



# U.S. Department of Energy Categorical Exclusion Determination Form

**Proposed Action Title:** Propane Air Peak Shaving Plant Relocation to Easement on Office of Secure Transportation Site (CX-ORR-16-002)

**Program or Field Office:** Oak Ridge Reservation

**Location(s) (City/County/State):** Oak Ridge, Tennessee

**Proposed Action Description:**

It is proposed that DOE grant an easement to Oak Ridge Utility District (ORUD) to relocate and install (4) 70,000 gallon aboveground propane storage tanks in an area located on the U.S. DOE Oak Ridge Reservation (ORR) next to the Office of Secure Transportation site on State Highway 58 east of Flannigan Loop Road adjacent to an existing ORUD natural gas regulator station easement. It is anticipated between 5 - 10 acres will be cleared out of approximately a 22 acre site; minor additional clearing may be required at a later date for entry and exit modifications, if needed. A one-story building also would be constructed to be used as a natural gas pipeline maintenance facility including connections to sewage, electrical, and drinking water systems. The site is to be utilized as part of a propane air peak shaving facility which is a mixing plant where liquid propane is heated to vapor then mixed with compressed air to dilute its BTU content to be compatible with natural gas. Once converted to synthetic natural gas it is injected into the city natural gas system to help meet daily peak gas demand on very cold days. Generally a plant like this will only operate several days each year in the coldest months.

Presently, about 84% of the site is forested, the balance being in road or utility right-of-ways. Current forest cover is composed of pine or pine-hardwood mixed forest. The pine component is mature planted white pine, planted loblolly (some 1949 individuals, though mostly 1978 vintage), loblolly regeneration and scattered Virginia pine. Among these is the majority of the merchantable timber the site would offer. The hardwood component is composed of yellow poplar, sweetgum, American beech and red maple, with scattered southern red oak on higher sites. There are also a few scattered sycamores, especially toward the north end of the site. No state or federally listed animals or plants have been documented within the site.

Prior land use within the footprint at the 1942 federal acquisition was composed of row cropping, 46%; grazing, 32%; woodlot (second growth forest – yellow pine and eastern cedar), 13%; homestead 7% and orchardry, 2%. Virtually no hardwood forest occupied the footprint at the time. Older individual trees were present (and remain so) at a home-site and along an old property line. During the construction phase of the K-25 site, the row-cropped portion of site, being relatively level and clear, was quickly converted into a residential area (aka, "Happy Valley"). By early 1949, the residential structures had been mostly demolished/removed and nearly the entire footprint replanted in loblolly or white pine. Harvesting and clearing episodes began sometime afterwards. By 1959, the East Tennessee Natural Gas pipeline had been entrenched along the southwest side of the parcel and a local power transmission line installed on the northeast side. TVA later upgraded the existing power line for an expanded right-of-way from Bull Run Steam Plant to K-25 during 1970, and widened it again to accommodate an additional line from Kingston Steam Plant in 1977. During this time, the pine was thinned (1967) and some portions harvested and replanted (1978). The last harvest in the area was during the 1993-4 southern pine beetle epidemic, which removed most of the original planted loblolly, but left some white pine along the frontage.

DOE has completed the Section 106 process in consultation with the Tennessee State Historic Preservation Office (SHPO) and consulting parties for the "Happy Valley" residential area in conjunction with the Environmental Assessment Transfer of Land and Facilities within the East Tennessee Technology Park and Surrounding Area, Oak Ridge, Tennessee (DOE/EA-1640). If an unanticipated discovery of cultural materials (e.g., human remains, pottery, weapon projectiles, and tools) or sites is made during any development activities, all ground-disturbing activities in the vicinity of the discovery would be halted immediately. ORUD would be responsible to contact DOE, who would then contact the Tennessee SHPO prior to any further disturbance of the discovery-site area.

The site contains trees that provide potential roosting habitat (i.e., containing exfoliating bark, cracks and crevices) for federally listed Indiana (endangered) and northern long-eared (threatened) bats. In order to minimize effects on Indiana bat populations, US Fish and Wildlife Service (USFWS) guidance has indicated seasonal restrictions to tree felling as follows: for projects affecting Indiana bat summer habitat, only cut trees between October 15 and March 31; for projects affecting Indiana bat swarming habitat (near hibernacula), only cut trees between November 15 and March 31. These tree felling dates are also applicable to the northern long-eared bat. Once the actual footprint is established, it will need to be assessed whether or not the specific area contains such habitat for these federally listed bats and acoustical surveys may be required to confirm presence or absence. If the project will involve the clearing of greater than 10 acres of forest within Indiana bat and northern long-eared bat summer roosting habitat, a tree removal plan approved by USFWS would be required and mitigation also may be required. Following the USFWS guidance should prevent any impacts to listed bat species.

Dependent on the actual chosen location for the footprint for the proposed project, there could be potential impacts to the existing stream due to erosion and sedimentation. The potential for the presence of state listed "in need of management" Tennessee dace and four-toed salamander increases the concern for potential impacts to the stream. Best management practices that would be utilized during construction include staked hay bales or silt fences and keeping a 100 foot (30m) buffer from top of bank on each side of the blue line stream. This is

needed to fully protect the stream and the associated riparian zone.

The regulations pertaining to the design, construction, location, installation, operation, and maintenance of gas utility gas plant, (Propane Air Mixing Plant), are covered under National Fire Protection Association (NFPA) 59, Utility LP-Gas Code. Those portions of LP-Gas mixing systems downstream of the point where LP-Gas and air are introduced into the natural gas utility distribution system is covered by the U.S. Department of Transportation, 49 CFR 192, Pipeline Safety Regulations. Berms would be made from earthen materials and meet any requirements of NFPA 58, Liquefied Petroleum Gas Code, and NFPA 59, related to above ground non-refrigerated propane storage tanks.

Any wastes generated by the proposed activity are expected to be managed through existing, standard waste management and/or recycling programs. Stored materials would be managed so as to prevent discharges to storm drains and/or waters of the state. To the best of DOE's knowledge, there are no hazardous wastes or pre-existing environmental hazards in the site area; however, should any hazardous materials be discovered during construction activities, the work would stop and DOE would be notified immediately.

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Categorical Exclusion(s) Applied:

B1.24 - Property transfers

B1.15 - Support buildings

Choose an item.

Choose an item.

Choose an item.

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For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The above description accurately describes the proposed action, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation.

*Cindy B. Finn*

**Program Point of Contact:** Cindy B. Finn, ORO Realty Officer

**Date Determined:** 6/2/2016

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

*James L. Elmore*

**NEPA Compliance Officer:** James L. Elmore, ISC-OR NEPA Compliance Officer

**Date Determined:** *6/2/2016*  
*Click here to enter a date.*