formats of Responses to Comments

The following describes several different approaches to presenting responses to comments. While there is no "right" or "wrong" approach, one may be better than another for certain circumstances.

#### 1. Address each comment individually

Each comment letter received and each hearing transcript/meeting summary is reproduced verbatim. Frequently, each comment is given a code and the

code appears with a marginal bar to indicate the text that is designated as the "comment." A response is prepared for each comment and printed following or adjacent to the comment. No attempt is made to summarize or restate the comments or to group the comments according

to subject matter or EIS section.

EIS Example:

Dual Axis Radiographic Hydrodynamic Test Facility, LANL Los Alamos, NM DOE/EIS-0203 (September 1995)

This approach ensures that all comments are addressed and accurately represented. Frequently, however, the same response is given to many similar comments, and this format may make changing such responses difficult. Further, it is difficult to discern an overview of the public comments on a particular issue. This approach is most appropriate when DOE receives a small number of comments or comments on generally different topics.

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## Office of NEPA Policy and Assistance Mini-Guidance

## Responding to Comments (continued)

## 2. Group comments according to EIS section or subject matter

Individual comments from comment letters and hearing transcripts/meeting summaries are

organized according to sections of the EIS or by subject matter. Multiple comments on the same section or subject are addressed only once. Responses to similar comments are referenced to avoid repetition.

This approach is readable and efficient. However, by grouping comments, the commentor's original context may be lost.

#### EIS Example:

Spent Nuclear
Fuel Management
and INEL
Environmental
Restoration
and Waste
Management
Programs,
Idaho Falls, ID
DOE/EIS-0203
(April 1995)

EIS Example:

Pilot Plant,

Waste Isolation

Carlsbad, NM

DOE/EIS-0026-FS

(January 1990)

## 3. Synthesize similar comments into one comment for response

Similar comments on the same issue are synthesized into one comment and one response is provided, which avoids repetition.

This enables DOE to respond in one place to commentors with differing viewpoints on the same issue.

However, DOE must include every point raised in the comments for a

particular subject. Each comment must be understood in the context of the entire submission and accurately represented in the comment summary. Adequately incorporating all of the comments to capture the commentors' points can be very time-consuming and resource-intensive.

This approach is most appropriate when a large number of comments is received and sufficient time is available to pay careful attention to the inclusion of all comments and the preparation of complete responses.

#### 4. Combination

When appropriate, comments on certain topics can be synthesized and comments on other topics grouped together or responded to individually. This approach is sometimes optimal.

#### EIS Example:

Proposed Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Nuclear Fuel DOE/EIS-0218 (February 1996)

#### 5. Comment-response document?

A "comment-response document" is not required by either the CEQ or the DOE NEPA regulations and may not be warranted when there are a small number of comments. DOE must nevertheless be able to show that it has in fact "assess[ed] and consider[ed]" all comments and made the appropriate changes in the final EIS.  $L_L$ 



**REMINDER:** Lessons Learned Questionnaires for all NEPA documents completed during the fourth quarter of FY 96 (July 1, 1996 to September 30, 1996) should be submitted as soon as possible after document completion, but no later than November 1, 1996. (Fax: 202-586-7031 or Internet: joanne.geroe@hg.doe.gov). The Lessons Learned Questionnaire is now available interactively on the DOE NEPA Web [http:// www.eh.doe.gov/nepa] on the Internet. Look for it under NEPA Process Information.

## Report from a NEPA Document Manager

## Improving Comment Resolution with EPA

By: David Hoel, NEPA Document Manager Office of Environmental Management

Have you felt disconcerted by an "Insufficient Information" rating from the Environmental Protection Agency (EPA) on your draft EIS? Do you want to receive a friendly concurrence letter on your responses to EPA's comments?

Don't despair! Lessons learned in working with EPA staff on their comments on the Spent Nuclear Fuel Management (SNF) and Waste Management Programmatic EISs (WM PEIS) can help achieve a happy ending for your EIS (environmental assessments too). These same lessons can be applied to other Federal and state agencies, tribal governments, and the Defense Nuclear Facilities Safety Board. The draft SNF PEIS and WM PEIS each received "EC-2" (Environmental Concerns-Insufficient Information) ratings from EPA. However, DOE's final documents (the final WM PEIS is in preparation) address the EPA comments with very positive results.

EPA's comments identified specific areas for which EPA believed there was insufficient information. We identified EPA comments that required changes in the final EIS, those that we did not expect to do so, and those that warranted discussion or clarification. We then contacted EPA to arrange to discuss both of the latter types of comments. This approach focuses discussions on

comments that need the most attention. EPA commentors welcomed the opportunity to elaborate on the intent of their comments and to better understand DOE. They offered constructive technical suggestions where developing a technically appropriate response was most difficult.

Clear, effective communication often is key to successful comment

adequately addressed their comments and satisfied the environmental concerns indicated in their rating of the draft PEIS. We were very happy to find out <u>before</u> publishing the final EIS that our responses were acceptable to EPA.

We let EPA know we appreciated the time and effort that their reviewers devoted to helping improve our NEPA document. As in any

"We...are satisfied that [EPA's] environmental concerns...have been adequately addressed....DOE's coordination...has been exceptionally managed and we appreciate the opportunity to...work with the DOE staff."

> Richard E. Sanderson Director, EPA Office of Federal Activities

resolution. Preparing draft responses before each discussion with EPA helped us to clarify issues and avoid dwelling on editorial rather than substantive aspects of the responses. EPA reviewers were objective and reasonable about withdrawing or otherwise closing a comment wherever DOE could show that the draft EIS adequately addressed the matter.

