National Environmental Policy Act

N E P A

Recommendations for the Supplement Analysis Process

Second Edition
January 2019

U.S. Department of Energy
Office of the General Counsel
Office of NEPA Policy and Compliance

Recommendations
for the Supplement Analysis Process

Contents

1.0 Introduction

When the Department of Energy (DOE) considers a change to a proposed action analyzed in an environmental impact statement (EIS), or new information relevant to the action becomes available, DOE must determine whether a supplement to the EIS (also referred to as a "supplemental EIS") or a new EIS is required. Criteria for determining the need for a supplemental EIS are specified in the Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) at 40 CFR 1502.9(c) and in the DOE NEPA regulations at 10 CFR 1021.314. (See text boxes (pages 1 and 2) and Attachment 1.)

When the need for a supplemental EIS is unclear, DOE's NEPA regulations require the preparation of a Supplement Analysis (SA). Despite the similarity of their names, a "Supplement Analysis" is not the same as a supplement to an EIS. An SA is the document DOE prepares to provide the information and analysis to determine whether a supplement to an EIS is necessary to meet the requirements of 40 CFR 1502.9(c). In other words, DOE uses an SA to determine whether changes in a proposed action that are relevant to environmental concerns are "substantial" or whether new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts are "significant." Throughout this document, the phrase **"a proposed change or new information"** refers to a change in a proposed action or new circumstances or information that may or may not trigger the need for a supplemental EIS pursuant to 40 CFR 1502.9(c).

The DOE regulations at 10 CFR 1021.314(c) provide considerable flexibility in preparing SAs. A case-by-case review is needed to support sound determinations regarding a proposed change or new information. There are, however, some general elements that should be contained in SAs.

Accordingly, this guidance provides recommendations that are broadly applicable to the SA process, including deciding whether to prepare an SA, the general content of an SA, and outcomes that can result from an SA, with a brief overview of the SA process. (See flow chart, Figure 1, page 12.) These recommendations do not constitute legal requirements, but are intended to enhance compliance with existing NEPA regulations (40 CFR Parts 1500−1508 and 10 CFR Part 1021).

This guidance, initially issued in 2005, was revised in 2018 to reflect the cancellation of DOE Order 451.1B Chg 3, National Environmental Policy Act Compliance Program (December 21, 2017), and the approval of DOE Policy 451.1, National Environmental Policy Act Compliance Program (December 21, 2017).

Criteria for Determining the Need for a Supplemental EIS

Excerpt from CEQ NEPA Regulations:

40 CFR Part 1502—ENVIRONMENTAL IMPACT STATEMENT

Section 1502.9 Draft, final, and supplemental statements.

(c) Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if:

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

2.0 Identifying the Need for a Supplement Analysis

The SA process provides a useful method for addressing the CEQ criteria for determining whether a supplemental EIS is required and increases the likelihood that the Department's NEPA reviews will prevail in the event of litigation. (See Attachment 2.)

2.1 When to Prepare an SA

DOE regulations (10 CFR 1021.314(c)) require that an SA be prepared when the need for a supplemental EIS is unclear based on the criteria established in the CEQ regulations. The DOE regulations also provide for the use of an SA to reevaluate the adequacy of a site-wide EIS at least every five years (10 CFR 1021.330(d)). (See text box, below.)

- An SA may be appropriate in reexamining an "old" (existing) EIS if a major Federal action remains to be taken. CEQ recommends that "if the proposal has not yet been implemented, or if the EIS concerns an ongoing program, EISs that are more than 5 years old should be carefully reexamined to determine" if a supplemental EIS is required. (Question 32, "Forty Most Asked Questions Concerning CEQ's NEPA Regulations," as amended, 51 FR 15618, April 25, 1986; hereafter "CEQ's 40 Questions." See text box, page 3.)
- Although the need for an SA typically does not arise until after a final EIS and record of decision (ROD) have been issued, an SA also may be appropriate between issuance of a final EIS and publication of its associated ROD. This would occur,

Requirements for the Preparation of an SA

Excerpts from DOE NEPA Regulations:

10 CFR 1021.314 Supplemental environmental impact statements.

(c) When it is unclear whether or not an EIS supplement is required, DOE shall prepare a Supplement Analysis.

(1) The Supplement Analysis shall discuss the circumstances that are pertinent to deciding whether to prepare a supplemental EIS, pursuant to 40 CFR 1502.9(c).

(2) The Supplement Analysis shall contain sufficient information for DOE to determine whether:

(i) An existing EIS should be supplemented;

(ii) A new EIS should be prepared; or

(iii) No further NEPA documentation is required.

(3) DOE shall make the determination and the related Supplement Analysis available to the public for information. Copies of the determination and Supplement Analysis shall be provided upon written request. DOE shall make copies available for inspection in the appropriate DOE public reading room(s) or other appropriate location(s) for a reasonable time.

10 CFR 1021.330 Programmatic (including Site-wide) NEPA documents.

(d) DOE shall evaluate site-wide NEPA documents prepared under § 1021.330(c) at least every five years. DOE shall evaluate site-wide EISs by means of a Supplement Analysis, as provided in § 1021.314. Based on the Supplement Analysis, DOE shall determine whether the existing EIS remains adequate or whether to prepare a new site-wide EIS or supplement the existing EIS, as appropriate. The determination and supporting analysis shall be made available in the appropriate DOE public reading room(s) or in other appropriate location(s) for a reasonable time.

for example, if DOE receives external comments during the required 30-day waiting period that introduce significant new information relevant to environmental concerns. (Usually, comments received during the waiting period do not trigger the need for an SA and are addressed in the ROD.)

