

# memorandum

DATE: August 16, 1994

REPLY TO: Office of NEPA Oversight:EH-25:Lichtman:586-4610  
ATTN OF:

SUBJECT: Environmental Assessment Checklist

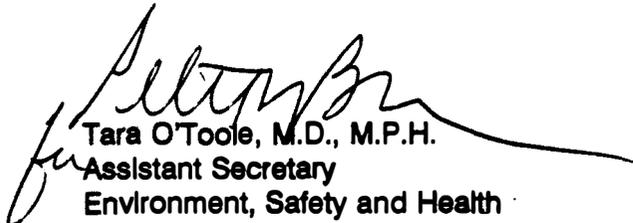
TO: Secretarial Officers and Heads of Field Offices

This memorandum transmits a new Department of Energy (DOE) Environmental Assessment Checklist, prepared by the Office of Environment, Safety and Health to assist DOE components in carrying out their responsibilities under the National Environmental Policy Act (NEPA). A draft of this checklist was distributed for review and comment at the NEPA Compliance Officers meeting in February 1994.

Although there is no requirement to use this checklist, we believe it is a useful tool in the preparation and review of DOE environmental assessments. Nevertheless, a checklist approach has certain inherent limitations, as discussed on page 1. Some NEPA practitioners may find this checklist has limited utility for the highly variable, analytical process of environmental impact assessment. Other NEPA practitioners may find an environmental assessment checklist useful because it serves to remind them, in a consistent format, of various requirements and recommendations. When this checklist is used, it should be only one tool among many.

Practitioners may modify this checklist as they desire to suit particular needs. Accordingly, the Office of NEPA Oversight will shortly provide copies of this checklist in electronic format to DOE NEPA Compliance Officers, who may distribute copies further as they see fit. In any modified versions, however, the discussion on page 1 should be retained as an integral part of the checklist. We ask further that those who modify the checklist identify themselves on the checklist to establish ownership and accountability.

Comments on this checklist may be directed to Stan Lichtman, Director, Waste Activities Division, Office of NEPA Oversight (202) 586-4610.

  
Tara O'Toole, M.D., M.P.H.  
Assistant Secretary  
Environment, Safety and Health

Attachment

cc: Distribution

**ENVIRONMENTAL  
ASSESSMENT  
CHECKLIST**

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF NEPA OVERSIGHT  
AUGUST 1994**

# DOE ENVIRONMENTAL ASSESSMENT CHECKLIST

## PREFACE

The attached checklist, developed by the Department of Energy (DOE) Office of NEPA Oversight, is intended to aid in preparing and reviewing DOE Environmental Assessments (EAs), prepared pursuant to the National Environmental Policy Act (NEPA). Checklist questions are based on NEPA, the Council on Environmental Quality (CEQ) NEPA Regulations (40 CFR Parts 1500-1508), DOE NEPA Regulations (10 CFR Part 1021), the DOE Office of Environment, Safety and Health's "Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements" ("Recommendations"), other Council and DOE guidance, and related federal environmental, safety, and health laws and regulations.

The checklist consists of two parts: List 1 -- General, and List 2 -- Supplemental Topics. Abbreviations/acronyms and references can be found at the end of List 2. Generally, the questions in List 1 are applicable to all EAs; the questions in List 2 may be used as applicable, depending on the specific proposal. Both lists provide columns for "yes", "no", and not applicable ("N/A") responses. If desired, notes on document adequacy and other comments can also be entered. The questions are phrased so that a "yes" answer is preferable to a "no" answer. Not all questions will apply to all EAs; the checklist should be adapted according to the particular circumstances. Consider also the use of the "sliding scale" approach (see "Recommendations").

Modification of this checklist is encouraged to suit the needs of a particular office or program. In particular, users may wish to revise or add to the topical questions in List 2. In all modified versions, however, the title page discussion (page 1) should be retained as an integral part of the checklist. Further, those who modify the checklist should identify themselves on the checklist to establish ownership and accountability.

## DOE Environmental Assessment Checklist

**Document Title:**

**Reviewed By:**

**Document Number:**

**Office/Phone:**

**Document Date:**

**Date:**

Attached is a checklist to aid in preparing and reviewing DOE Environmental Assessments (EAs), prepared pursuant to the National Environmental Policy Act (NEPA). Like any checklist, it has both value and limits.

