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c/o Department of Ecology
7601 W. Clearwater, Suite 102, Kennewick, WA 99336

August 14, 1993

To: Steve Cross
Washington Department of Ecology, Hanford Project
From: *John Hall*
John Hall
Habitat Biologist, Hanford Site

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EDMC

Subject: Location of the Environmental Restoration Storage and Disposal Facility

The Environmental Restoration Storage and Disposal Facility (ERSDF; now identified as ERDF, but I will retain ERSDF to avoid confusion with referenced documentation) is a project of significant importance to the safe, cost-effective, and timely final disposition of Hanford past-practice waste. The amount of land to be potentially dedicated to this facility has been identified as 6.0 mi², an area that is equivalent to that land presently occupied by the combined 200 East and West areas (Trost 1993). Because of its size the location of this facility has immense implications for future-site land uses and current local ecology. Concern about its location is not a trivial matter and goes well beyond appropriate engineering design and permit considerations.

This memorandum and its attachment are intended to provide Ecology with *my* concerns about the site-evaluation process for the ERSDF. The comments should be viewed as the position I would recommend that the Department of Wildlife take should the process remain significantly unchanged when it enters the public arena. I realize that site characterization and facility design work are ongoing and that my comments and recommendations, should they be implemented, may impact these activities. Thus, I could be criticized for the timeliness of my comments. I think, however, that I have reached the best balance between making sure I had sufficient requisite knowledge of the information concerning the ERSDF and making concerns known before site-evaluation activities had progressed too far. Nothing I state here should be construed as an attempt to halt a remediation action or to disrupt the achievement of a Tri-Party Agreement (TPA) milestone. Indeed, I think that by addressing these concerns now we can avoid more significant cost and schedule impacts in the future and, more importantly perhaps, we can achieve a more-balanced solution to the safe and ecologically-responsible disposal of past-practice waste.

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To facilitate your review I have divided the attachment into five sections. (1) I provide specific comments to the Site Evaluation Report for the Environmental Restoration Storage and Disposal Facility (Trost 1993). (2) I provide specific comments on the Site Characterization Plan for the Environmental Restoration Storage and Disposal Facility, Draft A (Weekes and Borghese 1993). For both of these documents I may repeat some of the comments made previously by Ecology and EPA, but I attempt to add my own perspective. (3) I discuss the importance of the Natural Resource Damage Assessment regulations (43 CFR Part 11) to the ERSDF site evaluation process. (4) I draw some general conclusions and make specific recommendations as to how I think we should proceed from here. (5) I provide a reference list of cited documents.

I would be happy to discuss further any of the issues I have raised in this memorandum.

jah

Attachment

cc: John Carleton, WDW
Ted Clausing, WDW
Rich Hibbard, Ecology
Darci Teel, Ecology
Ted Wooley, Ecology
JAH: File/LB

I. Comments to the Site Evaluation Report for the Environmental Restoration Storage and Disposal Facility (Trost 1993)

A. Section 1.3.1 Waste Volume Estimate:

Background - The stated estimates of waste volume were based on removal of all waste units in the 100 Areas, removal of all waste units in the 300 Areas but with an added phase of volume reduction and contaminant concentration, and removal of only select 200 Area waste with associated volume reduction.

Comment - What assumptions are valid today? Can volume reduction for some of the 100 Area waste sites be assumed as it is for sites in the 200 and 300 Areas? As an additional consideration, Section 8.0 (2nd paragraph) implies that disposal of the 100 Area reactor cores in the ERSDF is considered a possibility and partly justifies either the initial size of the ERSDF or the expansion area. As indicated by this paragraph, however, disposal of the reactor cores and other Decontamination and Decommissioning waste in the ERSDF may be less than optimal. What other waste types may be better placed in a different location? How do these considerations affect the volume estimate?