- If, during the preparation of an SA, the need for a supplemental or new EIS appears unlikely, the SA should nevertheless be completed. If, on the other hand, it becomes clear that a supplemental or new EIS is needed or would be beneficial, completion of the SA is not necessary.

2.2 When an SA Is Not Required

An SA may be prepared at any time, as appropriate, to further the purposes of NEPA. However, the following situations illustrate conditions in which an SA is not required.

- DOE is not required to evaluate new information in a supplemental EIS or an SA if there is no major Federal action proposed or that remains to be taken. For example, in a case where an agency had approved an EIS and associated land use plan, the Supreme Court ruled that a supplemental EIS was not required in light of new information because the agency action – issuance of a land use plan – was completed and there was no ongoing major Federal action (*Norton v. Southern Utah Wilderness Alliance*, 542 U.S. 55 (2004)).
- An SA is not required if a proposed change or new information clearly does not have a bearing on environmental concerns. For example, a major cost increase that does not change environmental impacts, or a facility design change that is not relevant to environmental concerns, would not require an SA or a supplemental EIS.
- In other cases, it may be obvious that a change in a proposed action would have negligible effects on environmental impact calculations, and, thus, an SA would not be required. For example, if an EIS analyzed the transportation of 10,000 shipments, a proposal resulting in an additional 10 similar shipments would be unlikely to change the calculation of transportation impacts. If it is obvious that no other resource areas would likely be affected, it may be concluded that a supplemental EIS would not be needed, without the preparation of an SA.
- A supplemental or new EIS without the need for an SA would likely be required if the purpose and need for a new proposed major Federal action differs substantially from that in an existing EIS such that the action alternatives are likely to change. To illustrate, a new proposal to use a former defense materials production facility for waste management purposes may require a new EIS even if the impacts of the proposed waste management operations would be less than in the existing analysis.

Excerpt from "CEQ's 40 Questions"

32. **Supplements to Old EISs**. Under what circumstances do old EISs have to be supplemented before taking action on a proposal?

A. As a rule of thumb, if the proposal has not yet been implemented, or if the EIS concerns an ongoing program, EISs that are more than 5 years old should be carefully reexamined to determine if the criteria in Section 1502.9 compel preparation of an EIS supplement.

If an agency has made a substantial change in a proposed action that is relevant to environmental concerns, or if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, a supplemental EIS must be prepared for an old EIS so that the agency has the best possible information to make any necessary substantive changes in its decisions regarding the proposal. Section 1502.9(c).

In this example, a new EIS would be required to analyze the range of reasonable alternatives for accomplishing the new waste management purpose and need, which could differ markedly from the alternatives analyzed in the existing EIS.

- Similarly, a supplemental or new EIS without the need for an SA may be required in some cases if a proposed action differs substantially from all alternatives analyzed in an existing EIS, even if the impacts are likely to be smaller than those estimated in the existing EIS. To illustrate, a proposal to change the location of a major disposal facility analyzed in an EIS from one state to another not analyzed in the EIS would be a substantial change in the proposed action that could warrant a supplemental EIS, even if the impacts were likely to be similar to or less than those in the existing EIS. A key consideration in this instance would be whether there had been adequate NEPA review of the proposed action in the newly proposed host community.
- An SA is not required to determine whether a supplement to a draft EIS is needed. A proposed change or new information can arise between publication of a draft and final EIS, in which case the changes may be addressed in a supplement to the draft EIS, in a revised draft EIS, or in the final EIS. An analytical process similar to that

SAs and Environmental Assessments (EAs)

- DOE NEPA regulations **do not** provide for preparation of an SA to determine the need for further NEPA review of an action analyzed in an EA.
- Rather, when the adequacy of an EA is unclear, an analytical process similar to that used in preparing an SA is appropriate to help resolve the uncertainty. However, an SA or SA-like process would not be a substitute for any further NEPA review that might be required.
- DOE NEPA regulations (10 CFR 1021.330(d) require the evaluation of **site-wide** NEPA documents at least every five years. DOE NEPA regulations (10 CFR 1021.330(e)) require evaluation of site-wide EAs by means of an analysis similar to an SA to determine whether the existing site-wide EA remains adequate, and whether to prepare a new site-wide EA, revise the finding of no significant impact, or prepare a site-wide EIS.
- For site-wide EAs, DOE NEPA regulations (10 CFR 1021.330(e)) also require that the determination and supporting documentation be made available in public reading rooms and other appropriate locations for a reasonable time.

used in preparing an SA is appropriate to help identify the appropriate course of action. (For additional information about identifying the need to supplement a draft EIS as a result of public comments, see DOE's guidance on *The EIS Comment-Response Process*, available on the DOE NEPA Website at *energy.gov/nepa* under Guidance & Requirements.)

- The need for extensive data collection and analysis in order to complete an SA may be an indicator that a change in the proposed action is "substantial" or that new circumstances or information requiring additional data for appropriate analysis are "significant." In such cases, early consideration of preparing a supplemental EIS without an SA is warranted.