Once we reached agreement with EPA staff on how to resolve their comments, we provided them a written accounting of the proposed responses. EPA confirmed in writing that the DOE responses

communications, a positive and polite demeanor can make quite a difference in the degree of cooperation received.

For more information on these EPA comment resolution experiences or for examples of SNF PEIS and WM PEIS correspondence, please call David Hoel, EM-35, at (202) 586-3977.

[Editor's Note: See mini-guidance on formats for responding to comments on page 4.] L

## EPA Commends DOE for "Model" Pollution Prevention Analysis

The U.S. Environmental Protection Agency (EPA) has praised the analysis of pollution prevention and waste minimization presented in the Pantex draft site-wide EIS as a model for future analyses. Robert D. Lawrence, Chief of the Office of Planning and Coordination in EPA's Region VI, stated: "The EPA would like to commend DOE for [the] Appendix on pollution prevention and waste minimization. We find Appendix G to be comprehensive in scope, informative to the reader, and a model which other DOE NEPA documents may find beneficial."

Appendix G of the draft EIS—which is entitled the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapon Components—offers background information on the Pantex Plant's Pollution Prevention and Waste Minimization program. The Pantex EIS discusses source reduction, process change, pollution prevention opportunity assessments, technology transfer, recycling, treatment, energy and water conservation, and future programs. Current and future potential waste reduction and cost savings are examined, and future goals are reviewed.

For example, the section on source reduction lists 34 specific measures taken at the Pantex Plant to reduce waste at the source. This

demonstrates how waste quantities are reduced over time and identifies the associated cost savings. The appendix also presents waste source reduction goals for 1994 to 1999.

Under DOE Order 5400.1, "General Environmental Protection Program," and DOE guidance—provided in the

(January 1995). [Note: DOE's Office of Environmental Management also is preparing guidance on addressing pollution prevention in NEPA documents.]

EPIC, DOE's Pollution Prevention Information Clearinghouse on the Internet, provides general DOE

"...comprehensive in scope, informative to the reader, and a model which other DOE NEPA documents may find beneficial..." EPA, Region VI

DOE's 1994 Waste Minimization/
Pollution Prevention Crosscut Plan
and the 1996 Pollution Prevention
Program Plan—each site is required
to develop and maintain site-wide and
generator-specific pollution
prevention/waste minimization
programs. Explanations of
applicable programs benefit
site-wide NEPA documents and
serve as a departure point for
presenting project specific pollution
prevention/waste minimization
information.

Guidance on incorporating pollution prevention principles, techniques, and mechanisms into NEPA documents—provided by the Council on Environmental Quality (January 12, 1993) and the EPA (October 15, 1992)—is included in the Volume II of the 1994 NEPA Compliance Guide. Additionally, EPA issued a pollution prevention check list for NEPA documents

information and links to pollution prevention homepages at specific offices. EPIC's address is: http://epic.er.doe.gov/epic.htm. DOE site pollution prevention reporting under the Toxic Chemical Release Inventory can be found at http://www.eh.doe.gov/nepa by clicking on the "Environmental Data and Reports" section.

Kent Hancock, Chair, Waste Reduction Steering Committee (WRSC), EM-77 (301) 903-1380, Jane Powers, WRSC member, EH-412 (202) 586-7301 and John Marchetti, WRSC member, DP-34 (301) 903-5003 can provide further information on pollution prevention and waste minimization topics. Copies of Appendix G of the Pantex draft site-wide EIS can be obtained from Shane Collins, Office of NEPA Policy and Assistance, at (202) 586-1979. L



## Legal Updates

## Department Sued Again Over Foreign Research Reactor Spent Nuclear Fuel; Other Cases of Interest

In the continuing controversy over the receipt of spent nuclear fuel from foreign research reactors, the State of South Carolina has again sued DOE, this time over the adequacy of the EIS issued in February 1996 on the policy. [In an earlier case, the U.S. Court of Appeals for the Fourth Circuit had ruled that DOE's EA for two urgent-relief shipments of foreign research reactor fuel was adequate. South Carolina v. O'Leary, 64 F.3d 892 (4th Cir. 1995).]

The complaint filed by the State on July 29, 1996, alleges that the EIS on a Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Nuclear Fuel is deficient in that it "barely discusses" the use of the L-Reactor disassembly basin for storage of the fuel once the Receiving Basin for Offsite Fuels becomes full. The State further alleges that the EIS "utterly fails to make candid disclosure of the known potential environmental and safety hazards" of storage in the basins. The State asked for an injunction prohibiting any shipments of foreign research reactor spent nuclear fuel assemblies to the U.S. until DOE has prepared an adequate EIS.

On August 15, 1996, the U.S. District Court for the District of South Carolina denied the State's motion for a preliminary injunction. The court found that the State is not likely to prevail on the merits of the case and has not proven that any irreparable harm would occur to the workers at the Savannah River Site

or to the general population from the proposed shipments. The court has not yet ruled on the merits of the case for purposes of a final ruling.

#### Sandia Sitewide EIS

In mid-June, DOE moved to dismiss the complaint filed by the Southwest Information and Research Center and Isleta Pueblo to require DOE to prepare a sitewide EIS for Sandia National Laboratory—Albuquerque (SNLA). DOE argued that the plaintiffs have not alleged any violation of NEPA for any particular action and that DOE has considered cumulative impacts as required under NEPA for all recent actions at SNLA. With respect to allegations concerning use of the 1977 sitewide EA for SNLA, DOE argued that it has not tiered from the EA and that preparation of a supplement analysis for the EA is not required. Finally, DOE argued that its policy to prepare sitewide EISs does not, as a matter of law, require the preparation of any particular sitewide EIS, and that the plaintiffs' request is moot because the Department decided in 1992 to prepare a sitewide EIS for SNLA and is committed to start doing so in fiscal year 1997, barring any budget limitations. As of this writing, the court has not ruled on the Department's motion to dismiss.