On one hand, a checklist may help EA preparers and reviewers to:

- avoid overlooking required or recommended items;
- identify needed analyses and discussions;
- provide a record of an internal review.

On the other hand, NEPA analysis does not reduce to a single formula or checklist. Each DOE proposal presents unique circumstances and potential impacts. This checklist should be applied carefully because:

- no checklist can be universally comprehensive or complete;
- it does not substitute for the original laws, regulations, and guidance;
- it alone cannot ensure that the EA will be adequate under, and in full compliance with, NEPA and associated federal laws and regulations;
- addressing generic items on a checklist alone may not lead to a sufficiently rigorous analysis of potential impacts of a proposed action;
- checklist items are not always of equal importance or weight (e.g., if threatened and endangered species are not addressed, an EA is generally inadequate; however, omitting beneficial impacts usually is not critical).

In short, a checklist should not be relied upon as the only way to build quality into a DOE EA. It does not replace good judgment.

Finally, this EA checklist is not intended to promote the rote generation of standardized documentation. It is not meant to encourage an ethic of minimal compliance with environmental, safety, and health standards. It cannot measure whether resources are appropriately allocated, or the extent to which DOE decisionmakers use NEPA information in decisions and whether those decisions improve protection of environmental quality. In the long run, the focus should be on the ultimate "product" of the NEPA process: high quality decisions and sound environmental stewardship.

## DOE ENVIRONMENTAL ASSESSMENT CHECKLIST\*

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
<b>1.1.0 SUMMARY (Optional In DOE EAs)</b>					
1.1.1 Does the summary address the entire EA [Recommendations, p.3]?†					
1.1.2 Is the summary consistent with information in the document [Recommendations, p.3]?					
1.1.3 Does the summary highlight key differences among the alternatives [Recommendations, p.3]?					
1.1.4 Does the summary describe:  the underlying purpose and need for agency action?  the proposed action?  each of the alternatives?  the principal environmental issues and results [Recommendations, p.3]?					
<b>1.2.0 PURPOSE AND NEED FOR ACTION</b>					
1.2.1 Does the statement of purpose and need define the need for <u>DOE</u> action [40 CFR 101.2.2]?					
1.2.2 Does the statement of purpose and need relate to the broad requirement or desire for agency action, and not to the need for one specific proposal [Recommendations, p.4]?					
1.2.3 Is the statement of purpose and need written so that it does not inappropriately narrow the range of reasonable alternatives [Recommendations, p.5]?					
1.2.4 Does the statement of purpose and need identify the problem or opportunity to which the agency is responding [Recommendations, p.5]?					

\* See list of Abbreviations/Acronyms, p. 17.  
See list of References, pp. 18-20.

† ["Recommendations"] refers to guidance entitled "Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements" (Issued by the Assistant Secretary for Environment, Safety and Health, May 1993)