2.3 Whether to Continue an Action during SA Preparation

When new information comes to light, an agency must consider it, evaluate it, and determine whether it is of such significance as to require a supplemental EIS. The agency is not obligated to suspend the actions it is taking as a result of the existing EIS while it is evaluating the new information.

This principle, however, should be exercised with prudence and common sense. Where it is clear from the nature of the new information that significant adverse impacts could occur (e.g., to a newly designated endangered species) if the ongoing Federal action continues, common sense suggests that the agency should refrain from taking that action until its review of the new information (i.e., an SA) is completed.

3.0 Content of a Supplement Analysis

DOE regulations do not prescribe a specific format or content for an SA. Nevertheless, an SA should address the CEQ criteria for whether to prepare a supplemental EIS and follow basic NEPA principles, e.g., full disclosure, good scientific analysis, clear expression, and discussion of impacts in proportion to their significance. (See *Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements, Second Edition*, available on the DOE NEPA Website at *energy.gov/nepa* under Guidance & Requirements.)

3.1 Major Sections of an SA

DOE has prepared adequate SAs that are only a few pages long. Although a number of DOE's complex SAs have been lengthy, a maximum of approximately 20-30 pages is a reasonable goal for most situations. Technical or other supporting documents should be attached or referenced as appropriate and should be available to the public when the SA is issued.

An SA Should Be Brief

- Focus analyses on changes
- Analyze changes commensurate with their contribution to potential impacts
- Evaluate changes absolutely and in comparison to the existing EIS analyses

In general, an SA should include the following elements.

- An introduction, the original statement of purpose and need for action, other relevant background information, and a description of the existing NEPA analyses and decisions.
- A clear statement of the proposed change or new information at issue. This statement should describe, and incorporate by reference as appropriate, any information that raised a question on the need for a supplemental EIS, such as updated environmental monitoring data or research results.
- Identification of those resource areas or aspects of the analysis in the existing EIS that could be affected by the proposed change or new information. An SA need not analyze resource areas that would be unaffected by the changes, but it is necessary to briefly explain why any impact area analyzed in the existing EIS does not warrant further analysis in the SA.
- An analysis – the crux of the SA – of the proposed change or new information in relation to the existing EIS. The analysis should identify the references on which the analysis is based. Section 3.2 discusses the analysis further.
- A findings or conclusions section. This section of the SA should summarize the differences between the impacts of one or more alternatives identified in the existing EIS, as appropriate, and the impacts identified in the SA. This section should allow the reader to readily understand whether the Department considers a change in the proposed action to be substantial

An SA's Findings and Conclusions Should Summarize:

- Changes in the proposed action and/or new circumstances or information
- Comparison of the new proposed action to any pertinent alternative(s) analyzed in the EIS, including a comparison of their potential impacts
- Comparison of new information and circumstances to analyses in the existing EIS

or whether the new circumstances or information are significant, within the meaning of the CEQ regulations. In some cases the question of whether a change in a proposed action is "substantial" and "relevant to environmental concerns" will be obvious from the analyses and discussion. In other cases this could be less evident.

In considering the environmental impacts of a proposed change or new information, a finding that the associated environmental impacts would be less than those of any of the analyzed alternatives in the existing EIS would be a strong indicator that a supplemental EIS is not required.

If the potential impacts of the new proposal or those resulting from computations based on new information would exceed the impacts analyzed in the EIS for one or more resource areas, the SA should provide the basis for judging the significance of the increased impacts. An SA might show that the larger impacts are not significant and thus support a determination that a supplemental EIS is not required.

For example, if a change in a proposed action would result in an increase in waste inventories destined for a disposal facility, an SA might show that the increase is too small (i.e., no new disposal facility is needed and transportation impacts would be very small) to trigger a supplemental EIS. In such a case, an incremental increase in risk of 1×10^{-8} above an original EIS risk estimate of 1×10^{-6} would almost certainly be insignificant.

Clearly, "significance" is a key test in developing conclusions based on an SA. This term, as used in a NEPA analysis, requires consideration of both context and intensity, as described in 40 CFR 1508.27. Another key test is whether a change in a proposed action is "substantial."

An SA for a Site-wide EIS

- DOE NEPA regulations do not contain unique requirements for an SA for a site-wide document, and the recommendations in this guidance regarding process, format, and content apply to site-wide as well as other SAs.
- An SA for a site-wide EIS should focus prospectively on all ongoing and proposed or reasonably foreseeable programs, operations, and activities at a site. A site-wide SA should evaluate new information and changes at a site since issuance of the most recent site-wide EIS and SA, including the cumulative impacts of completed actions. Such impacts could occur, for example, from the operation of a facility whose construction was completed based on an existing EIS.

A change is substantial if it presents a seriously different picture of the potential environmental impacts (*In re Operation of Missouri River System Litigation*, 516 F.3d 688, 693 (8th Cir. 2008)).

3.2 Approaches to the Analysis

The analysis should identify the total potential impacts resulting from the proposed change or new information, and compare those potential impacts to the potential impacts of one or more pertinent alternatives identified in the EIS (or more than one EIS or a supplemental EIS, if appropriate).

- The analysis should evaluate the changes from the existing EIS, both in an absolute and comparative sense. In other words, the analysis should identify the total impacts (i.e., the original estimates and any additional impacts) and the differences between the original estimates and the new estimates. For example, a change in the proposed action might result in an increase in the footprint of a facility so that it would require an additional acre of land above the 20 acres required for the design evaluated in the EIS. In absolute terms, the analysis would show a total impact on 21 acres of

land. In comparative terms, the analysis would show an increase of five percent in land use requirements attributable to the change.