## Electrometallurgical Processing Demonstration

On July 12, 1996, the U.S. District Court for the Northern District of California denied the request of organizations concerned about nonproliferation to temporarily restrain DOE from conducting an electrometallurgical process demonstration on Experimental Breeder Reactor-II spent nuclear fuel. (The Office of Nuclear Energy completed an EA for the proposed demonstration and issued a Finding of No Significant Impact on May 15, 1996.) The organizations had previously amended their complaint to include the demonstration project in ongoing litigation challenging DOE's NEPA review of the Transuranic Management by Pyroprocessing-Separation (TRUMP-S) project. The Department argued its motion for summary judgment in the TRUMP-S litigation on July 13, 1996. As of this writing, the court has not ruled on the Department's motion.

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Recent opinions of interest (not involving DOE) are summarized below:

#### **Connected Actions**

The U.S. Army Corps of Engineers does not have to consider continuation of an ongoing juvenile salmon transportation program in an EIS for a proposed flow improvement project in the Columbia River. The Corps would continue the transportation program with or without the flow improvement project, and vice versa. Thus, the two actions have independent utility.

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### Legal Updates (continued)

To the limited extent that the two actions are interconnected, each could exist without the other, although each would benefit from the other's presence. Northwest Resource Information Center, Inc., v. National Marine Fisheries Service, 56 F.3d 1060 (9th Cir. 1995).

#### **Beneficial Impacts**

The Farmers Home Administration is not required to prepare an EIS for a proposed water impoundment and treatment project on Big Fiery Gizzard Creek in Tennessee that would have significant beneficial impacts but no significant adverse impacts. One of the central purposes of NEPA is to "promote efforts which will . . . stimulate the health and welfare of man"; the health and welfare of the affected community will not be "stimulated" by the time and cost involved in preparation of an EIS that would not arguably be required except for the project's positive impacts. Friends of Fiery Gizzard v. Farmers Home Administration, 61 F.3d 501 (6th Cir. 1995).

#### Methodology

The Forest Service is not required to use a particular scientific methodology to analyze impacts on biodiversity of a proposed Timber Management Plan for two National Forests in northern Wisconsin. The Service extensively analyzed biodiversity impacts in an EIS, but the Sierra Club alleged that the analysis should use principles of conservation biology to address effects of fragmentation of the forest canopy, rather than a "traditional" species-by-species analysis. In its

response to the Club's comments on the draft EIS, the Service noted the Club's concern that fragmentation would be detrimental to several species, but decided that the theory of conservation biology had not been applied to forest management in the Great Lakes states, and so was uncertain in application. The court held that an agency is entitled to use its own methodology, unless it is irrational. Sierra Club v. Marita, 46 F.3d 606 (1995).

#### Response to Comments

The Corps of Engineers unreasonably narrowed the scope of the cumulative impacts analysis in its EIS on a proposed dam in southern Oregon, even though it received comments on the draft EIS from the public requesting that the analysis be broadened beyond that identified during the scoping process. Although the scoping process will normally identify most of the important areas of discussion, the Corps cannot foreclose a factor from the scope of an EIS solely because the factor was not raised as a concern in the scoping process. An agency preparing an EIS has a duty to assess, consider, and respond to all comments, even those relating to environmental factors not mentioned during the scoping process. Oregon Natural Resources Council v. Marsh, 52 F.3d 1485 (9th Cir. 1995).

### Transfer of Property

Because a parcel of wetlands in Bear Lake County, Idaho, was used for grazing before being acquired by the Farmers Home Administration and is currently used for grazing by a private party, the Administration's proposed transfer of title to that party for grazing would not alter the status quo and therefore is not subject to NEPA. National Wildlife Federation v. Espy, 45 F.3d 1337 (9th Cir. 1995).

Copies of complete opinions are available from Stephen Simpson, Office of NEPA Policy and Assistance, at 202-586-0125 (e-mail: stephen.simpson@hq.doe.gov).

#### Reminder:

From the DOE Federal Register Liaison: Field Counsel concurrence is required before field office submittal of any document related to NEPA for publication in the Federal Register.

# 1996 Federal Environmental Quality Award Winners

The Council on Environmental Quality and the National Association of Environmental Professionals recognized both an Army Corps of Engineers environmental impact statement and a Minerals Management Service NEPA program with this year's Federal Environmental Quality Awards.

#### Project Award

The Army Corps of Engineers Galveston District's supplemental environmental impact statement for the Houston-Galveston Navigation Channels won the 1996 award for an outstanding NEPA review. The EIS evaluates alternatives for improving navigation by widening and deepening the shipping channel.

The Corps originally proposed to deepen the channel to 50 feet. Subsequently, the Corps found, on the basis of its 1995 supplemental EIS, that deepening the channel to 45 feet adequately meets the need for navigation improvements at lower cost with significantly less adverse impacts on fish and wildlife.

Further, the supplemental EIS reveals that the dredged material could be used to create more than 4,000 acres of marsh, a bird island, and other environmental benefits, while reducing disposal costs and impacts.

