



OAK RIDGE RESERVATION

Environmental Management

May 14, 1997

Mr. Larry W. Clark
NEPA Document Manager
DOE-ORO Vision 2010 Task Team
P.O. Box 2001
Oak Ridge, TN 37831

Dear Mr. Clark:

The Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) Ad Hoc Committee has completed their review of the Draft Environmental Assessment for Proposed Lease of Land and Facilities at the Oak Ridge K-25 Site, Oak Ridge, Tennessee (DOE/EA-1175). The Board reviewed and approved the enclosed comments and recommendations at the May 7, 1997 meeting. Of the 11 members present, one member abstained and one member "blocked" approval of the comments. A subsequent vote resulted in the required three-quarter majority. The member objecting to the approval of the Board's comments was encouraged to submit a minority report.

We appreciate the public comment period being extended from April 15, 1997 to May 15, 1997 in response to our Executive Committee's verbal request on March 24, 1997.

We look forward to your written responses to the enclosed comments and recommendations.

Sincerely,

Bill Pader, Vice Chair

for Randy Gordon, Chair
ORREMSSAB

RG/sb

Enclosure

cc: Patricia W. Phillips, DOE/ORO NEPA Compliance Officer
Rod Nelson, DOE/ORO
John Hankinson, USEPA Region IV
Earl Leming, TDEC/ORO

**Oak Ridge Reservation Environmental Management Site Specific Advisory Board
Comments on the Draft Environmental Assessment for Proposed Lease of Land and
Facilities within the Oak Ridge K-25 Site, Oak Ridge, Tennessee (DOC/EA-1175)**

The "Draft Environmental Assessment, Lease of Land and Facilities within the Oak Ridge K-25 Site, Oak Ridge, Tennessee" (EA) should not be expected to describe the precise impacts of leases to unidentified entities. The use of surrogate lessees is appropriate, but only if there are clear criteria by which to determine whether or not lessees are within the bounds of the EA. As stated in the EA, additional review under the National Environmental Policy Act (NEPA) will be required for actions that do not fall within the bounds of this analysis. The document demonstrates that a number of issues arise within the envelope of topics addressed in this NEPA analysis. Unfortunately, not all of these issues are satisfactorily addressed by the present text. The following areas appear to need some additional fact-finding and analysis and unclear statements need to be clarified.

General Comments:

- **EDITING**
The draft EA is in need of editing.

- **INFRASTRUCTURE**
-Please correct 1) the status of infrastructure (i.e., water and sewer services, and public safety services) at K-25 to support reindustrialization; 2) the relationship of K-25 infrastructure to the City of Oak Ridge's infrastructure (i.e., current and proposed plans) and 3) the effects of development of ED-1 on the K-25 and City of Oak Ridge infrastructure.

-Please ensure consistency of infrastructure information in all sections of the document (e.g., p. xiv, lines 22-27; p. 2-3, lines 29-40; Section 3.4.3; Section 3.6.4.2; Section 4.2.3.1; Section 4.2.3.3; Section 4.2.5.4 and elsewhere as applicable).

- **LEASES**
-Please include information on who will monitor lease restrictions and how such monitoring will be done (e.g., p. 2-2, line 28 and elsewhere as applicable).

-Please update all references and information relating to current and proposed leases (e.g., p. 1-6, lines 33-44; p. 4-29, lines 7-10, status of the barge terminal, and elsewhere as applicable).

-Please include copies of Categorical Exclusion (CX) determinations for existing leases and proposed leases in an appendix.

-How can the public be assured that NEPA and other statutory and regulatory requirements are met when the public is not part of the CX determination process?

-Please establish a procedure for the public to review the adequacy of NEPA and other regulatory documentation for K-25 leases. Please provide details of such a procedure in this document.

-Please include in an appendix: 1) the sections of CERCLA (i.e., Section 120) that are applicable to reindustrialization of the K-25 site [e.g., Section 120(h)]; and 2) the section of the Oak Ridge Reservation Hazardous and Solid Waste Amendment (ORR HSWA) Permit that requires notification of alterations at a permitted facility.

