

S.3.3 Reasonable Alternatives

S.3.3.1 No Action Alternative

Consistent with the 1996 SSM PEIS ROD (61 FR 68014) and the 1999 LANL SWEIS ROD (64 FR 50797), NNSA has been re-establishing an interim pit manufacturing capability at LANL. The establishment of the interim pit production capacity is expected to be completed in 2007. As required by the CEQ NEPA Regulations (40 CFR Parts 1500-1508) and the DOE NEPA Regulations (10 CFR Part 1021), the MPF EIS includes a No Action Alternative. The No Action Alternative would be to maintain the interim pit production capacity at LANL PF-4 in TA-55 and not build the MPF at any site. The No Action Alternative is encompassed within the Expanded Operations Alternative listed in the LANL SWEIS, which evaluated the impact of producing 50-80 ppy at PF-4, but selected a 20 ppy level in the respective Record of Decision. There would be no additional impact on the other four sites.

S.3.3.2 Modern Pit Facility Alternatives

This section presents the alternatives to build a new MPF at each of the five alternative sites. In addition, if a MPF is built at any of these sites, including LANL, the interim pit capability at TA-55/PF-4 would not be relied on to meet future stockpile needs. For each of the sites, a representative or reference location for MPF at that site has been chosen for analysis purposes only. When a decision is made as to whether to proceed with the MPF, and if so, at which site to locate a MPF, a site-specific EIS process will be completed. The site-specific process will analyze reasonable locations in the vicinity of the selected site.

Each reasonable location was chosen based on the following factors: the site is approximately 32 hectares (ha) (80 acres [ac]) in size, does not conflict with any on-going or planned activities, is not potentially contaminated, and is located near an existing Category I Security Area (if possible). If the selected site did not have the requisite 32 ha (80 ac) (the maximum desired area inside a PIDAS), but still had enough space to accommodate the entire facilities footprint, it was deemed adequate for analysis purposes in this EIS. The proposed reference locations provide a basis for impact studies on the site and surrounding areas, which will allow reasonable comparisons between the various sites. If a decision is made to go forward with one of the MPF alternatives, a site will be selected, and the actual MPF location will be determined in a site-specific tiered EIS.

Los Alamos Site

The Los Alamos Site MPF Alternative would involve constructing a MPF at LANL as described in Section S.3.1.2. For analysis purposes, it is assumed that a MPF would be located on an unused location in TA-55. This is shown in Figure S.3.3.2-1. In addition, the interim pit production capability at LANL would not be relied on to meet future stockpile needs.

Nevada Test Site

The NTS MPF Alternative would involve constructing a MPF at NTS as described in Section S.3.1.2. For analysis purposes, it is assumed that a MPF would be located on an unused location