#### **Program Award**

The 1996 NEPA program award commended the Interior Department's Minerals Management Service program for long-term

protection of the Flower Garden Banks—a thriving coral reef formation in the northwestern Gulf of Mexico. Since 1973, the Service has ensured that activities associated with nearby development of oil and gas production are conducted in a manner that is compatible with the health of this designated Marine Sanctuary.

In the course of issuing lease sale environmental impact statements, the Service established, in partnership with industry and public interests, a series of mitigation measures that are increasingly protective of the lease tracts closer to the reef. An integrated program of long-term monitoring lowers costs by avoiding duplicative efforts and by allowing an easing of stipulations where monitoring data indicate drilling and production activities do not harm the sanctuary.

The Minerals Management Service was also recognized for its guidance for streamlining environmental impact statements for oil and gas lease. The guidance recommends:

- Including only enough background information to support the "Purpose and Need" for action.
- Shortening and simplifying the analyses for individual resources.
- When comparing alternatives, describing only those impacts that differ from impacts under the proposed action.
- Analyzing significant issues in more detail than minor ones (See discussion of sliding scale in DOE's "Green Book.")

- Incorporating by reference analyses from previous EISs.
- Having professional writers prepare EIS summaries, and strictly conforming to the NEPA regulations (40 CFR 1502.12)
- Eliminating unnecessary appendices.

For additional information on the 1996 Federal Environmental Quality Awards, contact Yardena Mansoor, fax to (202) 586-7031, phone (202) 586-9326 or e-mail to: [yardena.mansoor@hq.doe.gov].

[Editor's Note: The Department of Energy won the NEPA program award in 1995.]

## For Procurement Contacts:

The Office of NEPA Policy and Assistance invites any of our Lessons Learned Quarterly Report readers who are contracting officers involved in NEPA procurements to provide lessons learned from their experiences to Yardena Mansoor, Office of NEPA Policy and Assistance (EH-42), 1000 Independence Ave., SW, Washington, DC 20585-0119 or (e-mail: yardena.mansoor@ha.doe.gov).

## Rule Amendments Streamline DOE's NEPA Process

Extraordinary teamwork enabled DOE to complete its final amendments to DOE's regulations for compliance with NEPA (10 CFR Part 1021) in less than five months after proposal and meet the critical milestone established by the Secretary's Strategic Alignment Initiative Plan. With the assistance of the Department's network of NEPA Compliance Officers, expedited concurrences from Secretarial Officers and Heads of Field Organizations enabled the rule to go forward. The final rule amendments, published July 9, 1996 (61 FR 36222), became effective August 8, 1996.

Ray Clark, Associate Director for NEPA Oversight, Council on Environmental Quality, provided valuable advice and speedy consultation during the rulemaking. In a June 28, 1996 letter to DOE, he commended the Department for its efforts to streamline the NEPA process without sacrificing environmental quality. He further stated that the revisions will reduce costs and time associated with the process while making each analysis more useful to the decisionmaker and the public.

#### **Highlights of Final Amendments**

DOE responded to the public's comments on the proposed amendments by:

- Withdrawing the proposal to publish notices of availability instead of the full text of records of decision in the <u>Federal Register</u>.
- Adding a requirement to include contractor conflict of interest statements in environmental impact statements.
- Withdrawing a proposed categorical exclusion, and narrowing other categorical exclusions.

According to one DOE field office manager, the final amendments appropriately balance NEPA process changes with the need to preserve the quality of the NEPA process.

The Department is now working to complete a limited rulemaking for categorical exclusions that pertain primarily to Federal power marketing activities. Subsequently, the Office of NEPA Policy and Assistance intends to publish the entire integrated amended regulation and

conform its training modules accordingly.

The rule's final amendments are available on the DOE NEPA Web (Uniform Resource Locator address: [http://www.eh.doe.gov/nepa]). Questions, requests for further information, and requests for reprints of the final rule amendments may be directed to Bob Strickler, Office of NEPA Policy and Assistance, at (202) 586-2410 or fax (202) 586-3915.



## **NEPA Office Needs Your Documents**

Do you know why DOE Order 451.1, issued on September 11, 1995, requires that a NEPA Compliance Officer provide the Office of NEPA Policy and Assistance (generally within 2 weeks of their availability) five copies and one electronic file of:

An approved EA and any finding of no significant impact

- A proposed finding of no significant impact
- An approved draft or final EIS (in addition to the five copies filed with the Environmental Protection Agency)
- A record of decision for an EIS
- A mitigation action plan
- An EIS supplement analysis and any determination based on the analysis

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### NEPA Documents (continued)

Here's one reason why. The NEPA Office maintains the Department's NEPA Document Archives, the only central file containing all DOE NEPA documents. We use the Archives to answer requests for information from both internal and external sources. Requestors often include document preparers and reviewers who need information on how particular issues have been addressed previously; e.g., what accident scenarios have been evaluated for various kinds of facilities. We also use the Archives to support development of new typical classes of actions (e.g., categorical exclusions) in the NEPA regulations. We can only provide this assistance if we have copies of the documents in the Archives.

The Archives are indexed in a database that contains information such as document number, names of the cognizant offices, affected states, citation for the record of decision, and approval date. The database helps to perform NEPA trend analysis and to locate documents in the Archives.

A version of the 1990-96 EIS Archives database is now available electronically to the NEPA community and the general public on the Department's NEPA Web. The information in the Archives and the database must, therefore, be as complete, accurate, and up-to-date as possible. Please help us in maintaining this valuable tool for all of us in the DOE NEPA community.