- The comparison of a proposed change or new information can be to one or more of the alternatives analyzed in detail in the existing EIS. The comparison need not be only to the preferred alternative or alternative selected in a ROD. An SA should always make clear what alternatives are being compared.
- The analysis should identify any differences between the assumptions, including uncertainties, used for the comparative analysis and those used in the existing EIS that are relevant to the interpretation of the results.
- Presentations in the form of tables, bullets, lists, and similar devices can be effective in comparatively presenting proposed changes or new information, discussing associated environmental impacts, and summarizing the key differences. These methods can show at a glance what the existing NEPA document analyzed, the new or different information, and the environmental consequences for each resource area.

Use comparative presentational tools to highlight key differences in actions and impacts.

- The analysis should be based on the best information available. Typically, this would be the most recent information, such as the latest U.S. Census for population data, which may be different from what was used in the existing EIS.
- Regardless of the approach used (e.g., qualitative, quantitative), the analysis should identify whether and how the resources of interest or regions of influence would change. Accordingly, the analysis should identify whether there would be changes to the impacts for each of the resource areas assessed in the existing EIS and, as appropriate, any new potential impacts that were not associated with alternatives analyzed in the EIS.
- The SA need not analyze a resource area if no change to an impact is expected. As stated in Section 3.1, a brief, substantiated statement indicating that the impacts would be unchanged is sufficient. For example, changes to a facility design that could affect potential air emissions might not change the land use reported in the EIS; thus, in regard to land use impacts, the SA would only need to indicate "no change" and very briefly explain the basis for this conclusion.
- In some cases, a qualitative discussion would be sufficient. For example, a description of changes in potential impacts on bird or small animal nesting areas might be qualitative, explaining, without detailed species counts, whether the impacted areas would be adversely affected by a change in land use.
- In most cases, quantitative estimates are appropriate, especially when quantitative estimates were provided in the existing EIS.

Analytical Approaches to Streamline Quantitative Analysis

- Scaling
- Impact indicators
- Numerical sensitivity analysis
- Limited modeling

3.2.1 Streamlining Methodologies

The comparative focus of an SA lends itself to streamlined analytical approaches. Techniques that are sometimes used to streamline quantitative estimates in EAs and

EISs may be very useful in preparing an SA. Several examples follow.

- **Scaling** provides an approximation of the relative difference between the original impact estimate and the estimate associated with the proposed change or new information. For example, the scale of change might be identified as a proportional difference between the two estimates, such as a 25 percent increase in waste volume.
- ***Impact indicators*** are the most important parameters used to estimate impacts for an environmental resource. Impact indicators usually are directly proportional to the actual impact, and their determination generally occurs during an intermediate step in an impact calculation. For example, estimating nonradiological air quality impacts often involves estimating pollutant emissions and their rate of release, which are then put in a computer model to determine pollutant concentrations at various locations. The analysis then compares the concentrations to National Ambient Air Quality Standards. Rather than duplicating this analysis, the SA could present an estimate of emissions (the impact indicator) in direct comparison to the emissions estimate used in the original impact analysis. For example, the SA might identify a 10 percent reduction in emissions of a particular pollutant due to a proposed change.
- **Numerical sensitivity analysis** can be used to approximate the impact estimates of more detailed impact models. In general, a sensitivity analysis would not involve the complexity and detail of many quantitative environmental models, yet could provide a reasonable estimate of the extent to which a proposed change or new information could change the analytic results in the EIS. A quantitative sensitivity analysis is well suited to estimating whether a change in a proposed action would affect existing EIS transportation impacts, for example.
- ***Limited modeling*** involves re-running the model used for the EIS analysis, but only for certain scenarios or types of impacts. This might help achieve needed accuracy or a basis for comparison not available with other approaches. For example, a number of DOE EISs involve the transportation of radioactive and/or hazardous materials. If the EIS in this case did not analyze the use of a proposed new container and route(s) between the origin and destination, it might be necessary to compute potential routine and accident impacts to compare the potential risks from the new container traveling over the new route(s).

3.2.2 Strategic Tiering Approach

Attachment 3 contains an approach to project-specific analyses developed by DOE's Bonneville Power Administration (BPA), which addresses a large and diverse number of new projects each year. BPA prepared programmatic EISs to address each of the discrete aspects of its environmental management system and then devised a relatively standardized method for preparing the SAs necessary to evaluate whether the potential impacts of proposed site-specific projects fall within the range of alternatives and impacts the EISs analyzed. Elements of the BPA strategy may be appropriate to a DOE site during review of a site-wide EIS.

4.0 Completing the Supplement Analysis Process

Throughout the SA process, DOE is asking whether to prepare a supplemental or new EIS when the need for an EIS is unclear. If at any point the answer is "yes," the SA may be stopped and the supplemental or new EIS begun. So long as the answer is "no," the SA process continues through completion. (The major elements and decision points in the SA process are summarized in the flow diagram in Figure 1, page 12.)

The SA process ends with approval of the document by an appropriate DOE official and a determination whether or not DOE should prepare a supplemental or new EIS. The determination also may indicate whether an amendment to an existing ROD is needed. DOE makes the determination and related SA available to the public (10 CFR 1021.314(c)(3)).