Recommendation - The whole subject of a waste volume estimate should be revisited. Conservatism associated with the volume estimate can be viewed in two different lights. I would argue that from the standpoint of reducing the impact of remediation it can be just as detrimental to the cleanup effort to overestimate the expected waste volume to require disposal in the ERSDF.

B. Section 1.3.2 Land Requirement:

Background - Ecology and EPA have both previously commented that the land size requirement should be reexamined and land use minimized.

General Comments

The amount of land required is dependent on trench design (among other factors). A range of alternatives should have been evaluated that addressed trench design and its effect on the land requirement. If certain designs allowed for a reduction in anticipated land use, this could have enabled the consideration of other candidate sites. Additionally, this section as written is not consistent with the recommendations of the Hanford Future Site Uses Working Group (HFSUWG 1992) that state in part: "...adverse effects should be minimized, especially to uncontaminated areas of the Central Plateau." The working group also implies that though additional waste disposal is necessary in the 200 Areas the amount of land

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devoted to or contaminated by waste management activities should be minimized. Thus, there is an inherent conflict in balancing adequate land availability for anticipated disposal needs versus minimizing land usage. The tradeoffs involved should have been more fully evaluated. Although land within the ERSDF may be used only on a as needed basis (perhaps ultimately resulting in a reduced use of land), the projected use still drives the site-selection process.

Specific Comments

1st paragraph, 4th sentence:

Background - EPA previously commented that the borrow area stockpiles should be considered within the scope of the ERSDF.

Comment - I would add that the locations of the borrow areas themselves are within the scope of the ERSDF evaluation. If new borrow areas are necessitated by the ERSDF, these areas could be seriously impacted. The amount of borrow material required and its potential sources could serve as another limitation on the design of the ERSDF and may be subject to 43 CFR Part 11 requirements (see below).

C. Section 3.2 Results of Screening Evaluation

Background - Candidate site 2 was eliminated from further consideration because of the presence of the historic White Bluffs Road. This road crosses diagonally through the 200 West area and also site 2. It has been nominated (application submitted to the State) but not yet accepted to the National Register of Historic Places.

Comment - Because the road is not yet designated, WAC 173-303-282(7)(e) does not yet apply. Thus, the site should not have been arbitrarily excluded from consideration at the screening level. There is a good chance the road will be accepted by the State; however, the site contains only a section of the road. Moreover, there is also the possibility of documenting the presence of the road in lieu of preservation. The bottom line is that the value of this cultural resource should have been evaluated in comparison to the value of the natural resources of the other candidate sites (from a habitat standpoint site 2 is poor). The decision to exclude site 2 from consideration is more in line with the overall bias of this document to steer the site selection process toward site 3. The presence of this cultural resource and of the natural resources should have been used as weighting criteria (see below).

I include one final point related to site 2. It is not at all clear why a composite of sites 1 and 2 to the west of the White Bluffs Road could not have been considered.

D. Section 4.1.10 Existing RCRA/CERCLA Sites

Comment - The presence of past-practice waste sites, especially when outside the "squared off" area of the 200 Area, should not be a basis for disqualification of a potential site. There may be advantages, as well as disadvantages, for such a condition.

E. Section 5.0 Weighted Evaluation of Candidate Areas

Background - EPA and Ecology have both previously commented that the weighted evaluation of candidate sites lacked sufficient rationale and could be interpreted as biased.