Specific Comments:

- p. iv, line 8: Change 3-218 to 3-18.
- p. vi: Please list titles of appendices. Please include the Hall Amendment as an appendix.
- p. vii: Items 3.7-2 and 3.7-3, change caps to lower case.
- p. ix: FHWA, is this correct for Federal Highway Administration?
- p. x: NCRP, is this correct?
- p. xiii, lines 4, 10, 30: Is underutilized one word?
- line 10: Please describe what is meant by "...restricted...".
- line 17: Here, and in other places, DOE mentions the need to document the condition of land and facilities. CERCLA Section 120(h) requires that EPA and TN approve such documentation, but the EA does not address that. This raises the question of the validity of subsequent leases. Please see attached letter to DOE from EPA Region IV dated 2/19/97.
- line 19: The current leases appear not to be valid because according to this Environmental Assessment, NEPA and other statutory and regulatory requirements have not been met. (See also p. 2-2, lines 33-34.)
- line 32: Change "will" to "would".
- line 34: Change "are" to "would be".
- line 38: Change "...being cleaned up". to "... clean up".
- lines 41, 42: Change sentence to read "Radiological and chemical exposures would likely continue at their current low levels ...".
- lines 43, 44: Delete "Further evaluation ... are defined". It is a repeat of lines 32 and 33.
- p. xiv, line 5: Change "... any violation..." to "... violations..." .

- lines 6-11: Suggested rewrite: Industries proposed for the K-25 Site are not expected to affect local air quality or the allowable "prevention of significant deterioration" increments for SO₂ that protect air quality at the Great Smoky Mountain National Park.
- p. xv, lines 4-8: The local tax situation is awkwardly and erratically summarized. Here and in the body of the report the analysis and the description need to be upgraded. (See also p. 3-27, lines 38ff.)
- line 9: Please provide a better analysis of transportation and traffic associated with large trucks traveling through Oak Ridge. (See also p. 3-28, Section 3-7.)
- p. 1-1, line 28: Change to "the social, environmental, and economic....".
- p. 1-3, Figure 1-2: The map is in serious error in northwestern Oak Ridge at the ORR boundary. The city boundary and the reservation boundary are shown as the same. Since a couple of annexations five years ago, the populated part of Oak Ridge extends two or three miles west of the line shown in the figure. The annexed area is NW of the reservation. The error is important in the present report because air emissions from the K-25 area originate closer to the population than is suggested by the map. Check whether the map error led to erroneous quantitative estimates in the EA. Please show the city and reservation boundaries correctly.
- p. 1-4, Figure 1-3: Unreadable in its present form.
- p. 1-6, line 44: Please include "CX" in the list of acronyms beginning on page ix.
- p. 1-8, Section 1.4: The scope of this EA is only broadly defined in Section 1.4. The document must clearly state the industries, processes, waste streams, and contaminants covered by this NEPA analysis so that the public can determine if potential leases at the K-25 site are adequately covered by this EA or need separate NEPA analyses. This section states that "Additional NEPA review would be required for actions that do not fall within the bounds of this analysis." Please describe the procedure by which it will be determined whether or not actions fall within the bounds of this analysis.
- lines 13-19: The document should include the potential impacts of decontamination and decommissioning at K-29, K-31, and K-33. (See also comment for p. 4-1, Section 4.1).
- lines 23, 24: The EA states that the area available for leasing is the mostly disturbed 1,028 acres of the K-25 site. This land is surrounded by about 3,817 additional acres of mostly undisturbed land in the K-25 Area of Responsibility. If leases are considered for undisturbed land in the Area of Responsibility, they must be preceded by

