

**FINDING OF NO SIGNIFICANT IMPACT FOR THE
ENVIRONMENTAL ASSESSMENT FOR THE
OAK RIDGE ENHANCED TECHNOLOGY
AND TRAINING CENTER**



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Approved for Public Release

U.S. DEPARTMENT OF ENERGY
NATIONAL NUCLEAR SECURITY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT FOR THE
ENVIRONMENTAL ASSESSMENT FOR THE
OAK RIDGE ENHANCED TECHNOLOGY
AND TRAINING CENTER

AGENCY: Department of Energy, National Nuclear Security Administration

ACTION: Finding of No Significant Impact

SUMMARY: The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the United States (U.S.) Department of Energy (DOE), has the primary responsibility to maintain and enhance the safety, security, and effectiveness of the U.S. nuclear weapons stockpile. In addition, NNSA works to reduce the global danger from weapons of mass destruction and responds to nuclear and radiological emergencies in the U.S. and abroad. In accordance with the Council on Environmental Quality (CEQ) regulations at 40 Code of Federal Regulations (CFR) Parts 1500–1508 and the DOE National Environmental Policy Act (NEPA) implementing procedures at 10 CFR Part 1021, NNSA has prepared an environmental assessment (EA) (DOE/EA-2144) to analyze the potential environmental impacts associated with constructing and operating the Oak Ridge Enhanced Technology and Training Center (ORETTC) to train first responders and other experts in nuclear operations, safeguards, and emergency response to support the National Security Enterprise.

NNSA's Proposed Action is to construct and operate the ORETTC on property currently owned by NNSA on the Oak Ridge Reservation (ORR). The proposed location, which is approximately five miles west of the Y-12 National Security Complex (Y-12), is across from the Horizon Center Industrial Park on the Oak Ridge Turnpike, and approximately 1.5 mile east of the State Route (SR) 95 – SR 58 interchange. The Final EA also includes analysis of an alternative that would locate the ORETTC at the East Tennessee Technology Park (ETTP).

In August 2020, NNSA published the Draft EA on the DOE NEPA web page (<https://www.energy.gov/nepa/doe-environmental-assessments>) and the NNSA NEPA web page (<https://www.energy.gov/nnsa/nnsa-nepa-reading-room>) for public review and comment. NNSA announced the availability of the Draft EA in local newspapers and provided an email address and postal address where comments could be submitted. NNSA provided an approximately 30-day comment period, which ended September 21, 2020. The Final EA, published in November 2020, considers all comments received on the Draft EA.

The NNSA Production Office Manager has determined that the construction and operation of the ORETTC at the proposed site is not a major Federal action that significantly affects the quality of the human environment within the meaning of NEPA. Therefore, preparation of an environmental impact statement (EIS) is not required.

ADDRESS: The ORETTTC Final EA and this Finding of No Significant Impact (FONSI) have been prepared and are available to the general public on the NNSA NEPA web page (<https://www.energy.gov/nnsa/nnsa-nepa-reading-room>) and/or the DOE NEPA web page (<https://www.energy.gov/nepa/doe-environmental-assessments>). Requests for additional information may be submitted via regular mail to NNSA NEPA Document Manager, Attn: ORETTTC EA, P.O. Box 2050, Oak Ridge, TN 37831; or by email: NEPA.Comments@npo.doe.gov.

SUPPLEMENTARY INFORMATION: As described in Section 1.2 of the Final EA, NNSA requires highly specialized industrial training facilities and equipment with national-level emergency response experts to train first responders and other experts in nuclear operations, safeguards, and emergency response to support the National Security Enterprise. Currently, such training occurs in bifurcated facilities at Y-12, across the National Security Enterprise, and in non-NNSA facilities across the country. The lack of a dedicated, centralized training facility reduces the effectiveness and efficiency of training. The ORETTTC is envisioned as a state-of-the-art center with highly specialized industrial training facilities and equipment with national-level emergency response experts, which would differentiate this center from other training facilities.

The proposed ORETTTC facilities would consist of: (1) a Simulated Nuclear and Radiological Activities Facility (SNRAF) and a Technical Rescue Training Area (TRTA), consisting of a Live Burn Fire Tower and Rubble Pit to be developed by NNSA at the proposed site; (2) an Emergency Response Training Facility (ERTF) at the proposed site, which would be funded by the State of Tennessee and developed by the Roane County Industrial Development Board (RCIDB); (3) a maintenance building; and (4) utilities, roads, and supporting infrastructure. Approximately 24 acres of land would be transferred from NNSA to the RCIDB for development of the ERTF, but only a portion of this land would be disturbed.