Comment - The criteria used to weight the candidate sites are far too limited. As I mentioned above both cultural and natural resources should have been used as weighting criteria. As discussed below the ERSDF will have natural resource damage assessment implications. These considerations need to be brought in to the site-selection process. The projected size of the ERSDF suggests that some tradeoff of natural resource loss versus achieving an optimal facility siting based on other considerations may be necessary in order to accomplish remediation goals. The location of the ERSDF should be based in part on trying to minimize the loss of natural resources. Thus, the relative loss of habitat and the impact to affected wildlife species should have been part of the weighting criteria used to determine the preferred site for the ERSDF. USDOE-RL has established a precedent by considering federal candidate species (level 2) as if they were listed now (Fitzner et al. 1992). The loggerhead shrike (Lanius ludovicianus) is in this category and, thus, its occurrence on candidate sites is relevant. It is inappropriate to imply that the presence of candidate species plays no role in the site-selection process (see the footnote to Table 1 on page 9). If loggerhead shrikes nest on all sites (and they may), then their relative densities should have been used as a criterion. Habitat quality (i.e., species diversity, native versus non-native grasses, etc.), wildlife diversity, and the relative effect on shrub-steppe dependent species due to loss of habitat also should have been considered as criteria.

One other criterion should be considered. Because the Hanford Future Site Uses Working Group (1992) recommended minimizing the use of uncontaminated areas, areas that have current problems with surface spec contamination should be given consideration in the evaluation process. Remediation of these sites may destroy habitat. Thus, their incorporation into the site-evaluation process could minimize the potential loss of habitat.

F. Section 7.0 Potential Small Site Configurations

Comment - In general inadequate justification was provided for ruling out the use of small-site configurations. One particular use of a small-site approach seems pertinent to mention here. There is the distinct possibility that ERSDF will not be operating in time to

support the initial 100 Area past-practice waste disposal needs. In anticipation of this USDOE-RL (1993) has proposed an interim waste storage facility that could be incorporated within the permanent ERSDF. In the event that the ERSDF site is not approved (whether through final NEPA action or otherwise) any "stored" waste would have to be removed. The Richland Field Office has assumed that this action does not prejudice any subsequent EIS decisions or result in a commitment of land (USDOE-RL 1993). This is not likely to be viewed in this light by natural resource trustees or the public.

Recommendation - Consideration should be given to separating the siting of disposal facility for interim needs from the permanent ERSDF. In this way the siting of the interim facility can more closely follow the recommendations of the Hanford Future Site Uses Working Group to concentrate waste management activities within the "squared off" boundaries of the current 200 Area (HFSUWG 1992). The size of the interim facility is projected to be 400 acres (USDOE-RL 1993). It is apparent that the working group never considered the possibility of a facility the size of the ERSDF. Thus, it makes no sense to claim that the ERSDF is consistent with the Working Group's recommendations. Use of an interim facility not tied to the permanent ERSDF would allow time for a more comprehensive, unbiased, and more open (see below) evaluation of the siting criteria for the ERSDF. Consideration of the interim facility should proceed as USDOE-RL (1993) outlined but not tied to the ERSDF. Should the interim facility not receive final NEPA approval, the waste can be removed and disposed of in what will be by then, hopefully, the approved ERSDF.

II. Comments to the Site Characterization Plan for the Environmental Restoration Storage and Disposal Facility (Weekes and Borghese 1993)

A. Section 6.0 Ecology:

General Comments

Identified species are inaccurately portrayed as to their listing status and presence on the proposed ERSDF site. In general this section presents laundry lists of species with inadequate consideration of whether the identified species are of concern in regard to the siting of the ERSDF. Scientific names should be indicated for the wildlife species. The ecological survey as proposed in this section is inadequate (see comments to Section 9.2).

Specific Comments

1st Paragraph: The persistent sepal yellowcress is not an upland species and does not need to be considered. Washington State Natural Heritage Program (1990) and Rogers and Rickard(s?) (1977) are not listed in the references.