4.1 Approval Authorities

Each Departmental Element establishes responsibilities for preparing SAs, including approval authorities (DOE P 451.1). An office's NEPA Compliance Officer will be familiar with the applicable responsibilities and authorities.

4.2 Determination

The determination of whether or not DOE should prepare a supplemental or new EIS may be included in the SA or issued as a separate document. (See Attachment 4 for examples of SA determinations.) If the determination is included in the SA itself, the determination language can be a logical extension of the SA conclusions. The following points should be included in the determination.

- A brief description of the proposed change or new information.
- A summary of the results of the analyses DOE performed for the SA in relation to those in the existing EIS.
- A clear statement as to why the preparation of a supplemental or new EIS is or is not necessary based on the CEQ criteria at 40 CFR 1502.9(c).
- A statement that an amendment to an existing ROD is to be issued, if such is the case.
- The signature, date of signature, and title of the approving official.

4.3 Filing an SA within DOE

The DOE NEPA regulations require that a determination and supporting SA be incorporated into any related administrative record on the action that is the subject of the determination (10 CFR 1021.314(e)). In other words, each EIS's administrative record should contain all SAs prepared for that EIS and the associated determinations.

For filing and identification, assign the same number to an SA as that used for the EIS it addresses. At the end of the character string, append the characters "-SA-…n" in the order of issuance of SAs related to the EIS. For example, the first SA for a given EIS (x) and Supplemental EIS (y) would be DOE/EIS-000x-SA-1 and DOE/EIS-000y-S1-SA-1, respectively; the tenth SA would be DOE/EIS-000x-SA-10 and DOE/EIS-000y-S1-SA-10, respectively. If an SA addresses multiple EISs, use the document number for the EIS considered to be dominant or, if the EISs are of similar relevance, assign the SA more than one document number. Contact the Office of NEPA Policy and Compliance with questions regarding numbering SAs or reporting them to the DOE-wide NEPA document tracking system.

4.4 Making an SA Available to the Public

Each SA and the resulting determination must be made available to the public. DOE must provide copies upon written request, and copies must be available in an appropriate DOE public reading room(s) or other appropriate location(s) for a reasonable time (10 CFR 1021.314(c)(3), 1021.330(d), 1021.330(e)). The Office of NEPA Policy and Compliance also makes SAs and determinations available to the public on the DOE NEPA Website (*energy.gov/nepa* under NEPA Documents).

Additional public involvement may further the purposes of NEPA and provide valuable input to DOE. This is optional and at the discretion of the cognizant Program or Field Office.

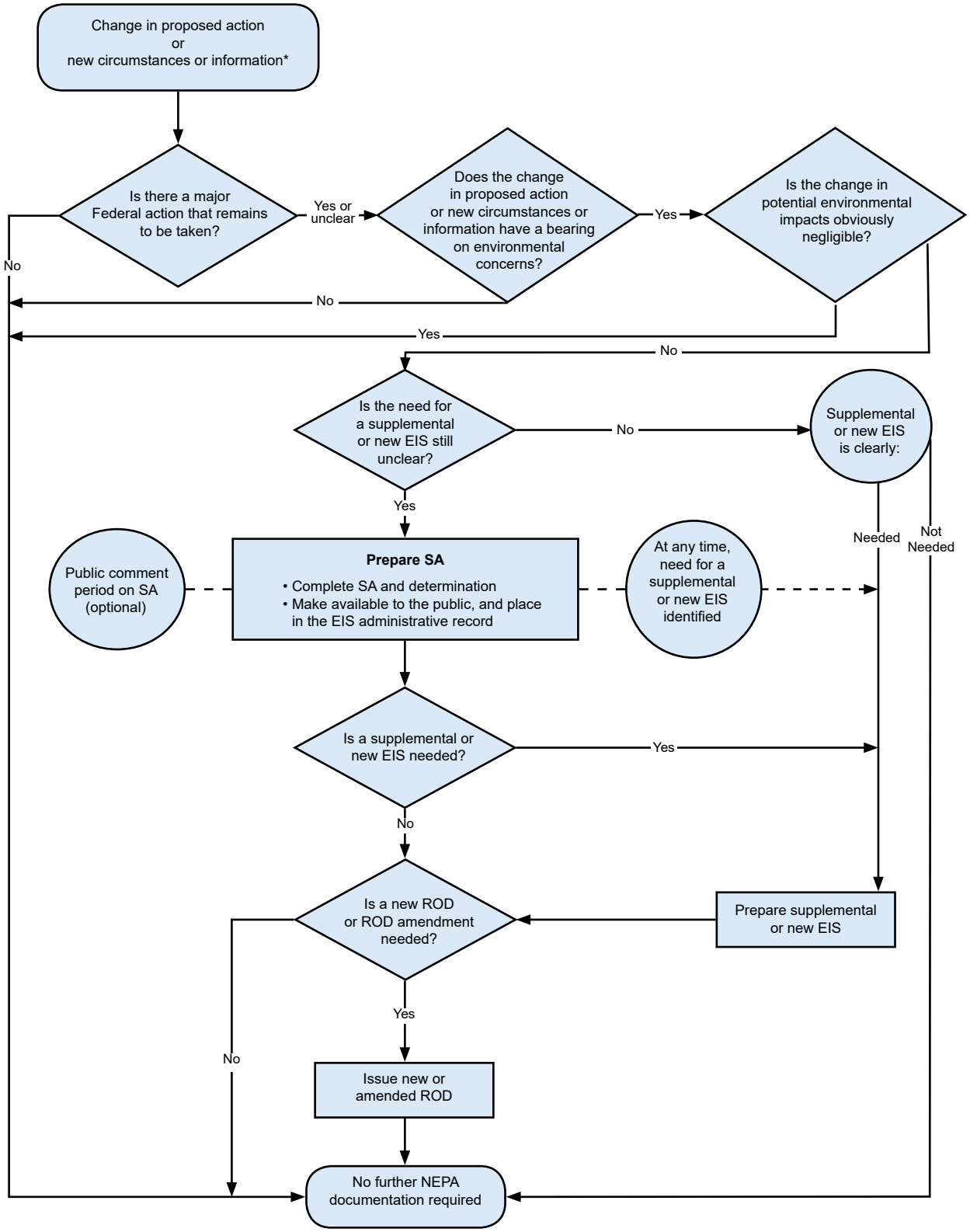
Each completed SA and the resulting determination must be publicly available and placed in the Administrative Record.