- additional NEPA assessment of the proposed action. (Also applies to p. 2-3, lines 21,22)
- p. 2-1, line 9: Please define "restricted" as used here and elsewhere in the document.
- lines 17, 18: DOE should explain this statement - it is not clear. Who will do the cleanup and/or decontamination? Ahead of whose/what present schedules?
- p. 2-3, line 42: Add after the word leasing, "or in an area affected by the use".
- pp. 2-5, 2-6, 2-7, & Table 2-2: Please revise table taking out incorrect references to specific sewers, creeks, rivers, (e.g., Items 1, 3, 5, and 8 in effluents column, reference is the city sewers; Item 4 in effluents column, reference is to the James River. For Item 3 in emissions column, is a permit required? For Items 4, 5, and 8, is it correct that state permits are required?
- p. 2-9, lines 18-20: Please clarify whether the proposed CERCLA waste management facility is anticipated to have treatment capability and the capability to store transuranic waste. If not, please correct.
- line 21: Please add East Bear Creek Valley to the list of candidate sites.
- line 35: Clarify that TSCAI does treat some off-site wastes. Please list states and the number of sites within those states.
- p. 2-10, lines 3-9: Please describe the storage treatment and disposal of non-CERCLA wastes mentioned in this paragraph.
- line 30: Add "d" to "determine"
- p. 3-1, line 28: Change "not conducive" to "relatively less conducive"
- lines 40-42: The terms "up-valley" and "down-valley" are ambiguous, especially for an area like K-25. Give a direction "(NE)" with one of them.
- p. 3-3, Figure 3.2-1: The figure caption needs sentences stating how to interpret the "wind rose" and the label indicating where it was observed.
- p. 3-7, Table 3.2-2: Please give an explanation for the 1994 24-hour SO₂ concentration of 243 ug/m³.
- p. 3-10, line 40: Please spell out "TSI" and other acronyms when they are first used.
- p. 3-12, line 33: Please spell out "STP".
- p. 3-14, line 2: Please spell out "CNF".

- p. 3-21, line 25: The analysis should also include Roane County, the county in which the site lies. (See also p. 3-26, lines 33-34; Paragraph 3.6.4)
- Section 3.6.1: Please provide a map with a scale that allows assessment of potential impacts to nearby populations.
- p. 3-34, line 35: Delete "slightly" from sentence.
- p. 3-37, line 12: There appears to be missing information.
- p. 3-38, lines 38, 40: Replace "cyanide" with "hydrogen cyanide at OSHA standards".
- p. 3-39, line 26: Add "hypothetical" accidents.
- p. 4-1, Section 4.1: The BNFL action to clean up the cascades should be included in this EA. It probably has the most impact and the fact that it is not a lease, but a contract, does not exclude it.
- p. 4-4, Section 4.1.10: There is no mention of industrial-type accidents to workers.
- line 47: Change "media" to "medium".
- p. 4-15, Section 4.2.3.3: Please review and revise this section to reflect what might happen (e.g., use "would").
- p. 4-26, Paragraph 4.2.9.2: The document should analyze dose for workers employed by the lessee.
- line 17ff: Explain how protection will be assured when the lessee is not skilled in radiation protection and the workplace is not radiologically clean? Plans have been made, and they should be discussed in this EA.
- lines 40-43: How will regulation by Tennessee OSHA be phased in? State inspectors may be unaware of existing site hazards. The draft EA has indicated that the condition of leased property will be documented, but you also need to indicate the detail with which this will be done and who will review and approve the condition reports.
- p. 4-29, & p. 4-30, line 7ff & line 22ff: The section on dredging is surprising. The 1996 Clinch River/Poplar Creek (CR/PC) RI/FS indicated that serious multi-agency attention would be given to any dredging operations in the K-25 area to avoid dispersing contaminated sediment. The stream sediment near the barge terminal was stated to be heavily contaminated. The text in this EA indicates the sediment would be good topsoil, while previous analyses have been concerned about foodstuffs grown in, and farm animals grazed on, sediment dredged

from this watercourse. Must the public conclude that the CR/PC Proposed Plan and the ROD, that will soon follow, are being ignored?

The (TCLP) test for hazardous material leachate is usually applied to identify material that may be safely placed in a municipal landfill. That would be a much more protected environment for sediment than refilling a borrow pit! The public should not be presented with such conflicting information (within 8 months) from almost the same source, without very careful explanation. Since other analyses have identified the dredging scenario as risky for these sediments, the discussion needs to be specific as to sampling

Please include the June 1996 data for sediment sampling.

p. 4-29, lines 21-27: Please locate sewage sludge land application sites on a map. Could be added to Figure 4.3-1.