2nd Paragraph: The long-billed curlew is a federal candidate level 3 species (no longer under consideration for listing) and the Swainson's hawk is no longer identified as a federal candidate at any status level. The ferruginous hawk, loggerhead shrike, and western sage grouse are all federal candidate level 2 species (proposed listing as threatened or endangered may be appropriate but current data are not conclusive). I already commented above on USDOE-RL's precedent for treating federal candidate level 2 species. Loggerhead shrikes are known to nest on the proposed site for the ERSDF. Although western sage grouse are found at present only at the upper elevations of Rattlesnake Mountain, historically they once occupied the southern and western parts of the Hanford Site (Fitzner et al. 1992). The key to viable populations of sage grouse is sagebrush habitat (Fitzner et al. 1992). This is also true for another federal candidate level 2 species not identified in this document, the pygmy rabbit (Brachylagus idahoensis). Because Hanford represents a large fraction of the remaining sagebrush habitat in the State of Washington, loss of these habitats should be evaluated in the context of losing possible recovery areas for candidate species. The northern goshawk and black tern are also federal candidate level 2 species. They are rare visitors to the Hanford Site and no nesting attempts have been reported.

Some state listed species are inappropriately included or omitted, or inadequately identified. The ferruginous hawk (state threatened) nests on the Hanford Site and may use the proposed ERSDF site for foraging. The pygmy rabbit is currently listed as state threatened but has been proposed for state endangered status. The American white pelican (state endangered), sandhill crane (state endangered), peregrine falcon (state endangered), and bald eagle (state threatened) are not known to be associated with shrub-steppe habitats on the Hanford Site. For state candidate species it is not important to consider the golden eagle or the western bluebird. Sage thrashers are rare on the Hanford Site (Stegen 1992). The Swainson's hawk and loggerhead shrike are also state candidate species. Based on species that currently nest in the proposed ERSDF site the loggerhead shrike and the sage sparrow would be the major bird species that would be impacted. Long-billed curlews tend to use more open habitats (Stegen 1992). A final state candidate species of concern that is found associated with sagebrush habitats and is not mentioned is the striped whipsnake (Masticophis taeniatus) (Stegen 1992). This species is rare on Hanford but is poorly studied.

The description of an area's ecology should not be limited to the rare and habitat-sensitive species. The mammals and reptiles that may use the site are not described. What are the invertebrates that may be present? How diverse are the plant species? What species and habitats considered priority by the Washington Department of Wildlife are present? All of these biotic elements need to be considered.

B. Section 9.2 Characterization Methods

The biotic survey as proposed in this section is inadequate (Ecology previously indicated that the ecological survey was not described in Section 11.0 Characterization Tasks). Should this site eventually be chosen for the ERSDF it would require a complete quantification of the biota for establishing the site baseline conditions in accordance with Section 11.72 of 43 CFR Part 11 Natural Resource Damage Assessment regulations (see below). Species lists, though important, are not adequate by themselves. It would be necessary to quantify both the habitat and its usage by wildlife species. As described in my comments to Section 6.0 quantification must extend well beyond endangered, threatened, and candidate species.

III. Implications of 43 CFR Part 11 regulations (Natural Resource Damage Assessments)

Background

Section 107(a)(4)(C) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, imposes liabilities on responsible parties for damages for injury to, destruction of, or loss of natural resources resulting from the release of a hazardous substance [hazardous substance as defined by CERCLA Section 101(14)]. CERCLA Section 107(f)(1) indicates that liability shall be to the United States Government, States, and Indian tribes for natural resources that in some way belong or are managed by these entities. Federal and State trustees are designated in accordance with CERCLA Section 107(f)(2). From this authority the National Oil and Hazardous Substances Pollution Contingency Plan (NCP; 40 CFR Part 300.600(b)(3) and Executive Order 12580 authorize USDOE as a land managing agency to act as a trustee for sites they administer. The Governor of the State of Washington designated the Department of Ecology as the State's natural resource trustee.