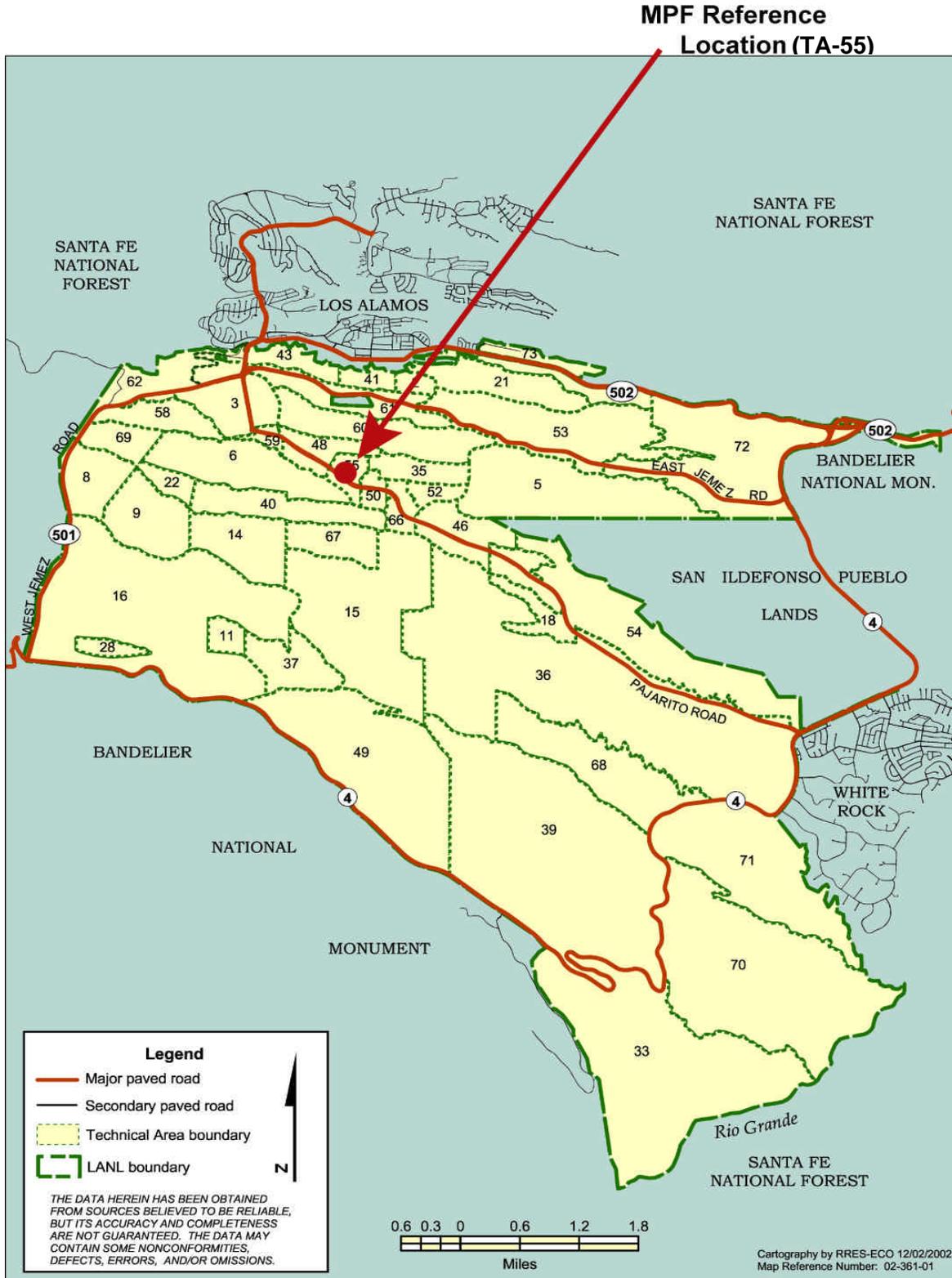


Figure S.3.3.2-1. Los Alamos Site

near the Device Assembly Facility. This is shown in Figure S.3.3.2–2. In addition, the interim pit production capability at LANL would not be relied on to meet future stockpile needs.

Pantex Site

The Pantex Site MPF Alternative would involve constructing a MPF at Pantex as described in Section S.3.1.2. For analysis purposes, it is assumed that a MPF would be located on an unused location in Area 11. This is shown in Figure S.3.3.2–3. In addition, the interim pit production capability at LANL would not be relied on to meet future stockpile needs.

Savannah River Site

The SRS MPF Alternative would involve constructing a MPF at SRS as described in Section S.3.1.2. For analysis purposes, it is assumed that a MPF would be located on an unused location southwest of the F Canyon area. This is shown in Figure S.3.3.2–4. In addition, the interim pit production capability at LANL would not be relied on to meet future stockpile needs.

Carlsbad Site

The Carlsbad Site MPF Alternative would involve constructing a new MPF at Carlsbad as described in Section S.3.1.2. For analysis purposes, it is assumed that a MPF would be located on an unused location. This is shown in Figure S.3.3.2–5. In addition, the interim pit production capability at LANL would not be relied on to meet future stockpile needs.

NNSA notes that legislation may be required to proceed with the construction and operation of a MPF at the Carlsbad Site either on land at the WIPP site or in the vicinity of the WIPP site.

The U.S. Environmental Protection Agency’s (EPA’s) current compliance certification of WIPP does not consider the potential impacts of a MPF on the long-term performance of the repository. If the Secretary of Energy were to decide to locate a MPF in the vicinity of WIPP, DOE would need to provide EPA with sufficient information for the Agency to determine whether the potential impacts of a MPF should be included in the performance assessment to ensure that they would not adversely impact the repository’s long-term performance. EPA’s consideration of a MPF’s potential impacts could result in a modification rulemaking involving the compliance certification.