Section 4.3.1: Lines 33-35 do not make sense! Are you telling the public that it is okay to disturb natural areas on ED-1, a greenfield site, and not okay on K-25, a brownfield site? Please revise.

p. 4-30, lines 6-16: Sounds as if a potential for contamination of water resources exists as a result of land application of sewage sludge. Such proposed action should be subject to NEPA assessment.

lines 17-18: Development of the mostly greenfield White Wing Scrapyard Site for a waste disposal facility is unacceptable. Please see the attached Oak Ridge Reservation Environmental Management Site Specific Advisory Board recommendation to Rod Nelson dated February 25, 1997.

lines 19-20: Furthermore, the statement that development of the site for waste burial would disturb several additional acres of top soil is misleading and wrong. Projected land use for an Onsite Waste Management Facility at the White Wing Scrapyard Site is 350 acres (See Identification and Screening of Candidate Sites for the Environmental Management Waste Management Facility, Oak Ridge, Tennessee. DOE/OR/02-1508&D1). In addition, this projection apparently does not include impacts to the borrow area for the soil cap which must be included in any environmental assessment for the waste management facility.

p. 4-31, lines 10-15: If dredged sediments from the barge terminal on the Clinch River are contaminated, what restrictions will be placed on access to the contaminated sediments in the former Borrow Pit?

p. 6-1, Section 6.0: Please be consistent in use of initials/first names of authors.

p. 6-4, line 20: Please include Mr. Issel's initials.

Minority opinion and response to Draft EA for the K-25 Site DOE/EA 1175

Sandra Reid, SSAB Member

Overall Comments

- The demand for speedy review of this document only served to perpetuate distrust amongst the affected population. It ignores the intent of NEPA and DOE's stated purpose to "foster early and open communication between DOE and the affected states and stakeholders."
- This EA does not evaluate specific industries and their effects on the site workers and the environment.
- The EA provides CX without explanation as to why the CX was granted to industries that are already in place and where buildings are already leased without characterization and without future remediation plans identified. When will an EIS be conducted on industries already on site?
- It provides CX for the proposed work by BNFL. It is obvious that this work has a high potential for environmental and worker health and safety concerns. BNFL's credibility in Great Britain is already lacking regarding health and safety. Why was BNFL given a CX? A full explanation is needed.
- There is no identification of who will be responsible for and have regulatory oversight over the ES&H of these individual industries and their operations.
- The document does not ensure protection provided under NEPA as the proposed industries do not exist. Potential industries should be made aware of the known contaminants at the Site and the health concerns from worker exposures that have been inadequately evaluated by NIOSH. There should be a provision in every contract with potential lessees that the contract is contingent upon their undergoing and being approved by a NEPA and CERCLA evaluation. All potential workers should be informed of potential site hazards.
- There appears to be a rush to force decisions that will have long reaching effects and these issues need to be carefully evaluated by all stakeholders with full disclosure. Ample opportunity must be made available for discussion and review of documents evaluating accuracy of stated claims. Forcing decisions by using the Federal Facilities Agreement and the 10-year plan as a driver will only perpetuate further harm and bad decision making. This is a cycle that I thought we were trying to overcome. Using NEPA in order to obtain a "FONSI" is a manipulation of a regulation meant to protect the public. EPA does not establish an adequate basis for making a determination whether

the environmental conditions of the property are such that leasing the property, and the terms and conditions of the lease agreement, are consistent with safety and the protection of public health and the environment.

- Public confidence would be enhanced if meetings between EPA regulators and DOE were held with public participation, rather than behind closed doors. This is particularly important as decisions are being made that directly effect our community by people who (1) have absolutely no ties to our community, (2) are not accountable to our community and (3) do not communicate the proposed decisions in a timely and open fashion.
- Statements regarding future proposed plans do not identify where the funding will come from for projects such as upgrading the water treatment at K-25 and building the new barge facility on the Clinch River where DOE has stated that these sediments should not be disturbed.

Support from EPA

- The enclosed letter from Camilla Bond Warren (USEPA) to Margaret Wilson (DOE-ORO) dated 2/10/97, subject: K-25 Site, Building K-1036: "CERCLA 120 h Report" (9/23/96), Supplemental Environmental Baseline Survey (9/23/96), Finding of Suitability to Lease (1/17/97) and K-25 Site, K-1220 Office and Laser Lab Area: "CERCLA 120 h Report" 12/19/96), Supplemental Environmental Baseline Survey (12/19/96), Finding of Suitability to Lease (12/23/96) indicates that DOE has not established "an adequate basis for making a determination whether the environmental conditions of the property are such that leasing the property, and the terms and conditions of the lease agreement, are consistent with safety and the protection of public health and the environment. Accordingly, EPA Region 4 cannot at this time recommend that the Administrator of EPA concur with DOE's protectiveness determination under the 'Hall Amendment.'"

