

The actions selected and implemented by the Department of Energy for the modernization of Y-12 National Security Complex should consider the current environmental conditions that exist at the site. Moreover, in undertaking those activities, DOE should recognize the importance of striking a balance between national security interests and protection of human health and the environment. The past 57 years of production and research activities at Y-12 have resulted in widespread contamination to soils, surface water, and groundwater within the footprint of the Y-12 plant. Ongoing remedial activities must continue to address the release of contaminants (i.e., Mercury, Uranium, Volatile Organic Compounds, etc.) to the environment.

Recognizing the fact that the entire Oak Ridge Reservation is a National Priorities Listed (NPL) site being remediated pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) statute, DOE has an obligation to coordinate the modernization activities with the planned environmental restoration activities on the site. Many of the areas identified for expansion or construction of these new facilities have underlying groundwater contamination and contaminated soils issues that must be addressed. Proposed construction activities that potentially affect runoff into Upper East Fork Poplar Creek or Bear Creek should be analyzed thoroughly to prevent further deterioration of these waters of the state.

Facilities under the Environmental Restoration Program are not covered in this document. Their impact to the environment is substantial and therefore more time should be spent in the description and the breadth of their environmental effects. It is the state of Tennessee's preference for DOE to use the designated brown-field areas for the construction activities. However, regardless of whichever site option DOE chooses for this construction effort, media sampling must be consistent with the sampling strategy to support the CERCLA remediation activities. DOE must develop contingency plans for the management of contaminated soil encountered as a result of the construction effort.

Environmental Justice has been identified as an issue with respect to the Y-12 plant; therefore, DOE should make every effort to fully address the potential or possible environment impacts to those affected communities.

In accordance with the Tennessee Oversight Agreement, June 27, 1996, DOE should involve the TDEC/DOE-O as early as possible in the planning and development processes of this effort to minimize potential conflicts related to the environmental statutes, laws, and regulations.

Specific Comments

Section S-4, Affected Environment Page S-38 and Table S.5-1, Summary of Environmental Consequences for the Y-12 Site-Wide Alternative (Page 12 of 30), Page S-66

In these sections and throughout the document, the draft EIS does not clarify that the 10 mrem/year National Emission Standards of Hazardous Air Pollutants (NESHAP) standard for radionuclides is for the Oak Ridge Reservation (ORR). The draft document

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Comment No. 3

Issue Code: 12

The Y-12 SWEIS considers the current and projected environmental conditions of Y-12. EM Program CERCLA restoration activities and their impacts are addressed in appropriate CERCLA documents (e.g., RI/FS). EM Program restoration activities are currently ongoing and would continue regardless of future projects proposed for Y-12 DP missions. EM Program waste management operations, environmental restoration activities, and the new EM Waste Management Facility are included in Alternative 1B (No Action - Planning Basis Operations) as described in Sections 3.2.2, 3.2.2.2, and 3.2.2.3 of the SWEIS. More than 95 percent of the current EM work is expected to be completed by 2006 and groundwater, surface water, and soil contamination would be remediated to a level consistent with future use. DOE would implement appropriate mitigation and pollution prevention/pollution control measures to minimize any impacts to media that may result from construction and operation of the proposed DP facilities.

DOE's Office of Environmental Management oversees and manages the ORR CERCLA activities. There are several environmental restoration projects within the Y-12 Site area of analysis which are referred to in various sections in Chapter 4, and Section 4.5 in particular. These include the Bear Creek and Upper East Fork Poplar Creek Watershed projects which have been merged and is now called the Y-12 Project. Questions regarding specific processes used in CERCLA restoration projects should be directed to the ORO and EM personnel at Oak Ridge. Potential impacts to groundwater from new construction are addressed in Section 5.5, Volume I of the SWEIS. Section 5.4 discusses the potential soil impacts from new construction.

Comment No. 4

Issue Code: 26

EM Program CERCLA restoration activities are covered under appropriate CERCLA documents (e.g., RI/FS). EM Program CERCLA restoration activities are currently ongoing and would continue regardless of future projects proposed for Y-12 DP missions. EM waste management operations, environmental restoration activities, and the new EM Waste Management Facility are included in Alternative

appears to imply that the 10 mrem/year standard is for the Y-12 plant only. For the preferred alternative (Alternative 4), the Y-12 portion of the NESHAP standard of 10 mrem/year is 4.5 mrem/year. It is not clear to TDEC/DOE-O if this amount will limit any re-industrialization plans or future expansions for Oak Ridge National Laboratory or the East Tennessee Technology Park. Please clarify this issue in the final EIS.

Section 3.3.2.2 Page 3-16 Environmental Management Waste Management Facility
This section used data from the Remediation Investigation/Feasibility Study completed in 1998. The facility has since been moved and raised. TDEC and EPA are still reviewing the design. Therefore, some of the data presented in the document may have changed. This issue should be relayed to the reader.

Section 3.5.13 Environmental Justice Page 3-98 (paragraph 1)
The location of surrounding communities such as the Scarboro Community should be described and the Environmental Justice section should consider current impacts in site-specific terms, not general terms.

Section 3.5.5, Water Resources Page 3-88
There is no reference made concerning the state of Tennessee, TDEC, responsibilities for permitting and inspections during the construction phase of the various projects.