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
<b>1.3.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES</b>					
1.3.1 Is the proposed action described in sufficient detail so that potential impacts can be identified? Are all phases described (e.g., construction, operation, maintenance and decommissioning) [Recommendations, p.7]?					
1.3.2 Are environmental releases associated with the proposed action quantified, including both the rates and durations [Recommendations, p.7]?					
1.3.3 As appropriate, are mitigation measures included in the description of the proposed action [Recommendations, p.8]?					
1.3.4 Is the project description written broadly enough to encompass future modifications [Recommendations, p.8]?					
1.3.5 Does the proposed action exclude elements that are more appropriate to the statement of purpose and need [Recommendations, p.8]?					
1.3.6 Is the proposed action described in terms of the <u>DOE</u> action to be taken (even a private action that has been federalized) [Recommendations, p.8]?					
1.3.7 Does the EA address a range of reasonable alternatives that satisfy the agency's purpose and need, including reasonable alternatives outside DOE's jurisdiction [Recommendations, p.9]?					
1.3.8 If there are alternatives that appear obvious or have been identified by the public, but are not analyzed, does the EA explain why they were excluded [Recommendations, p.9]?					
1.3.9 Does the EA include the no action alternative [10 CFR 1021.321(c)]?					
1.3.10 Is the no action alternative described in sufficient detail so that its scope is clear and potential impacts can be identified [Recommendations, p.11]?					
1.3.11 Does the no action alternative include a discussion of the legal ramifications of no action, if appropriate [Recommendations, p.11]?					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
1.3.12 Does the EA take into account relationships between the proposed action and other actions to be taken by the agency in order to avoid improper segmentation [Recommendations, p.12]?					
1.3.13 Does the proposed action comply with CEQ regulations for interim actions [40 CFR 1506.1]?					
<b>1.4.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT</b>					
<p>1.4.1 Does the EA <u>identify either the presence or absence</u> of the following within the area potentially affected by the proposed action and alternatives:</p> <p>floodplains [EO 11988; 10 CFR 1022]?</p> <p>wetlands [EO 11990; 10 CFR 1022; 40 CFR 1508.27(b)(3)]?</p> <p>threatened, endangered, or candidate species and/or their critical habitat, and other special status (e.g., state-listed) species [16 USC 1531; 40 CFR 1508.27(b)(3)]?</p> <p>prime or unique farmland [7 USC 4201; 7 CFR 658; 40 CFR 1508.27(b)(3)]?</p> <p>state or national parks, forests, conservation areas, or other areas of recreational, ecological, scenic, or aesthetic importance?</p> <p>wild and scenic rivers [16 USC 1271; 40 CFR 1508.27(b)(3)]?</p> <p>natural resources (e.g., timber, range, soils, minerals, fish, wildlife, water bodies, aquifers)?</p> <p>property of historic, archaeological, or architectural significance (including sites on or eligible for the National Register of Historic Places and the National Registry of Natural Landmarks) [16 USC 470; 36 CFR 800; 40 CFR 1508.27(b)(3)]?</p> <p>Native Americans' concerns [16 USC 470; 42 USC 1996]?</p>					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
minority and low-income populations (including a description of their use and consumption of environmental resources) [EO 12898]?					
1.4.2 Does the description of the affected environment provide the necessary information to support the impact analysis, including cumulative impact analysis [Recommendations, p.14]?					
1.4.3 Does the EA appropriately use incorporation by reference? Is/are the incorporated document(s) up-to-date?					
1.4.4 If this EA adopts, in whole or in part, a NEPA document prepared by another federal agency, has DOE independently evaluated the information?					
<b>1.5.0 ENVIRONMENTAL EFFECTS</b>					
1.5.1 Does the EA identify the <u>potential effects</u> (including cumulative effects) to the following, as identified in question 1.4.1:  floodplains [EO 11988; 10 CFR 1022]?					
wetlands [EO 11990; 10 CFR 1022; 40 CFR 1508.27(b)(3)]?					
threatened, endangered, or candidate species and/or their critical habitat, and other special status (e.g., state-listed) species [16 USC 1531; 40 CFR 1508.27(b)(3)]?					
prime or unique farmland [7 USC 4201; 7 CFR 658; 40 CFR 1508.27(b)(3)]?					
state or national parks, forests, conservation areas, or other areas of recreational, ecological, scenic, or aesthetic importance?					
wild and scenic rivers [16 USC 1271; 40 CFR 1508.27(b)(3)]?					