43 CFR Part 11 regulations

CERCLA Section 301(c) requires the promulgation of federal regulations for the assessment of damages (monetary award) for injury to, destruction of, or loss of natural resources resulting from a release of oil or a hazardous substance. Executive Order 12580 delegated the responsibility for promulgating these regulations to the Secretary of the Interior (DOI). The Interior Department has issued various final rules for the assessment of natural resource damages. These rulemakings are codified as 43 CFR Part 11 - Natural Resource Damage Assessments. Two types of assessments are possible: Type A and Type B. A Type A assessment, standard methodologies for conducting simplified natural resource damage assessments, is not applicable to Hanford and will not be addressed further. Aspects of Type B assessments, alternative methodologies for individual cases, were challenged in court (Ohio vs. Interior, 1989). As a response to the Court remand for specific aspects of the rule,

DOI issued a proposed rule on April 29, 1991 (56 FR 19752). On July 22, 1993 DOI reopened the comment period (closes September 7, 1993) and provided background information in response to comments already received that addressed the original rule and changes made by the proposed rule (58 FR 39327). In general, most of what I will discuss here is not affected by the proposed rule; however, I thought an overview of the regulatory history might put the process in perspective. Moreover, I will refer to the July 22, 1993 Federal Register publication for supportive material. Unless stated otherwise, cited sections are from the final rule and are not affected by the proposed rule.

Implications of 43 CFR Part 11 for the ERSDF

CERCLA Section 301(c)(2) specified that the regulations should consider both direct and indirect injuries to, destruction to, or loss of natural resources. Section 11.15(a)(1)(ii) of 43 CFR Part 11 provides that responsible parties are liable for damages :

"...based on injuries occurring from the onset of the discharge or release through the recovery period, less any mitigation of those injuries by response actions taken or anticipated, **plus any increase in injuries that are reasonably unavoidable as a result of response actions taken or anticipated.**"

Three points are important here. (1) Natural resource damages may be recovered for injuries **residual** to the response action. (2) Damages may be recovered for the "loss of use" of the natural resource from the time of the release until the point at which the resource has recovered to the baseline condition (I will come back to baseline later.). (3) Damages may be recovered for increases in injury due to a response action. Further clarification as to why responsible parties are liable for this last type of injury is stated in the preamble to the August 1, 1986 final rule:

"...because the Department believes that any response actions undertaken by government agencies should strive to avoid additional injury to natural resources whenever possible. Damages from such 'reasonably unavoidable' increases in injury resulting from response actions by governmental agencies are not excluded from damage actions, because they are indirectly due to the discharge or release and thus included under section 301(c) of CERCLA." (Cited in 58 FR 39335).

This last provision of the rule may be the most important with respect to its applicability to the ERSDF. The implication is that the ERSDF can be viewed as an increase in injury to natural resources as a result of a response action. Moreover, it is conceivable that this provision may be applied as well to any (newly created?) borrow site associated with the facility.

Damages are determined in accordance with Sections 11.80 through 11.84. Section 11.82(d)(5) of the proposed rule again indicates that trustees should consider the additional injuries resulting from indirect impacts as part of their damage determination. To assess damages it is necessary to have a reference or baseline condition. Baseline is defined in

Section 11.14(e): "...condition or conditions that would have existed at the assessment area had the discharge of oil or the release of the hazardous substance under investigation not occurred." For the purposes of ERSDF this definition is easily adaptable. The residual injury to the natural resources as a result of ERSDF in and of itself will have to be determined by reference to the baseline or pre-existing conditions at the site prior to its use for remediation. Baseline conditions for biological as well as other resources are determined in accordance with Section 11.72 [the proposed rule modifies Section 11.72(b)(4) but this change is not important here].

It is important to point out that under a natural resource damage assessment (NRDA) the higher the original quality of the natural resource (e.g., habitat and its associated wildlife species) the greater the financial liability to the potentially responsible party (i.e., USDOE). Thus, an anticipatory NRDA can in a sense provide an estimate of the tradeoffs involved with using one site or another in terms of resource loss as indicated by a projected damage award. Also keep in mind that damage awards are not necessarily trivial. USDOE would be liable for the restoration costs (back to baseline) and the "loss of use" costs attributable to the ERSDF. If restoration is not possible then USDOE would be liable for the acquisition of equivalent resources. This encompasses more than just the purchase of land. It would have to cover the full range of lost resources (58 FR 39340). From a NRDA perspective characterization of the proposed ERSDF site as "low value land" (Trost 1993, page 17) is naive.