Section 4.5.2 Groundwater Page 4-35 Y-12 Hydrogeology
This section should mention that there is Uranium contamination in the Groundwater at Kerr Hollow Quarry (a closed facility under RCRA) which is part of the Chestnut Ridge Hydrogeologic regime.

Section 4.6.1, Page 4-50, Terrestrial Resources
Descriptions of the biological health of East Fork Poplar Creek in this draft document are misleading. It should be made clear that conditions in the creek are improving but that continued remediation is required to achieve a status of fully supporting state designated uses.

If you have any questions concerning these comments, please contact me at (865) 481-0995.

Sincerely



John A. Owsley
Director

jao591.99

Comment No. 4 (cont.)

Issue Code: 26

1B (No Action - Planning Basis Operations Alternative) as described in Sections 3.2.2, 3.2.2.2, and 3.2.2.3 of the SWEIS. Cumulative impacts of waste generation activities for the ORR study area are discussed in Chapter 6, Section 6.4.7 of the SWEIS.

9/07
(cont.)

Comment No. 5

Issue Code: 22

Comment noted. Sections 3.2.3.2 and 3.2.4.2 describe the proposed sites for construction of the HEU Materials Facility and the Special Materials Complex, respectively. DOE's preferred site for the HEU Materials Facility is Site A which is a previously disturbed area and currently the location of the Y-12 West Portal Parking Lot. The preferred site for the Special Materials Complex is Site 1, identified in the Final SWEIS. The ROD on the Y-12 SWEIS will identify DOE's decision and action on the proposed action and siting of facilities.

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Comment No. 6

Issue Code: 12

Soil and other media sampling for construction of the proposed new facilities, if appropriate would be in accordance with applicable ORR CERCLA decision documents and plans. Prior to any site disturbance, DOE would develop appropriate contingency plans for management of unexpected contaminated soil or other media. TDEC would be involved in the review of such plans in accordance with applicable regulations and agreements.

13/05

14/06

Comment No. 7

Issue Code: 13

DOE is committed to compliance with provisions of Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The Environmental Justice analysis was prepared in accordance with CEQ's guidelines under NEPA. The Y-12 SWEIS addresses the issue of whether implementation of the proposed action and alternatives would result in disproportionately high and adverse environmental effects on minority or low-income populations. Section 5.13, Volume I, discusses the potential environmental justice impacts of the proposed action and alternatives. This section has been expanded in the Final SWEIS.



State of Tennessee
Department of Environment and Conservation
Division of Radiological Health
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MEMORANDUM

TO: David Harbin
FROM: Joelle Kay
SUBJECT: State of Tennessee's Comments on the United States
Department of Energy Draft Site-Wide Environmental Impact
Statement For The Oak Ridge Y-12 Plant.
DATE: January 26, 2001

General Comments:

The Tennessee Division of Radiological Health (DRH) supports the Department of Energy (DOE) using a combination of new buildings and major building upgrades to improving operations including health and safety, emissions control and waste management on the Y-12 site. Wherever possible new buildings should be built with single emissions points that are easily monitored and controlled to reduce emissions on and off site. An effort should also be made to make waste management easier in new and remodeled buildings.

15/25

In several buildings currently being used for production, it is necessary to pass from contamination areas to uncontaminated areas and back into contamination areas on a frequent basis. This makes contamination control difficult and a series of administrative controls have had to be relied upon for this effort. New building should be designed so that radiation areas and non-radiation areas are separated and it isn't necessary to pass back and forth in order to get work done. A review of NRC and State licensees could be very helpful in the design of new buildings.

16/14

It is critical that new building and remodeling campaigns do not distract the DOE from the critical issue of cleanup of the Oak Ridge Reservation (ORR). Funds for cleanup needs to be protected so that they are not redirected into these new activities.

17/16

Comment No. 8

Issue Code: 25

DOE, through it's M&O contractor BWXT-Y12, will coordinate with TDEC/DOE-O in accordance with the Tennessee Oversight Agreement in the planning and development process for potential new facilities after the ROD is issued on the SWEIS.

Comment No. 9

Issue Code: 07

The 10 mrem/year is the NESHAPs radionuclide standard for the entire ORR. This issue has been clarified in the Final SWEIS (see revised text to section in the Summary and in Volume I, Chapters 4 and 5). A hypothetical MEI could have received a total of 0.7 mrem from radionuclides emitted to the atmosphere from all sources on the ORR in 1999. The atmospheric radionuclide contribution from Y-12, ORNL, and ETTP was approximately 0.5 mrem, 0.06 mrem, and 0.1 mrem, respectively of the 0.7 mrem ORR total in 1999. Even with a very conservative estimated MEI dose of 4.5 mrem/year from Y-12 atmospheric radionuclides for the preferred alternative (Alternative 4), the total dose to the MEI would be below the NESHAPs radionuclide standard and would not preclude re-industrialization efforts at ORNL or ETTP.

Comment No. 10

Issue Code: 19

The following statement has been added to Section 3.2.2.2: "The TDEC and EPA are still reviewing the final design for the Environmental Management Waste Management Facility. As a result, some of the data presented in this section of the SWEIS may change."

Comment No. 11

Issue Code: 13

Additional site specific data have been added to Volume I, Sections 3.5.13 and 5.13.

Comment No. 12

Issue Code: 05

A brief description of the role of the TDEC with regard to permitting and inspections during construction has been added to sections pertaining to the description of the facilities in Chapter 3, Sections 3.2.3.2 and 3.2.4.2.