natural resources (e.g., timber, range, soils, minerals, fish, wildlife, water bodies, aquifers)?					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
<p>property of historic, archaeological, or architectural significance (including sites on or eligible for the National Register of Historic Places and the National Registry of Natural Landmarks) [16 USC 470; 36 CFR 800; 40 CFR 1508.27(b)(3)]?</p>					
<p>Native Americans' concerns [16 USC 470; 42 USC 1996]?</p>					
<p>minority and low-income populations [EO 12898]?</p>					
<p>1.5.2 Does the EA analyze the proposed action:</p> <p>for both short-term and long-term effects [40 CFR 1508.27(a)]?</p> <p>for both beneficial and adverse impacts [40 CFR 1508.27(b)(1)]?</p> <p>for effects on public health and safety [40 CFR 1508.27(b)(2)]?</p> <p>for disproportionately high and adverse human health or environmental effects on minority and low-income communities [EO 12898]?</p>					
<p>1.5.3 Do the discussions of environmental impacts include (as appropriate) human health effects, effects of accidents, and transportation effects [Recommendations, p.18]?</p>					
<p>1.5.4 As appropriate, does the EA address the degree to which the possible effects on the human environment may be highly uncertain or involve unique or unknown risks [40 CFR 1508.27(b)(5)]?</p>					
<p>1.5.5 Do the discussions of environmental impacts identify possible indirect and cumulative impacts [Recommendations, Sec. 6.1]?</p>					
<p>1.5.6 Does the EA quantify environmental impacts where possible [Recommendations, p.18]?</p>					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
1.5.7 Are all potentially non-trivial impacts identified? Are impacts analyzed using a graded approach -- i.e., proportional to their potential significance [Recommendations, p.16 and 17]?					
1.5.8 Does the EA identify all reasonably foreseeable impacts [40 CFR 1508.8]?					
1.5.9 If information related to potential impacts is incomplete or unavailable, does the EA indicate that such information is lacking [40 CFR 1502.22]?					
1.5.10 Are sufficient data and references presented to allow review of the validity of analysis methods and results [Recommendations, p.19]?					
<b>1.6.0 OVERALL CONSIDERATIONS/INCORPORATION OF NEPA VALUES</b>					
1.6.1 Because conclusions of overall significance will be made in a FONSI or determination to prepare an EIS, are the words "significant" and "insignificant" absent from conclusory statements in the EA [Recommendations, p.38]?					
1.6.2 Do the conclusions regarding potential impacts follow from the information and analyses presented in the EA [Recommendations, p.30]?					
1.6.3 Does the EA avoid the implication that compliance with regulatory requirements demonstrates the absence of significant environmental effects [Recommendations, p.20]?					
1.6.4 Are mitigation measures appropriate to the potential impacts identified in the EA [40 CFR 1500.2(f)]?					
1.6.5 Does the EA show that the agency "has taken a 'hard look' at environmental consequences" [Mieppe v. Sierra Club, 427 US 390, 410 (1976)]?					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
<b>1.7.0 PROCEDURAL CONSIDERATIONS</b>					
1.7.1 Were host states and tribes and, when applicable, the public notified of DOE's determination to prepare the EA [10 CFR 1021.301; Policy Statement, Sec. V]** Does the EA address issues known to be of concern to the states, tribes, and public ?					
1.7.2 Has the EA been made available to the agencies, states, tribes, and the public [10 CFR 1021.301]?					
1.7.3 Have stakeholders including the public been involved to the extent practicable during the preparation of the EA [CEQ (46 FR 18037); 40 CFR 1506.6; 40 CFR 1501.4(b); 10 CFR 1021.301]? Has DOE proactively sought the involvement of minority and low-income communities in the review and preparation process [EO 12898]?					
1.7.4 Have comments from host states and tribes and, when applicable, the public been addressed [10 CFR 1021.301; Policy Statement, Sec. V]?					
1.7.5 Is a Floodplain/Wetlands Assessment required and if so, has one been completed? If required, has a Public Notice been published in the Federal Register [10 CFR 1022.14(b)]?					
1.7.6 Does the EA demonstrate adequate consultation with appropriate agencies to ensure compliance with sensitive resource laws and regulations? Are letters of consultation (e.g., SHPO, USFWS) appended [16 USC 1531; 36 CFR 800; Recommendations, p.15]?					
1.7.7 Does the EA include a listing of agencies and persons consulted [40 CFR 1508.9(b)]?					
<b>1.8.0 FORMAT, GENERAL DOCUMENT QUALITY, USER-FRIENDLINESS</b>					
1.8.1 Is the EA written precisely and concisely, using plain language, and without jargon [10 CFR 1021.301(b); Recommendations, p.36]?					