The EA Process

- It appears DOE is seeking approval for an initiative where decisions have already been made without public participation and without effectively identifying the present hazards and characterizations of the buildings, the Site, and the surrounding environment.
- Nowhere does DOE identify its own responsibilities or future plans for remediating these buildings, the Site, or the environment. There is no apparent future intent to provide remediation by any party.
- For full public participation, appendices and identifying documents must be made available for public perusal.

- It appears there will be multiple NEPA reviews required or DOE will generously use CXS. All CXS must be documented.

TSCA Incinerator

- TSCAI is being proposed as a "national resource and treasure." More than 61 sites are identifying TSCAI as a means of dealing with their legacy wastes. It is critical that a new EA be conducted on the waste presently being burned in the incinerator and also for future proposed substances as waste streams have changed dramatically since the original trial burn. It is critical that the emissions be revisited to determine what the "real" emissions are. The present sampling data does not provide satisfactory information to ensure public health and safety. It has been made clear by DOE that current technology is not available to identify or measure real time emissions of any substances. However, recently, DOE committed to testing new monitors on the facility. Heavy metals, products of incomplete combustion, creation of new "potentially more hazardous" substances, multiple radionuclides, (alpha, beta and gamma emitters) must be analyzed together, not as single source substances. Regulations for TSCAI are narrow and do not identify or accurately measure the types of substances being incinerated. Gross alpha and gross beta analysis is inadequate to determine accurate radiological releases.

Quality of Data

- The information and documentation provided within this EA is often inaccurate and inadequately supported in order to obtain a fully informed, supportive decision.
- Claims of "no harm" from past actions because of "lower than the national average radiation levels" to justify new "similar industries" is unproven and unsubstantiated.
- The quality of information provided in this document does not represent an accurate analysis of the impacts of present, past or future industrial impacts on our community.
- There is no James River in East Tennessee. It is in Virginia. This raises the question as to whether waste is being transported to or from Virginia.
- There is no connection between the City of Oak Ridge sewage system and the Site, nor is one even proposed at this time. Relevance to this EA is indeterminate. Where will the funds come from to develop this project?
- The tax situation is poorly summarized. The Tennessee Sales and Use Tax is currently paid by the DOE plants and would be paid by any new tenants, just as it is by tenants elsewhere under the current law.

- The maps and the wind rose patterns do not identify where the point of analysis is and is not substantiated in the written document. The maps themselves are flawed and do not accurately represent the boundaries between K-25 and the City of Oak Ridge. The air emissions of K-25 are closer to Oak Ridge and residential communities than implied.
- True north, south, east, west directions must be described, not "up and down valley." These are highly inaccurate terms.
- The dredging of the Clinch River contradicts every previous document and EA, Safety Analysis, and Health Hazard Evaluation which stated that the contaminants of concern were buried in the sediments and could not be disturbed for fear of creating exposure to down stream communities. There are absolutely no supporting documents for this claim of safety. The indication is that this sediment will be used as topsoil. It appears history will be repeated when sediment from East Fork Poplar Creek was placed on the school playing fields and on the Civic Center later having to be dug up and capped at enormous expense. Prior documents have identified the harm from growing vegetables and allowing animals to graze on grass grown from this type of sediment. How has this all been validated? The TCLP testing identified is inadequate for assessing this kind of agricultural impact. (TCLP is used as an assessment of pollution drainage for a landfill.)
- No impact was included on the waterborne contamination releases to downstream communities.
- To imply that the additional airborne burden on the Greater Smokey Mountains will be manageable and within compliance is not substantiated and indeed must be carefully evaluated given the present increasing damage to the Greater Smokey Mountains.

Community Impacts

- What is the Site worker population? Where do they live. The analysis is based solely on the effects on Oak Ridge. As this site is based in Roane County, it is more likely to effect Roane County (an already economically depressed community). In addition, it will impact Knox and Loudon Counties. The burden on water management, fire, safety and emergency response will likely fall upon Roane County where the present response teams are based on volunteers. Where will the additional funds come from to help support this development? These people must be trained to respond to hazardous materials accidents that could result at the Site.
- This document needs to be evaluated considering the affected stakeholders and responsible officials of Roane, Knox and Anderson Counties not just Oak Ridge City. The economic impacts must consider these additional counties.
- How will protection be assured for the new lessee and it's workers when they may not be experienced in providing protection for radiation and multiple chemical exposure?