In instances involving heightened public interest or technical controversy, Program or Field Offices may choose to distribute a draft SA for review and comment or distribute a completed SA to the public (e.g., to the persons who received the existing EIS). Mechanisms that can be used to announce or disseminate an SA and determination are the same as for an EIS and include, for example, the *Federal Register*, the U.S. Postal Service, and presentations at site advisory board meetings. If the public is offered an opportunity to comment, DOE should make its responses to the comments available to the public.

4.5 SAs and Records of Decision

- When an SA results in a determination that a supplemental or new EIS is needed, DOE may publish an amended or new ROD at the conclusion of the EIS process. (As with any EIS, a 30-day "waiting period" is required before issuance of a ROD.)
- When an SA does not lead DOE to prepare a supplemental or new EIS, the Department may or may not determine that an amendment to an existing ROD is required. An amended ROD would document that DOE has changed some aspect of its decision as published in an earlier ROD and reference the SA. There is no requirement for a waiting period between an SA and an amended ROD.

Figure 1. Summary of the Supplement Analysis Process



* DOE may supplement a draft or final EIS at any time to further the purposes of NEPA (10 CFR 1021.314(b)).

Attachment 1. Regulations and Guidance Relevant to the SA Process

A. Excerpts from CEQ Regulations

40 CFR Part 1502—ENVIRONMENTAL IMPACT STATEMENT

Section 1502.9 Draft, final, and supplemental statements.

(c) Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if:

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

(2) May also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

(3) Shall adopt procedures for introducing a supplement into its formal administrative record, if such a record exists.

(4) Shall prepare, circulate, and file a supplement to a statement in the same fashion (exclusive of scoping) as a draft and final statement unless alternative procedures are approved by the Council.

40 CFR Part 1508—TERMINOLOGY AND INDEX

Section 1508.27 Significantly.

"Significantly" as used in NEPA requires considerations of both context and intensity:

(a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
2. The degree to which the proposed action affects public health or safety.
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

B. Excerpt from CEQ's 40 Questions

32. **Supplements to Old EISs**. Under what circumstances do old EISs have to be supplemented before taking action on a proposal?

A. As a rule of thumb, if the proposal has not yet been implemented, or if the EIS concerns an ongoing program, EISs that are more than 5 years old should be carefully reexamined to determine if the criteria in Section 1502.9 compel preparation of an EIS supplement.

If an agency has made a substantial change in a proposed action that is relevant to environmental concerns, or if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, a supplemental EIS must be prepared for an old EIS so that the agency has the best possible information to make any necessary substantive changes in its decisions regarding the proposal. Section 1502.9(c).

C. Excerpts from DOE Regulations

10 CFR 1021.314 Supplemental environmental impact statements.

(a) DOE shall prepare a supplemental EIS if there are substantial changes to the proposal or significant new circumstances or information relevant to environmental concerns, as discussed in 40 CFR 1502.9(c)(1).

(b) DOE may supplement a draft EIS or final EIS at any time, to further the purposes of NEPA, in accordance with 40 CFR 1502.9(c)(2).

(c) When it is unclear whether or not an EIS supplement is required, DOE shall prepare a Supplement Analysis.

  (1) The Supplement Analysis shall discuss the circumstances that are pertinent to deciding whether to prepare a supplemental EIS, pursuant to 40 CFR 1502.9(c).

  (2) The Supplement Analysis shall contain sufficient information for DOE to determine whether:

    (i) An existing EIS should be supplemented;

    (ii) A new EIS should be prepared; or

    (iii) No further NEPA documentation is required.

  (3) DOE shall make the determination and the related Supplement Analysis available to the public for information. Copies of the determination and Supplement Analysis shall be provided upon written request. DOE shall make copies available for inspection in the appropriate DOE public reading room(s) or other appropriate location(s) for a reasonable time.

(d) DOE shall prepare, circulate, and file a supplement to a draft or final EIS in the same manner as any other draft and final EISs, except that scoping is optional for a supplement. If DOE decides to take action on a proposal covered by a supplemental EIS, DOE shall prepare a ROD in accordance with the provisions of §1021.315 of this part.