\*\* ["Policy Statement"] refers to the "Secretarial Policy Statement on the National Environmental Policy Act" (issued by the Secretary of Energy, June 13, 1994)

<b>List 1: General</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Page</b>	<b>Adequacy Evaluation and Comments</b>
1.8.2 Is DOE listed as the preparer on the title page of the EA [Recommendations, p.32]?					
1.8.3 Is the metric system of units used (with English units in parentheses) to the extent possible [Recommendations, p.35]?					
1.8.4 If scientific notation is used, is an explanation provided [Recommendations, p.35]?					
1.8.5 Are technical terms defined where necessary [10 CFR 1021.301(b); Recommendations, p.36]?					
1.8.6 Are the units consistent throughout the document [Recommendations, p.35]?					
1.8.7 If regulatory terms are used, are they consistent with their regulatory definitions [Recommendations, p.37]?					
1.8.8 Are visual aids used whenever possible to simplify the EA?					
1.8.9 Are abbreviations and acronyms defined the first time they are used?					
1.8.10 Is the use of abbreviations minimized to the extent practical?					
1.8.11 Do the appendices support the content and conclusions contained in the main body of the EA? Is information in the appendix consistent with information in the main body of the EA [Recommendations, p.33]?					
1.8.12 Is information in tables and figures consistent with information in the text and appendices [Recommendations, p.33]?					
<b>1.9.0 KEY TO SUPPLEMENTAL TOPICAL QUESTIONS</b>					
1.9.1 Does the proposed action present potential for impacts on water resources or water quality?					If yes, complete questions in Section 2.1.0.
1.9.2 Does the proposed action present potential for impacts related to geology or soils?					If yes, complete questions in Section 2.2.0.
1.9.3 Does the proposed action present potential for impacts on air quality?					If yes, complete questions in Section 2.3.0.

<b>List 1: General</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Page</b>	<b>Adequacy Evaluation and Comments</b>
1.9.4 Does the proposed action present potential for impacts on wildlife or habitat?					If yes, complete questions in Section 2.4.0.
1.9.5 Does the proposed action present potential for effects on human health?					If yes, complete questions in Section 2.5.0.
1.9.6 Does the proposed action involve transportation?					If yes, complete questions in Section 2.6.0.
1.9.7 Does the proposed action involve waste management?					If yes, complete questions in Section 2.7.0.
1.9.8 Does the proposed action present potential for impacts on socioeconomic conditions?					If yes, complete questions in Section 2.8.0.
1.9.9 Does the proposed action present potential for impacts to historic, archaeological, or other cultural sites or properties?					If yes, complete questions in Section 2.9.0.

<b>List 2: Supplemental Topics</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Page</b>	<b>Adequacy Evaluation and Comments</b>
<b>2.1.0 WATER RESOURCES AND WATER QUALITY</b>					
2.1.1 Does the EA identify potential effects of the proposed action and alternatives on surface water quantity and quality under both normal operations and accident conditions?					
2.1.2 Does the EA evaluate whether the proposed action or alternatives would be subject to:					
water quality or effluent standards?					
National Interim Primary Drinking Water Regulations?					
National Secondary Drinking Water Regulations?					
2.1.3 Does the EA state whether the proposed action or alternatives:					
would include work in, under, over, or having an effect on navigable water of the United States?					
would include the discharge of dredged or fill material into waters of the United States?					

<b>List 1: General</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Page</b>	<b>Adequacy Evaluation and Comments</b>
would include the deposit of fill material or an excavation that alters or modifies the course, location, condition, or capacity of any navigable waters of the United States?					
would require a Rivers and Harbors Act Section 10 permit or a Clean Water Act (Section 402 or Section 404) permit?					
2.1.4 Does the EA identify potential effects of the proposed action and alternatives on groundwater quantity and quality (including aquifers) under both normal operations and accident conditions?					
2.1.5 Does the EA consider whether the proposed action or alternatives may affect any municipal or private drinking water supplies?					
<b>2.2.0 GEOLOGY AND SOILS</b>					
2.2.1 Does the EA describe and quantify the land area proposed to be altered, excavated, or otherwise disturbed? Is this description consistent with other sections (e.g., land use, habitat area)?					
2.2.2 Are issues related to seismicity sufficiently characterized, quantified, and analyzed?					
2.2.3 If the action involves disturbance of surface soils, are erosion control measures addressed?					
<b>2.3.0 AIR QUALITY</b>					
2.3.1 Does the EA identify potential effects of the proposed action on ambient air quality under both normal and accident conditions?					
2.3.2 Are potential emissions quantified to the extent practicable (amount and rate of release)?					
2.3.3 Does the EA evaluate potential effects to human health and the environment from exposure to radiation and hazardous chemicals in emissions?					
2.3.4 Does the EA evaluate whether the proposed action and alternatives would:					