Why do we need five copies of each document? One is for the Archives, one for our staff, two for the Office of Scientific and Technical Information, and one helps to get the document onto the NEPA Web.  $|L_L|$ 



#### **Book Review**

## Environmental Impact Assessment, 2nd Edition, McGraw-Hill, 1995

Author: Larry W. Canter

Reviewed by: Linda Thurston, Office of NEPA Policy and Assistance

This college textbook—in clear language and with a logical order—illustrates the tools and techniques for how and why we apply NEPA. The author's presentation will refresh long-time NEPA practitioners and serve as an expert guide for initiates.

Author Larry Canter, a Ph.D. in environmental health engineering, is Director of the Environmental and Ground Water Institute at the University of Oklahoma. His specialties are groundwater protection and pollution source evaluation, soil and groundwater remediation, and air quality and noise management and impact mitigation. Last year he served on the panel on cumulative effects at DOE's Conference Commemorating the 25th Anniversary of NEPA.

This well-referenced text covers environmental factors and regulations that one must consider when assessing environmental impacts. Effective graphic illustrations of the assessment process inspire the reader to simplify and clarify his/her own NEPA document illustrations.

In nearly 700 pages, Dr. Canter presents a functional array of tools and models for producing and following the

progress of the environmental document. He includes an objective chronicle of the rationale for NEPA and other related Federal environmental regulations. Readers who may have spent so much time looking at the trees that they have forgotten the forest will enjoy a reminder of our national NEPA goals.

Chapter topics include: ● NEPA and its implementation • Planning and management of impact studies • Simple methods for impact identification: matrices, networks and checklists • Description of environmental setting

- Environmental indices and indicators for describing the affected environment Predictions and assessments of impacts on air environment/surface water/the soil and groundwater/biological environment Habitat-based methods for biological impact prediction and assessment
- Prediction and assessment of cultural (architectural, historical, and archaeological)/environmental/visual/socioeconomic impacts
   Decision methods for evaluation of alternatives
   Public participation in environmental decision making
   Preparation of written documentation and
   Environmental monitoring.

## Third Quarter FY 1996 Questionnaire Results

#### What Worked and Didn't Work in the NEPA Process

To foster continuing improvement of the Department's NEPA Compliance Program, DOE Order 451.1 requires the Office of Environment, Safety and Health to solicit comments on lessons learned in the process of completing NEPA documents and to distribute quarterly reports. This Quarterly Report covers documents completed between April 1 and June 30, 1996. Comments and lessons learned on the following topics were submitted by questionnaire respondents.

Editor's Note: 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.

#### **SCOPING**

- We were able to use existing documentation of alternatives in a programmatic EIS to efficiently flesh out potential alternatives in our project EIS.
- Concentrating on the real need to take action, rather than the "project-of-the-moment" or only funded projects, helped us to identify reasonable alternatives and to eliminate unreasonable ones.

#### DATA COLLECTION/ANALYSIS

- Historic data from the facility production and operation
  phases are critical for analyses in facility cleanup and
  stabilization EISs. Face-to-face meetings between the
  EIS preparation contractor and the management and
  operations contractor are necessary to ensure that
  proper data are used and correctly interpreted.
- The use of correct data is critical to impact analyses results.
- EISs should focus on key elements, which in a facility cleanup/stabilization EIS are the impacts to the workers and the public. The impact of waste shipments from the affected site to either the on-site storage area or the final disposal site needs to be closely reviewed.
- Helicopter flights of the proposed electric power line helped everyone (specialists, engineers, coordinator) see exactly what was happening and helped identify the environmental "hot spots."

#### **SCHEDULE**

#### Timely Completion of Documents was Facilitated by:

- Developing a schedule based on several key milestones, keeping the focus on the end points.
- Team members who believed that a schedule worth developing is worth maintaining.
- Conducting bi-weekly status reports and teleconferences to inform all participants of the status of each activity and its relation to the overall schedule.
- The Document Manager maintaining constant vigilance over the project, being able to make corrections, and having solid management backing.
- Timely support from EH, EM and GC staff during the planning and review process, which provided valuable reality checks for the preparation and review teams.

#### Procedures for Keeping the Document on Schedule:

- Delegation of EIS approval authority.
- Involvement of Headquarters staff in interim reviews was very helpful in providing a Headquarters viewpoint. Reviewers who were not closely involved with the projects also supplied additional perspective.
- Having an aggressive DOE NEPA Document Manager.

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## Third Quarter FY 1996 Questionnaire Results

#### **SCHEDULE** (continued)

#### Timely Completion of Documents was Inhibited by:

- The need to add another alternative between the draft and final EIS because the EIS scope was initially too narrowly defined.
- Delays related to funding problems, which were the major cause of the seven month slippage in the schedule.
- The need to make further characterizations (measurements) after the public comment period.
- Several changes in the scope of the project and the proposed action.
- The NEPA process being put on hold for extended periods due to power marketing contract negotiations with private utilities that had a potential effect on the scope of the proposed project.

#### **Factors that Facilitated Teamwork:**

- Having the core DOE Headquarters team (EH, GC, Program) at the lab helped complete the draft quickly.
- Conducting bi-weekly status meetings and teleconferences enabled the DOE operations office, Headquarters and the various contractors to ensure the proper project direction, and saved dollars by eliminating travel to meetings unless truly necessary.
- A strong NEPA Document Manager who actively led the process, defining roles and boundaries of the participating organizations and helping them work together.
- Having a team mentality, defined roles, defined tasks and frequent communication meetings.
- Using a contractor to write the EA who was ex-DOE with a NEPA/Health & Safety background, and who knew the right questions to ask and how to get the most information out of the project teams.