(e) When applicable, DOE will incorporate an EIS supplement, or the determination and supporting Supplement Analysis made under paragraph (c) of this section, into any related formal administrative record on the action that is the subject of the EIS supplement or determination (40 CFR 1502.9(c)(3)).

10 CFR 1021.330 Programmatic (including Site-wide) NEPA documents.

(c) As a matter of policy when not otherwise required, DOE shall prepare site-wide EISs for certain large, multiple-facility DOE sites; DOE may prepare EISs or EAs for other sites to assess the impacts of all or selected functions at those sites.

(d) DOE shall evaluate site-wide NEPA documents prepared under § 1021.330(c) at least every five years. DOE shall evaluate site-wide EISs by means of a Supplement Analysis, as provided in § 1021.314. Based on the Supplement Analysis, DOE shall determine whether the existing EIS remains adequate or whether to prepare a new site-wide EIS or supplement the existing EIS, as appropriate. The determination and supporting analysis shall be made available in the appropriate DOE public reading room(s) or in other appropriate location(s) for a reasonable time.

(e) DOE shall evaluate site-wide EAs by means of an analysis similar to the Supplement Analysis to determine whether the existing site-wide EA remains adequate, whether to prepare a new site-wide EA, revise the FONSI, or prepare a site wide EIS, as appropriate. The determination and supporting analysis shall be made available in the appropriate DOE public reading room(s) or in other appropriate location(s) for a reasonable time.

Attachment 2. SA to Support an Amended Decision – An Example

In August 2002, the Fourth Circuit Court of Appeals upheld a district court decision that DOE had taken the "hard look" required by NEPA in regard to the Department's surplus plutonium disposition program. The Supreme Court refused to review the appellate court's ruling (*Hodges v. Abraham*, 300 F.3d 432 (4th Cir. 2002), cert. denied, 537 U.S. 1105 (2003)). The fact that DOE had prepared SAs in support of its decisionmaking played a large part in the outcome of this case.

Background. In April 2002, DOE changed its plans for its plutonium disposition program by (1) canceling one of two parallel tracks for plutonium disposition and (2) accelerating the consolidated storage of surplus, non-pit plutonium from the Rocky Flats site in Colorado at the Savannah River Site (SRS) in South Carolina (67 FR 19432, April 19, 2002).

South Carolina's Governor Hodges filed suit in May 2002 in the U.S. District Court for the District of South Carolina alleging that DOE had violated NEPA and the Administrative Procedure Act in modifying its plutonium disposition plans. The Court ruled in DOE's favor. The issue before the Court relevant to the SAs was the change from a proposal to construct an Actinide Packaging and Storage Facility (APSF) for long-term storage (up to 50 years) of non-pit, surplus plutonium at SRS to a proposal to modify one of the site's closed reactor buildings to store the plutonium. The modified reactor building is known as the K-Area Material Storage Facility (KAMS).

Four NEPA Reviews

DOE's NEPA compliance strategy for its plutonium disposition program involved a programmatic EIS (PEIS), a tiered project EIS, and two SAs. The courts referred to elements of each of these in their determinations that DOE had satisfied its obligations under NEPA.

- *Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement* (DOE/EIS-0229, December 1996) – DOE evaluated alternative strategies and locations both for long-term storage and for disposition of weapons-usable fissile materials (plutonium and highly enriched uranium). In its record of decision (ROD), DOE chose to consolidate storage of surplus, non-pit plutonium at SRS upon completion of an expanded, new storage facility, and DOE chose to pursue plutonium disposition through both immobilization (conversion of plutonium to a form suitable for direct disposal within a matrix of highly radioactive vitrified waste) and use as mixed-oxide (MOX) fuel (62 FR 3014, January 21, 1997).
- *Supplement Analysis for Storing Plutonium in the Actinide Packaging and Storage Facility and Building 105-K at the Savannah River Site* (DOE/EIS-0229-SA1, July 1998) – To accelerate shipment of surplus, non-pit plutonium from Rocky Flats to SRS, DOE prepared an SA regarding use of KAMS for up to 10 years. This would allow receipt at SRS of plutonium before APSF became operational and enhance management flexibility of plutonium in storage at SRS while additional shipments were being received. The SA supported an amended ROD for the Storage and Disposition PEIS (63 FR 43386, August 13, 1998).
- *Surplus Plutonium Disposition Final Environmental Impact Statement* (DOE/EIS-0283, November 1999) – DOE selected SRS as the location for new facilities and associated activities to implement its plan to disposition surplus plutonium through a combination of immobilization and MOX fuel. (See ROD, 65 FR 1608, January 11, 2000.)
- *Supplement Analysis for Storage of Surplus Plutonium Materials in the K-Area Material Storage Facility at the Savannah River Site* (DOE/EIS-0229-SA2, February 2002) – DOE analyzed use of KAMS for storage of surplus, non-pit plutonium for up to 50 years. This made the analysis consistent with the analysis of long-term storage in the Storage and Disposition PEIS and was necessary because the APSF was cancelled. This SA supported an amended ROD for the Storage and Disposition PEIS (67 FR 19432, April 19, 2002).

Court Decisions

The Court of Appeals, affirming the District Court's ruling, determined in this case that through the 2002 SA, which incorporated by reference the other NEPA documents, DOE fulfilled its NEPA obligations to take a "hard look" at the long-term plutonium storage option. The appellate court referred to the Supreme Court's decision in *Marsh v. Oregon Natural Resources Council* in which the Court held that an agency must prepare a supplemental EIS "[i]f there remains 'major Federal action' to occur, and if the new information is sufficient to show that the remaining action will 'affect the quality of the human environment' in a significant manner or to a significant extent *not already considered*" 490 U.S. 360, 374 (1989) (quoting 42 U.S.C. 4332(2)(C)) (emphasis added).