IV. Conclusions and Recommendations

Conclusions

- A. A close reading of the Hanford Future Site Uses Working Group Final Report (HFSUWG 1992) clearly indicates that the Working Group did not anticipate a disposal facility with the scope of the ERSDF. Their working assumption was that waste management activities in the 200 Area would stay within the confines of the "squared off" boundaries of the current 200 Area. It is not clear whether this description was intended to include the State-leased land. They did anticipate that grout vaults might be located east of the 200 East area. The remainder of the Central Plateau was to be used as a buffer zone where: "...environmental restoration, but not waste management activities would occur...". It is inappropriate for USDOE-RL to take the position that the proposed location of the ERSDF as currently envisioned (or of the other candidate sites) is within the guidelines of the Working Group. An additional recommendation of the Working Group that can be applied to the ERSDF is: "...the guiding principle in decisions about cleanup activities [in regard to wildlife species and/or habitat] should be 'do no harm'." (HFSUWG 1992, page 28).

- B. The regulators must become more pro-active toward the site evaluation process. Previous Ecology and EPA comments have indicated regulator concerns with the apparent biases applied in choosing and screening candidate sites, the lack of clear justification for the weighting criteria, and the restricted nature of these criteria. Based on the correspondence between the regulators and USDOE-RL concerning the site-selection process, it seems that the regulators cannot exercise approval authority for selecting candidate sites but must wait until after site characterization has occurred for a particular site to exercise any regulatory discretion. This is too late in the process. Characterization activities in themselves may impact the natural resources. One of the most important aspects of this whole project in the context of future site uses of Hanford is the process of initial site selection, yet it seems to have been trivialized. Should site selection be revisited Ecology and EPA should endeavor to seek approval authority for any potential candidate site prior to the commencement of detailed characterization work at that site.
- C. A further indication of bias in the site-selection process is highlighted by the proposed location of a new road to run between Highway 240 and 200 West. The road as proposed will run along the western boundary of the preferred ERSDF site. The public may legitimately ask which project constrains the other. Does a road, still subject to the NEPA process, constrain the evaluation of potential sites for the ERSDF?
- C. There is at present inadequate natural resource trustee (and arguably perhaps the public as well) involvement with the site-selection process for the ERSDF. Although there is a definite need to address remediation of the 100 and 300 Areas in a cost-effective and timely manner, the drive to pursue the large-scale remediation approach has created a set of blinders that effectively ignores the impact on future-site uses in the Central Plateau.
- D. In regard to the cleanup of Hanford past-practice waste and the ERSDF, USDOE-RL and Ecology do recognize their roles as responsible party and regulator, respectively. What has remained mostly unrecognized by both parties, however, are their roles as natural resource trustees. For Ecology, as well as for USDOE-RL, these dual roles can create conflicts. Ecology must recognize that its role as the State natural resource trustee representative can be just as important as its role as regulator.
- E. The NRDA process (i.e., 43 CFR Part 11 regulations), and especially the rebuttable presumption [CERCLA 107(f)(2)(C)], puts the burden of proof for challenging claims of natural resource injuries and damage assessments on the responsible party. The intent of the regulations, however, is not to use this provision to encourage law suits,

but rather to encourage responsible parties to reach agreement with natural resource trustees on remediation decisions. Thus, the NRDA process can be used as a tool to help guide remediation with the goal of mitigating impacts to natural resources.