#### **Factors that Inhibited Teamwork:**

- Headquarters offices allocating few staff resources to assist with the EIS because approval authority had been delegated to the field office.
- DOE staff reorganization which made it hard to tell who was in charge and whether anyone in DOE still cared about the EA.

## Factors that Inhibited DOE Teamwork with Contractors:

 Lack of e-mail connection to contractor for most of the project was a distinct disadvantage.

#### **PUBLIC PARTICIPATION PROCESS**

#### **Successful Aspects of the Public Participation Process:**

- The most effective public interactions were small meetings with industry and labor union representatives.
- Conducting small group and one-on-one meetings with stakeholders and interested parties from the alternative site communities, which provided key members of the public with the opportunity to more exclusively share their ideas and opinions, personalized the process, and demonstrated the Department's commitment to the affected communities.
- Involving the Citizens Advisory Board, both as a sounding board and as an active reviewer, in an EIS initiated in response to public comments on a draft EA.
- Meeting directly with the few concerned people.
- Using project newsletters and newspaper, radio, and cable TV announcements to keep the public informed about the project and to announce upcoming public workshops.

continued next page

## Third Quarter FY 1996 Questionnaire Results

#### PUBLIC PARTICIPATION PROCESS (continued)

- Impacts of this project were spread over a relatively large area, so public meetings did not make much sense. We focused on letters to a general audience and one-on-one contacts with those who might feel impacted. This worked well.
- At the public workshops, the public provided input on the "weight" factors that DOE applied to resources in comparing routing alternatives.
- The NEPA Compliance Officer was in contact with many of the public participants prior to the public hearing and therefore experienced less hostility regarding the ecological issues.

## **Unsuccessful Aspects of the Public Participation Process:**

- Advertising public meetings in metropolitan area newspapers was the least cost effective way of communicating with the public.
- Failing to gauge the minimum number of public meetings needed from the public response to the meeting announcement.

#### **Public Reactions to the NEPA Process**

- Overall the EIS process seemed to be accepted by the public. The EIS for this project immediately followed an EA. Several members of the public questioned why their EA comments had to be resubmitted in order to be incorporated into the EIS record.
- Members of the public at each alternative site were vocal, but believed their input wasn't going to influence the decision because it had already been made.
- The strongest reaction came from a stakeholder group that thanked DOE for finally preparing an EIS for a proposed action and stated that DOE should have started preparing the EIS two years earlier. Once DOE committed to preparing the EIS, public interest and concerns regarding the facility declined.
- Overall good—people felt they had input. At first the tribe felt we had passed them by—but we slowed down and involved them successfully.

#### FURTHER GUIDANCE NEEDS IDENTIFIED

- Clearer definition of the minimum criteria needed to satisfy NEPA review requirements is needed. The "necessary and sufficient" process needs to be applied to NEPA reviews.
- Guidance is needed on procedures for notifying the congressional delegations and Native American groups, publications of notices in the Federal Register, and document distribution. Since the Federal Register staff needs specific documentation and notices presented in a particular format, guidance on what is needed for these interactions (who to contact, lead time for publication, etc.) needs to be provided. [Editor's Note: See guidance provided in Lessons Learned Quarterly Report, June 1995, page 6.]
- Assembling the mailing list(s) for an EIS is time consuming and expensive, therefore an accurate and legally complete list is needed. A list should be maintained and updated by DOE Headquarters on the Internet Home Page, saving sites from having to establish and confirm such a list every time they write an EIS. [Editor's Note: EIS mailing lists must be prepared individually in order to comply with applicable requirements (40 CFR 1502.19 and 1506.6). The Office of NEPA Policy and Assistance semiannually prepares a Directory of Potential Stakeholders for DOE Actions under NEPA. The 6th edition of the Directory, dated July 1996, is available on the DOE NEPA Web. Look for it under "NEPA Tools."]

#### **USEFULNESS**

#### **Agency Planning and Decision Making**

• The preparation of this EIS did not aid in planning or decision making. The ROD indicated that nearly all action alternatives were being selected (the tool box approach), which suggests that the alternatives were not properly structured to allow a decision maker to choose one approach over another.  $|L_L|$ 

## Effectiveness of the NEPA Process

The adjacent charts illustrate how respondents rated the effectiveness of the NEPA process. For the purposes of these charts, "effective" means the NEPA process was rated 3, 4 or 5 on a scale from zero to five, with zero meaning "not effective at all" and five "highly effective."

Since the fourth quarter FY 1994, the number of respondents rating the NEPA process as effective for EAs has increased to over 60%. The EIS data do not show a clear trend and should be interpreted cautiously in view of the low numbers of EISs and respondents.

For this quarter, 17 of the 23 respondents for EAs and 2 of the 11 respondents for EISs rated the NEPA process as "effective." One EA respondent commented that part of the value of the assessment process was that it brought the project people ("let's get everything we can") and the program people ("let's figure out what we really need") together to a mutual point of agreement.

## PERCENT OF RESPONDENTS RATING THE NEPA PROCESS AS EFFECTIVE, FOR EAS\*

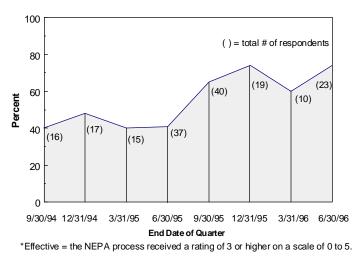


Figure 1

In one case, a respondent indicated that the results of an EA were used to facilitate eventual operation of a facility.

Another respondent indicated that the process provided a mechanism for public input on local issues associated with the proposed project. As a result, the project had a minimal impact on the environmen and, in at least one respect, improved the existing environmental quality.