<b>List 1: General</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Page</b>	<b>Adequacy Evaluation and Comments</b>
be in compliance with the National Ambient Air Quality Standards?					
be in compliance with the State Implementation Plan?					
potentially affect any area designated as Class I under the Clean Air Act?					
be subject to New Source Performance Standards?					
be subject to National Emissions Standards for Hazardous Air Pollutants?					
be subject to emissions limitations in an Air Quality Control Region?					
<b>2.4.0 WILDLIFE AND HABITAT</b>					
2.4.1 If the EA identifies potential effects of the proposed action and alternatives on threatened or endangered species and/or critical habitat, has consultation with the USFWS or NMFS been concluded? Does the EA address <u>candidate</u> species?					
2.4.2 Are <u>state</u> -listed species identified, and if so, are results of state consultation documented?					
2.4.3 Are potential effects (including cumulative effects) analyzed for fish and wildlife other than threatened and endangered species and for habitats other than critical habitat?					
2.4.4 Does the EA analyze the impacts of the proposed action on the biodiversity of the affected ecosystem, including genetic diversity and species diversity?					
2.4.5 Are habitat types identified and estimates provided by type for the amount of habitat lost or adversely affected?					
<b>2.5.0 HUMAN HEALTH EFFECTS</b>					
2.5.1 Have the susceptible populations been identified -- i.e., involved workers, noninvolved workers, and the public (including minority and low-income communities, as appropriate) [Recommendations, p.21]?					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
2.5.2 Does the EA establish the period of exposure (e.g., 30 years or 70 years) for exposed workers and the public [Recommendations, p.21]?					
2.5.3 Does the EA identify all potential routes of exposure [Recommendations, p.21]?					
2.5.4 When providing quantitative estimates of impacts, does the EA use current dose-to-risk conversion factors that have been adopted by cognizant health and environmental agencies [Recommendations, p.22]?					
2.5.5 When providing quantitative estimates of health effects due to radiation exposure, are collective effects expressed in estimated numbers of fatal cancers, and are maximum individual effects expressed as the estimated maximum probability of death of an individual [Recommendations, p.22]?					
2.5.6 Does the EA describe assumptions used in the health effects analysis and the basis for health effects calculations [Recommendations, p.22]?					
<p>2.5.7 As appropriate, does the EA analyze radiological impacts under <u>normal operating conditions</u> for:</p> <p>Involved workers</p> <p>    Collective dose?</p> <p>    Maximum individual?</p> <p>    Latent cancer fatalities?</p> <p>Uninvolved workers</p> <p>    Collective dose?</p> <p>    Maximum individual?</p> <p>    Latent cancer fatalities?</p> <p>Public</p> <p>    Collective dose?</p> <p>    Maximum individual?</p> <p>    Latent cancer fatalities?</p>					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
2.5.8 Does the EA identify a spectrum of potential accident scenarios that could occur over the life of the proposed action [Recommendations, p.27]?					
2.5.9 As appropriate, does the EA analyze radiological impacts under <u>accident conditions</u> for: <ul style="list-style-type: none"> <li>Involvement workers               <ul style="list-style-type: none"> <li>Collective dose?</li> <li>Maximum individual?</li> <li>Latent cancer fatalities?</li> </ul> </li> <li>Uninvolved workers               <ul style="list-style-type: none"> <li>Collective dose?</li> <li>Maximum individual?</li> <li>Latent cancer fatalities?</li> </ul> </li> <li>Public               <ul style="list-style-type: none"> <li>Collective dose?</li> <li>Maximum individual?</li> <li>Latent cancer fatalities?</li> </ul> </li> </ul>					
2.5.10 Are non-radiological impacts (e.g., chemical exposures) addressed for both routine and accident conditions [Recommendations, p.25]?					
<b>2.6.0 TRANSPORTATION</b>					
2.6.1 If transport of hazardous or radioactive waste or materials is part of the proposed action, or if transport is a major factor, are the potential effects analyzed (including <u>to</u> a site, on-site, and <u>from</u> a site) [Recommendations, p.25]?					
2.6.2 Does the EA analyze all reasonably foreseeable transportation links (e.g., overland transport, port transfer, marine transport, global commons) [Recommendations, p.26; EO 12114]?					
2.6.3 Does the EA avoid relying exclusively on statements that transportation will be in accordance with all applicable state and federal regulations and requirements [Recommendations, p.26]?					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
2.6.4 Does the EA address both routine transportation as well as reasonably foreseeable accidents [Recommendations, p.26]?					
2.6.5 Are the estimation methods used for assessing radiological impacts of transportation defensible [Recommendations, p.26]?					
2.6.6 Does the EA address the annual, total, and cumulative impacts of all DOE and non-DOE transportation on specific routes associated with the proposed action [Recommendations, p.26]?					
<b>2.7.0 WASTE MANAGEMENT AND WASTE MINIMIZATION</b>					
2.7.1 Are pollution prevention and waste minimization practices applied in the proposed action and alternatives (e.g., is pollution prevented or reduced at the source when feasible; would waste products be recycled when feasible; are by-products that cannot be prevented or recycled treated in an environmentally safe manner when feasible; is disposal only used as a last resort)?					
2.7.2 If waste would be generated, does the EA examine the human health effects and environmental impacts of managing that waste, including waste generated during decontaminating and decommissioning?					
2.7.3 Are waste materials characterized by type and estimated quantity, where possible?					
2.7.4 Does the EA identify RCRA/CERCLA issues related to the proposed action and alternatives?					
2.7.5 Does the EA establish whether the proposed action and alternatives would be in compliance with federal or state laws and guidelines affecting the generation, transportation, treatment, storage, or disposal of hazardous and other waste?					