ENVIRONMENTAL IMPACTS: At the proposed site, construction of the ORETTTC would disturb approximately 24.1 acres, or approximately 0.06 percent of the total land at ORR. Of this 24.1 acres, approximately 7.7 acres would remain permanently disturbed by the facility footprint, parking lots, and the access road. The other 16.4 acres would be temporarily disturbed (i.e., surfaces would remain pervious) to grade the land and provide greenspace around the ORETTTC to enhance the campus-feel. In addition, approximately 3.5 acres of forest would be thinned to reduce wildland fire fuel sources. No change to the zoning designation for the DOE-owned land would be required, and use of the DOE-owned land for the ORETTTC would be consistent with the current zoning designation and historic uses of ORR land. Depending upon the specific siting location and facility configuration at the ETTP Alternative site, the amount of land disturbance could be of similar magnitude as the land disturbance at the proposed site. Once operational at the ETTP Alternative site, approximately 7.7 acres would remain permanently disturbed by the facility footprint, parking lots, and the access road. The ETTP Alternative site is currently owned by the DOE Environmental Management (DOE EM) and is currently being leased to the Community Reuse Organization of East Tennessee, who subleases it to a private woodchip processing business. In order to use the property for the ORETTTC, the current long-term lease would have to be terminated and the property vacated (and remediated, if necessary). Because of previous contamination at the ETTP, and ongoing concerns that could affect project implementation, there

is a higher potential for project delays associated with transferring land from DOE-EM to NNSA and eventually to the RCIDB for development of the ERTF compared to the proposed site.

No appreciable visual resource impacts are expected, as the ORETTC proposed site is largely wooded and would only be visible from traffic on the Oak Ridge Turnpike. If located at the ETPP Alternative site, the ORETTC would be visible from the Oak Ridge Turnpike and would be in character with the mix of industrial use and open space at ETPP.

Minor, short-term effects would be due to generating airborne dust and other pollutants during construction. The area is in attainment for all National Ambient Air Quality Standards and emissions from ORETTC construction and operation would be below *de minimis* thresholds at either site alternative. There are no sensitive noise receptors in the vicinity of the alternative sites and there would be no notable noise sources associated with ORETTC construction and operation.

Construction of the ORETTC would not impact groundwater resources and would have less than significant adverse impacts on surface water resources. A perennial stream located within the central portion of the parcel is within the proposed construction and operational footprint for the ORETTC facility. As such, this stream would have the highest potential for impacts during construction and operations. However, a 100-foot riparian buffer would be maintained around all of the streams within the construction footprint to reduce the potential for impacts. It should be noted that the central perennial stream would be crossed in two locations to allow pedestrians and vehicles to cross. Bottomless culvert arches (or similar bottomless bridge) would be designed in a manner that would maintain the existing stream bottom contours, and therefore the flow would not be altered or impeded. Clearing of vegetation within the stream buffer-zone at these crossings would occur. Disturbance in the stream riparian buffers would be limited to approximately 0.70 acres for the road and pedestrian crossing. Approximately 0.05 acres of wetlands would be impacted. No water quality impacts are expected from operations as stormwater and fire-training runoff water would be captured and managed under National Pollutant Discharge Elimination System permits, as required.

At the proposed site, the ORETTC would not be located within a 100-year or 500-year floodplain, but could potentially impact approximately 0.05 acres of wetlands. Depending upon the specific siting location and facility configuration at the ETPP Alternative site, floodplains and wetlands could be impacted. The EA includes a wetlands assessment in accordance with 10 CFR 1022 (“Floodplain and Wetland Environmental Review Requirements”). In addition, NNSA has separately prepared a Wetland Statement of Findings, which is also available to the general public on the NNSA NEPA web page (<https://www.energy.gov/nnsa/nnsa-nepa-reading-room>) and/or the DOE NEPA web page (<https://www.energy.gov/nepa/doe-environmental-assessments>). In the Wetland Statement of Findings, NNSA determined that there is no practicable alternative to the construction and operation of the ORETTC at the proposed site. In accordance with 10 CFR 1022 and Executive Order 11990, NNSA has identified, evaluated, and minimized/mitigated adverse wetlands impacts associated with the construction and operation of the ORETTC at the proposed site. Wetland loss due to road and pedestrian crossings could total approximately 0.05 acres within the watershed. With regard to the proposed site, NNSA would minimize potential wetlands impacts by: (1) using bottomless culvert arches; (2) limiting the road corridor and pedestrian corridor to the minimum width across the 100-foot riparian buffers on either side of the stream,