Respondents gave several other reasons for high effectiveness ratings, including that an EIS provided a vehicle for several areas of planning and a future management tool, and that an EIS allowed the public to take a more active role in the decision making process.

One respondent who gave the NEPA process a low effectiveness rating noted that the NEPA process had little influence on the decision making for the project due to the narrow scope of the project and the lack of impact to sensitive resources.

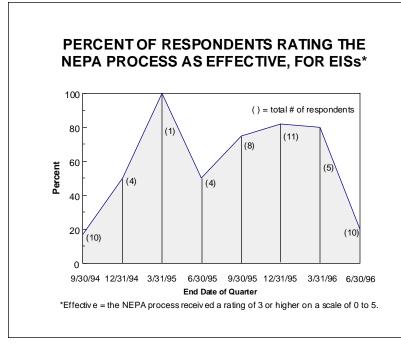
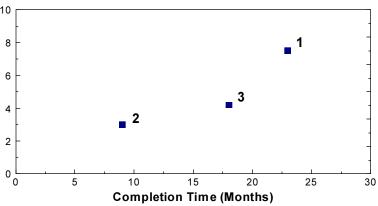


Figure 2

## EIS Cost and Completion Times Data

#### **EIS Costs and Completion Times\***

Total NEPA Cost (\$ million)
(Contractor Cost + Federal Staff Cost)



\* EIS #4 was adopted from the Navy; therefore, costs and completion time are not reported.

Figure 3

#### **Completion Time Facts**

- Three EISs were completed during the third quarter of FY1996, in 9, 18, and 23 months.
- Of 3 EISs reporting scheduling information, 1 was completed on schedule.
- The NEPA process was initiated early enough for 2 of the EISs to avoid being on a critical path. Respondents for 1 EIS disagreed about whether the NEPA process was initiated early enough.
- Cumulatively over the last year, the median completion time for 20 EISs was 22 months; the average completion time was 28 months.

#### **Cost Facts**

- Total NEPA process costs for the 3 EISs completed during the third quarter were \$7.5 million, \$3.0 million, and \$4.2 million; corresponding contractor costs were \$6.9 million, \$2.4 million, and \$3.6 million, respectively. A fourth EIS was adopted from the Navy and the cost is not included here.
- Budget data were reported for 3 EISs, one of which was completed within budget. The NEPA process costs for the other 2 EISs exceeded their budgeted costs by 7% and 17%.
- Total project cost was reported only for EIS #2, for which the NEPA process cost represented 10% of the total project cost.
- Cumulatively, over the last year, the median contractor cost for the preparation of 15 EISs was \$3.0 million; the average cost was \$3.9 million.

#### **EISs**

#### **Fissile Materials Disposition**

1 = Disposition of Surplus Highly Enriched Uranium, DOE/EIS-0240 EPA Rating: EC-2 (\$560,000 Federal cost, \$6.9 million contractor cost; 23 months)

#### **Nuclear Energy**

2 = Medical Isotopes Production Project: Molybdenum 99 and Related Isotopes, DOE/EIS-0249 EPA Rating: LO (\$620,000 Federal cost, \$2.4 million contractor cost; 9 months)

#### Richland Operations Office/ Environmental Management

3 = Plutonium Finishing Plant Stabilization, Hanford Site, Richland, Washington, DOE/EIS-0244 EPA Rating: EC-2 (\$575,000 Federal cost, \$3.6 million contractor cost; 18 months)

4 = Disposal of Decommissioned, Defueled Cruiser, Ohio and Los Angeles Class Naval Reactor Plants, Hanford Site, Richland, Washington, DOE/ EIS-0259 EPA Rating: LO-1 (Adopted from the Navy)

#### ENVIRONMENTAL PROTECTION AGENCY (EPA) RATING DEFINITIONS

#### Adequacy of the EIS

Category 1 — Adequate
Category 2 — Insufficient Information

Category 3 — Inadequate

#### **Environmental Impact of the Action**

LO — Lack of Objections

EC — Environmental Concerns

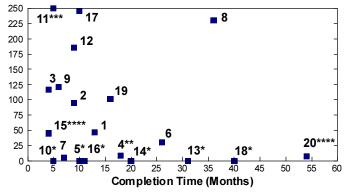
EO — Environmental Objections

EU — Environmentally Unsatisfactory

## EA Cost and Completion Times Data

#### **EA Costs and Completion Times**

Total NEPA Cost (\$1,000s) (Contractor Cost + Federal Staff Cost)



- \* No cost data reported
- \*\* Federal staff cost only, contractor costs not reported
- \*\*\* Cost was \$503,000.
- \*\*\*\* No contractor used

#### Figure 4

#### **Completion Time Facts**

- The median completion time for 20 EAs completed during the third quarter FY1996 was 11 months (range: 4 to 54 months).
- 6 of 14 EAs for which scheduling information was reported were completed on schedule.
- The NEPA process was initiated early enough for 9 EAs to avoid being on a critical path. Respondents for 2 EAs disagreed about whether the NEPA process was initiated early enough.
- Cumulatively for the last year, the median completion time for 69 EAs was 13 months; the average completion time was 18 months.

#### **Cost Facts**

- NEPA process cost data were reported for 13 EAs; the median cost was \$101,000.
- The median contractor cost for the 11 EAs reporting such costs was \$87,000.
- Budget data were reported for 8 EAs, 4 of which were completed within budget.
- Total project costs were reported for 4 EAs, for which the NEPA process costs represented .4%, .8%, 1.1% and 5.5%.
- Cumulatively for the last year, the median contractor cost for the preparation of 37 EAs was \$85,000; the average cost was \$101,000.