List 1: General	Yes	No	N/A	Page	Adequacy Evaluation and Comments
<b>2.8.0 SOCIOECONOMIC CONSIDERATIONS</b>					
2.8.1 Does the EA consider potential effects on land use patterns, consistency with applicable land use plans, and compatibility of nearby uses?					
2.8.2 Does the EA consider possible changes in the local population due to the proposed action?					
2.8.3 Does the EA consider potential economic impacts, such as effects on jobs and housing, particularly in regard to disproportionate adverse effects on minority and low-income communities?					
2.8.4 Does the EA consider potential effects on public water and wastewater services, stormwater management, community services, and utilities?					
2.8.5 Does the EA evaluate potential noise effects of the proposed action and the application of community noise level standards?					
<b>2.9.0 CULTURAL RESOURCES</b>					
2.9.1 Was the SHPO consulted?					
2.9.2 Was an archaeological survey conducted?					
2.9.3 Does the EA include a provision for mitigation in the event unanticipated archaeological materials are encountered?					

## ABBREVIATIONS/ACRONYMS

CEQ	President's Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	United States Code of Federal Regulations
DOE	U.S. Department of Energy
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
FONSI	Finding of No Significant Impact
FR	Federal Register
N/A	not applicable
NEPA	National Environmental Policy Act
NMFS	United States National Marine Fisheries Service
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Officer
US	United States
USC	United States Code
USFWS	United States Fish and Wildlife Service

## REFERENCES

### Legislation

- Archeological and Historic Preservation Act (16 USC § 469 et seq.).
- American Indian Religious Freedom Act (42 USC § 1996 et seq.).
- Clean Air Act (42 USC § 7401 et seq.).
- Clean Water Act (Federal Water Pollution Control Act) (33 USC § 1251 et seq.).
- Comprehensive Environmental Response, Compensation, and Liability Act (42 USC § 9601 et seq.).
- Endangered Species Act (16 USC § 1531 et seq.).
- Farmland Protection Policy Act (7 USC § 4201 et seq.).
- National Environmental Policy Act (42 USC § 4341 et seq.).
- National Historic Preservation Act (16 USC § 470 et seq.).
- Noise Control Act (42 USC § 4901 et seq.).
- Resources Conservation and Recovery Act (42 USC § 6901 et seq.).
- Rivers and Harbors Act (33 USC § 401 et seq.).
- Safe Drinking Water Act (42 USC § 300 et seq.).
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