and (3) using best management practices such as biodegradable sediment control barriers to protect the stream from erosion. The EA identifies all practicable measures to minimize harm to wetlands. Pursuant to the Clean Water Act, an application for Nationwide Permit 14, Linear Transportation Projects would be submitted to the U.S. Army Corps of Engineers (USACE). In addition, an application for General Aquatic Resource Alteration Permit for Construction or Removal of Minor Road Crossings (form CN-1091), along with any other required information, would be submitted to Tennessee Department of Environment and Conservation (TDEC) to implement the Proposed Action. During the permitting process, NNSA would work with USACE and TDEC to identify and develop expansion and/or creation of wetland acreage in areas near the ORETTC.

Construction activities would cause some minor impacts to the existing geologic and soil conditions at either alternative site; however, no viable geologic or soil resources would be lost as a result of construction activities. At the ORETTC proposed site, construction-related activities and ground disturbance would be small and no cemeteries or known prehistoric sites would be affected. Based on the results of a Phase I Archeological Survey at the ORETTC proposed site, no historic properties eligible or potentially eligible for listing in the National Register of Historic Places would be affected. Because much of the ETTP has been previously disturbed, cultural resources are not likely to exist at that site. Operational activities are not expected to have an impact on cultural resources.

Construction of ORETTC would have short- and long-term less than significant adverse effects on biological resources. Potential impacts on biological resources include loss of habitat and wildlife disturbance. Given the small land disturbance, the ORETTC would not reduce the distribution or viability of species or habitats of concern. During the EA process, NNSA conducted informal consultation with the U.S. Fish and Wildlife Service (USFWS), Tennessee Ecological Services Field Office, regarding potential impacts to threatened, endangered, or sensitive species, particularly the Indiana bat (endangered), northern long-eared bat (threatened), and gray bat (endangered). As a result of that consultation, the USFWS concluded that NNSA has adequately addressed potential direct, indirect, and cumulative effects to federally listed species and their habitats. The USFWS concurred with the determination that the project is not likely to adversely affect federally listed bats. The analysis in the EA also showed that the ORETTC would not significantly impact the Tennessee dace and the black mountain salamander, both of which are state-listed In Need of Management species. For the ETTP Alternative, adverse environmental impacts to existing ecological receptors would be limited because the area is primarily industrialized, fragmented, and disturbed; no rare, threatened, and endangered plant and animal species are known to occur, therefore adverse impacts are not anticipated.

Because the peak construction workforce (75 persons) and operational/training workforce (270 persons) would be negligible compared to the projected population in the ROI, socioeconomic impacts, although beneficial, are expected to be negligible at either alternative site. Temporary increases in traffic associated with construction activities would not be significant compared to existing activities in the ROI. No environmental justice populations were identified within the census tracts where ORETTC would be located. During construction and operation, no disproportionately high and adverse environmental or economic effects on minority or low-income populations are expected.

No offsite adverse health impacts are expected at either alternative site. During ORETTC construction and operation, 1-2 days of lost work from illness/injury and less than one fatality would be expected. There would be no radiological or hazardous chemical human health impacts associated with ORETTC operations. Approximately 0.002 fatalities could be expected to occur annually at the ORETTC specifically from accidents related to firefighting drills/training. Statistically, one death would be expected to occur for every 500 years of operation at the ORETTC. The likelihood of sabotage and terrorism is extremely low. However, it is possible but highly unlikely that random acts of vandalism could occur. A variety of measures to control access and maintain security would be used.

Solid non-hazardous waste would be recycled or transported to an appropriate DOE landfill for disposal. Minimal quantities of hazardous waste (i.e., less than 100 pounds of hazardous waste associated with cleaning supplies and spent training materials) would be generated annually and would be disposed of at offsite licensed facilities. Construction of the ORETTC would have minimal impacts on infrastructure capacity. The capacity of the existing infrastructure in the region would be adequate to support the ORETTC at either alternative site.

DETERMINATION: Based on the analysis in the EA, I conclude that the construction and operation of the ORETTC at the proposed site does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, preparation of an EIS is not required.

Issued in Oak Ridge, Tennessee, this 4th day of November 2020.

Geoffrey L. Beausoleil
Manager, NNSA Production Office