#### Errata:

On page 15 of the June 1996 Lessons Learned Quarterly Report, the correct completion time for EA#1 is 49 months. The correct cost for EA#5 is \$12,000.

#### **EAs**

#### Albuquerque Operations Office/ Los Alamos Area Office

- 1 = Consolidation of Certain Materials and Machines for Nuclear Criticality Experiments and Training, LANL, Los Alamos, New Mexico, DOE/EA-1104 (\$20,000 Federal cost, \$27,000 contractor cost; 13 months)
- 2 = Facility Operations, Grand Junction Project Office, Colorado, DOE/EA-0930 (\$23,000 Federal cost, \$72,000 contractor cost; 9 months)
- 3 = Low Energy Demonstration Accelerator, LANL, Los Alamos, New Mexico, DOE/EA-1147 (\$29,700 Federal cost, \$87,500 contractor cost; 4 months)

#### **Bonneville Power Administration**

- **4** = Lower Red River Meadow Habitat Restoration Project, Idaho, DOE/EA-1027 (\$8,000 Federal cost, contractor cost not reported; 18 months)
- 5 = Olympia South Tacoma Reconductor Project, Washington, DOE/EA-1114 (Costs unreported; 10 months)

## **Energy Efficiency and Renewable Energy**

- **6** = Programmatic EA for the State Energy Conservation Program (SECP), DOE/EA-1068 (\$30,000 contractor cost; 26 months)
- 7 = Thermal Oxidation System Energy Recovery, Copper Center, Alaska, DOE/EA-1145 (\$5,000 contractor cost; 7 months)

#### **Idaho Operations Office**

8 = Test Area North Pool Stabilization Project, INEL, Idaho Falls, Idaho, DOE/EA-1050 (\$20,000 Federal cost, \$210,000 contractor cost; 36 months)

continued next page

## EA Cost and Completion Times Data

#### **EAs** (continued)

## Naval Petroleum Reserves in California

9 = Western NPR-1 3-D Seismic Program at Elk Hills, California, DOE/EA-1124 (\$11,000 Federal cost, \$110,200 contractor cost; 6 months)

#### **Nevada Operations Office**

10 = Double Tracks Test Site, Nevada Test Site, Nye County, Nevada, DOE/EA-1136 (Costs unreported; 5 months)

#### **Nuclear Energy**

11 = Electrometallurgical Treatment Research and Demonstration Project in the Fuel Conditioning Facility at ANL-W, Idaho Falls, Idaho, DOE/EA-1148 (\$189,700 Federal cost, \$313,200 contractor cost; 5 months)

#### Oak Ridge Operations Office

**12** = Proposed Lease of Parcel ED-1 of the Oak Ridge Reservation, DOE/EA-1113 (\$65,000 Federal cost, \$120,000 contractor cost; 9 months)

13 = Sale of Radioactively Contaminated Scrap Nickel Ingots at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/EA-0994 (Costs unreported; 31 months)

#### **Oakland Operations Office**

14 = Construction and Operation of the Explosive Waste Treatment Facility, LLNL, Livermore, California, DOE/EA-1106 (Costs unreported; 20 months)

**15** = Decontamination and Waste Treatment Facility, LLNL, Livermore, California, DOE/EA-1150 (\$45,000 Federal cost, no contractor used; 4 months)

#### **Rocky Flats Operations Office**

16 = Radioactive Waste Storage, Rocky Flats Site, Colorado, DOE/EA-1146 (Costs unreported; 11 months) 17 = Solid Residue Treatment, Repackaging and Storage, Rocky Flats Site, Colorado, DOE/EA-1120 (\$26,000 Federal cost, \$220,000 contractor cost; 10 months)

18 = Surface Water Structures Maintenance Activities, Rocky Flats Site, Colorado, DOE/EA-1093 (Costs unreported; 40 months)

#### **Western Area Power Administration**

19 = Estes-Marys Lake 69/115-kV Transmission Line Upgrade and Substation Expansion Projects, Colorado, DOE/EA-1074 (\$15,000 Federal cost, \$86,000 contractor cost; 16 months)

20 = Weld-Windsor 115-kV Transmission Line Project, Windsor, Colorado, DOE/EA-1095 (\$7,500 Federal cost, no contractor used: 54 months)

## Analysis Models and Codes Used in DOE EISs and EAs

Gary Palmer, DP Deputy NEPA Compliance Officer, has developed a summary of environmental impact analysis models and computer codes recently used in preparing DOE EISs and EAs. This summary, prepared with support from Los Alamos National Laboratory, identifies what models were used for specific NEPA documents and provides a brief description of each model. Included are models used for analyses of radiological and nonradiological impacts of normal operations and accident conditions, transportation, socioeconomics, and groundwater, and other environmental resources. In some cases, the models are identified as "EPA recommended" for use in certain regulatory applications. DP intends to keep its compilation of models updated and will provide copies, on request. Comments are welcome. For further information and to receive a copy, please contact Gary Palmer at (202) 586-1785 or Ellen Taylor at (301) 916-7732.

## Cumulative Topical Index to Quarterly Reports on Lessons Learned in the NEPA Process

The following is a topical index for this and all previous editions of the Lessons Learned Quarterly Reports. The index will be revised and published annually. If you would like a copy of any back issue of the Quarterly Report, please call Joanne Geroe, Office of NEPA Policy and Assistance, at (202) 586-8397or by fax (202)586-7031. We suggest you keep a file of these reports for future reference.

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