Attachment 3. Bonneville Power Administration's Strategic Use of SAs

The Bonneville Power Administration (BPA) annually funds a substantial number of specific projects within each of its three major programs, and must accordingly conduct a large number of NEPA reviews. To make its NEPA process efficient and effective, BPA prepared programmatic EISs for each of these major programs and regularly prepares a large number of project-specific SAs to ensure that appropriate NEPA review has been completed. Although BPA's approach is unique to its programs, other NEPA practitioners may find elements of the strategy useful to their own needs, including those for five-year site-wide reviews.

- BPA's mission under the Wildlife Mitigation Program, as mandated by the Pacific Northwest Electric Power Planning and Conservation Act, is to mitigate the loss of wildlife habitat caused by development of the Federal Columbia River Power System. Specific wildlife conservation projects that BPA supports to satisfy this responsibility are generally developed in a public process managed by the multi-state Northwest Power and Conservation Council (Council). BPA funding of Council-approved wildlife mitigation projects is a Federal action subject to NEPA.
- The Watershed Management Program separately funds projects beneficial to fish habitat.
- The Transmission System Vegetation Management Program maintains the transmission line corridors and substations free from intrusive vegetation that could cause interruptions in power transmission such as from the growth of trees through power lines.

In 1997, BPA completed the *Wildlife Mitigation Program EIS* (DOE/EIS-0246). Until the EIS had been completed, identification and resolution of project management issues occurred at various stages of project planning, sometimes through the NEPA review and sometimes not. In the EIS, BPA identified the universe of activities conceivably funded under the program, generically evaluated their potential environmental impacts, and presented various standards and guidelines − procedural and substantive − to address concerns. The EIS arranged these various standards and guidelines in alternative sets, with one set ultimately adopted in the Record of Decision (ROD). BPA later prepared a very similar EIS for its *Watershed Management Program* (DOE/EIS-0265, July 1997) and a third EIS using a similar NEPA compliance strategy, but with a very different scope and constituency, to create standards and guidelines for its *Transmission System Vegetation Management Program* (DOE/EIS-0285, May 2000).

For application to specific wildlife and watershed projects proposed for funding, and for specific transmission system vegetation management treatments, BPA environmental staff reviews each project and evaluates the environmental issues present. Through this review and evaluation, BPA staff determines (1) whether there are substantial changes in the proposed action that are relevant to environmental concerns, and (2) whether there are significant new circumstances or information relevant to environmental concerns. The findings and the analysis supporting them are recorded in the SA and approved by the designated NEPA compliance authority, and made public by way of BPA's Web site (*www.bpa.gov/efw* under Environmental Analysis then Project Reviews). BPA staff find these procedures provide project, public, and agency efficiencies and that they help incorporate environmental protection features early in project planning.

Attachment 4. Examples of Determinations Based on SAs

Concluding paragraph and determination both contained in the SA

Example 1:

From: *Supplement Analysis for Disposal of Polychlorinated Biphenyl-Commingled Transuranic Waste at the Waste Isolation Pilot Plant* (DOE/EIS-0026-SA-2, June 2004)

In summary, DOE has conservatively reviewed the impacts that would be expected from preparing and transporting up to 2,500 cubic meters (88,000 cubic feet) of PCB-commingled TRU waste from the five sites where it is currently stored and projected to be generated and disposing of this waste at the Waste Isolation Pilot Plant (WIPP). The volume of this waste is within the total volume analyzed in the Supplemental EIS II (SEIS-II) Proposed Action. DOE estimated the maximum impacts that could be associated with the addition of PCBs to the hazardous organic compounds analyzed in Action Alternative 2. These impacts would be so small that in no instance would the presence of PCBs increase the impact results beyond those presented in the SEIS-II.

Determination

Based on the analyses of the potential impacts on land use, geology, hydrology, biological resources, air quality, socioeconomic conditions, noise, cultural resources, environmental justice, waste handling and characterization, transportation, and long-term performance of the WIPP repository for disposal of PCB-commingled TRU waste discussed in this Supplement Analysis, DOE concludes that the Proposed Action is not a substantial change to the proposal analyzed in the SEIS-II. Further, there are no significant new circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts. Therefore, a supplement to the SEIS-II is not needed.

Approved in Washington, DC, on this _____ day of _____, 2004.

[Signature of Approving Official]

Example 2:

From *Supplement Analysis for Storage of Surplus Plutonium Materials in the K-Area Material Storage Facility at the Savannah River Site* (DOE/EIS-0229-SA-2, February 2002)

The results of this SA indicate that the activities and potential environmental impacts associated with the storage of surplus plutonium materials in the KAMS facility at SRS are encompassed within those activities analyzed in the NEPA and supporting documentation described above. Storage of these materials would not constitute a substantial change in actions previously analyzed and would not constitute significant new circumstances or information relevant to environmental concerns and bearing on the previously analyzed action or its impacts. Therefore, DOE does not need to undertake additional NEPA analysis.

Issued in Washington, DC, [date].

[Signature of Approving Official]