Recommendations

- A. I want to make clear that I am making no specific recommendations for using or not using a particular site for locating the ERSDF. I am stating the position that the site-evaluation process has been far too narrow and biased in its use of site-evaluation criteria. Moreover, the process risks being derailed in the future by natural resource trustees or the public. My specific recommendations are that the process include site-evaluation criteria and weighting factors that are more appropriate in regard to future-site land uses and current natural resource conditions on Hanford. Moreover, the process of initial site selection prior to characterization must be more open. I mentioned above regulator involvement; below I discuss natural resource trustee involvement.
- B. I strongly recommend that the natural resource trustees be made a part of the process for selecting appropriate candidate sites for the ERSDF. A number of sites with an order of preference should be approved by the trustees. Thus, if detailed characterization of the preferred site indicates that it would not be capable of permitting by the State (or EPA as appropriate), additional candidate sites are already available. One approach open to the trustees is to establish a Site Evaluation Technical Advisory Committee that can make recommendations. Initial site selection should never have been left to an internal USDOE-RL/WHC review. This issue should be brought to the attention of trustees at their next meeting in November or earlier if deemed critical. Prior trustee approval of a site, with full recognition of the impacts to natural resources, will mitigate (but not necessarily eliminate) the potential residual injuries to natural resources that result from the remediation action and that the trustees could assess as damages.
- C. Consideration should be given to whether the Hanford Future Site Uses Working Group should be reconvened to address the location of the ERSDF. It is clear that the proposed facility is outside the scope of their previous deliberations. This recommendation and the previous one are in keeping with USDOE-RL's commitment to keep the public involved in remediation decisions. Handing the public a done deal in regard to the ERSDF site is a dangerous risk that could backfire and seriously impact future remediation schedules.
- D. Again, I reiterate that the process for locating and designing the interim waste storage facility (for receiving initial 100 Area waste) should be kept separate from

the process for locating and designing the ERSDF. Because of its intended size (i.e., 400 acres) the interim facility can be located in accordance with the recommendations of the Hanford Future Site Uses Working Group (1992). Again, USDOE-RL will be hard pressed to convince the public they have not biased the site-selection process for ERSDF by locating the interim waste storage facility within the confines of the proposed (and currently only site intended to be characterized) ERSDF site. This approach should support TPA milestones for 100 Area near-term remediation schedules.

- E. No matter what site is eventually chosen for the ERSDF the following consideration should be factored into the use of the site. As much as possible the most disturbed areas of the site should be used first. Thus, if waste volume projections fall short the more intact areas of native habitat can be protected.
- F. Quantification of biological resources at any site chosen to be more fully characterized should be in accordance with 43 CFR Part 11 requirements.

V. References

- Fitzner, R. E., S. G. Weiss, and J. A. Stegen. 1992 (Draft). Biological Assessment for Threatened and Endangered Wildlife Species: Related to CERCLA Characterization Activities. WHC-EP-0513 Westinghouse Hanford Company, Richland, Washington.
- Hanford Future Site Uses Working Group (HFSUWG). 1992. The Future for Hanford: Uses and Cleanup, Summary of the Final Report.
- Stegen, J. A. 1992. Biological Assessment for State Candidate and Monitor Species Related to CERCLA. WHC-SD-EN-EE-009, Rev. 0. Westinghouse Hanford Company, Richland, Washington.
- Trost, E. T. 1993. Site Evaluation Report for the Environmental Restoration Storage and Disposal facility (ERSDF). WHC-SD-EN-EV-009, Rev. 0. Westinghouse Hanford Company, Richland, Washington.
- Weekes, D. C., and J. V. Borghese. 1993. Site Characterization Plan for the Environmental Restoration Storage and Disposal Facility, Draft A. WHC-SD-EN-AP-128, Rev. 0. (May 21, 1993). Westinghouse Hanford Company, Richland, Washington.
- USDOE-RL. 1993. National Environmental Policy Act (NEPA) Environmental Assessment (EA) Interim Action Determination: Environmental Restoration Storage and Disposal Facility. Letter from J. D. Wagoner to the Assistant Secretary for Environmental Restoration and Waste Management, EM-1, HQ (April 5, 1993).