S.3.3.3 TA-55 Upgrade Alternative

The TA-55 Upgrade Alternative (80 ppy) would involve expanding the pit production capability of PF-4 without expanding the size of the facility as described in Section S.3.1.4 and the Summary of TA-55/PF-4 Upgrade Evaluation to Provide Long-term Pit Manufacturing Capacity contained in Appendix G. Two support facilities would also be constructed in TA-55 and one in TA-54. The interim pit production capability at LANL would be expanded to approximately 80 ppy through the upgrade process.

MPF Reference Location

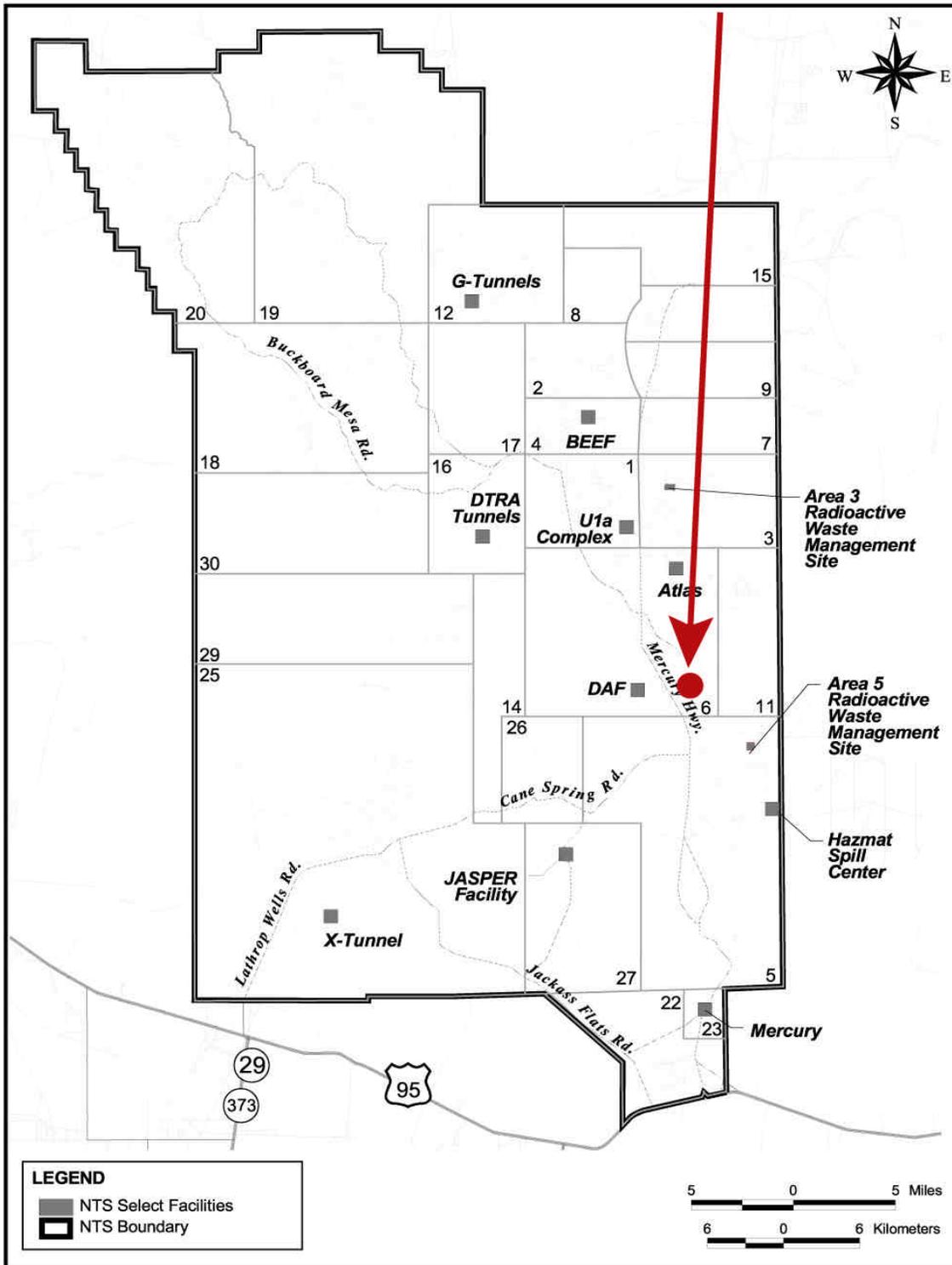


Figure S.3.3.2-2. Nevada Test Site

MPF Reference Location

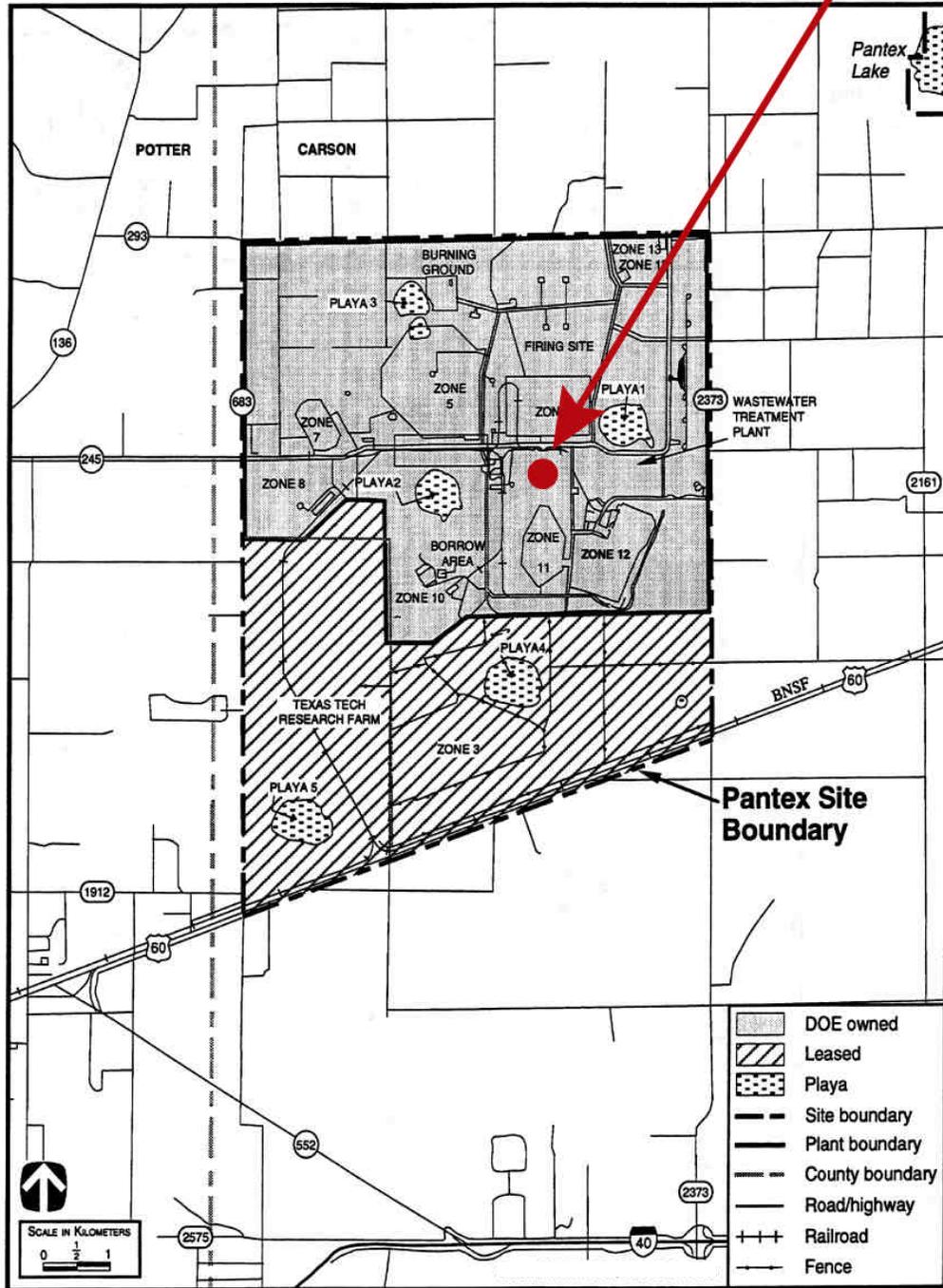


Figure S.3.3.2-3. Pantex Site

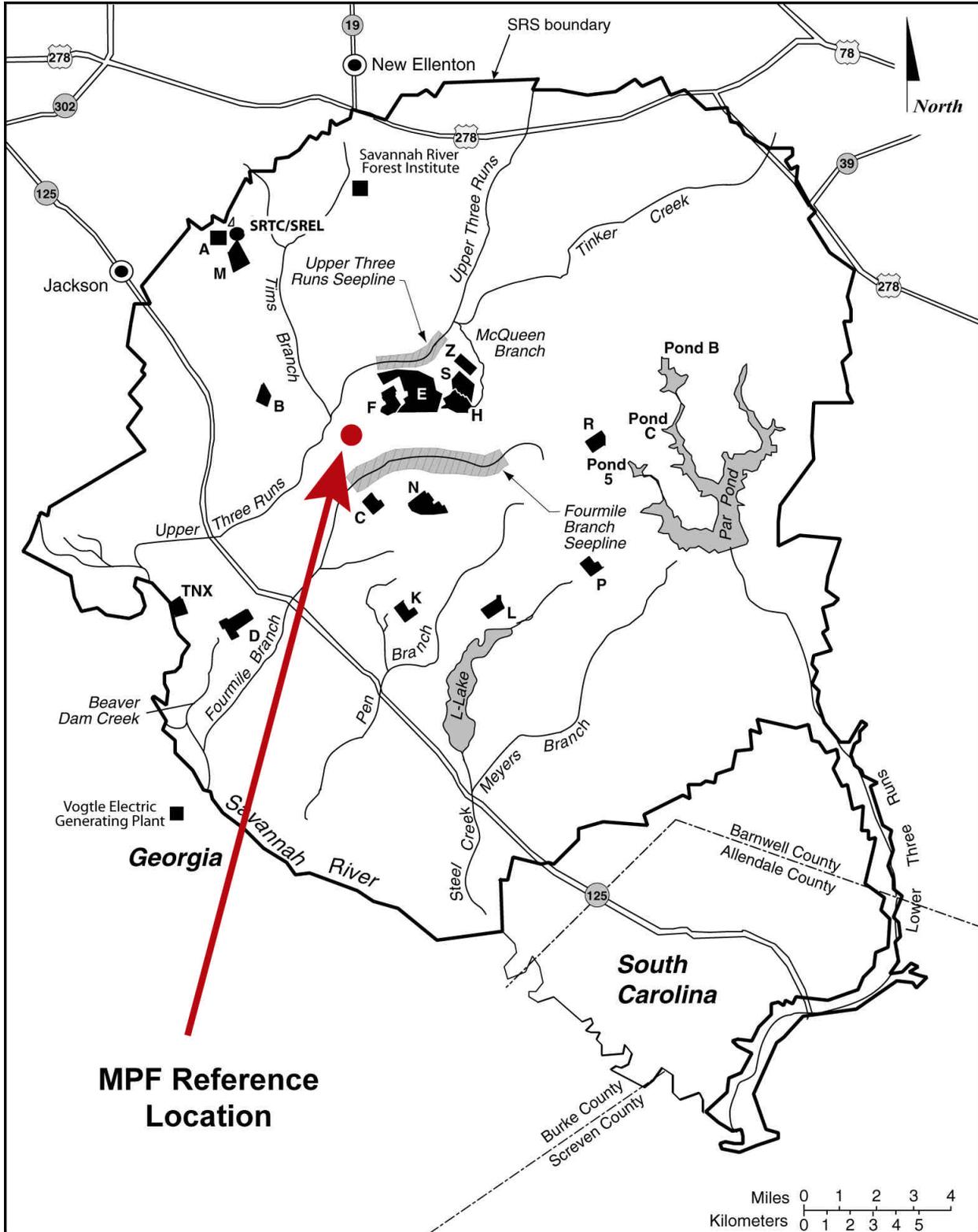


Figure S.3.3.2-4. Savannah River Site

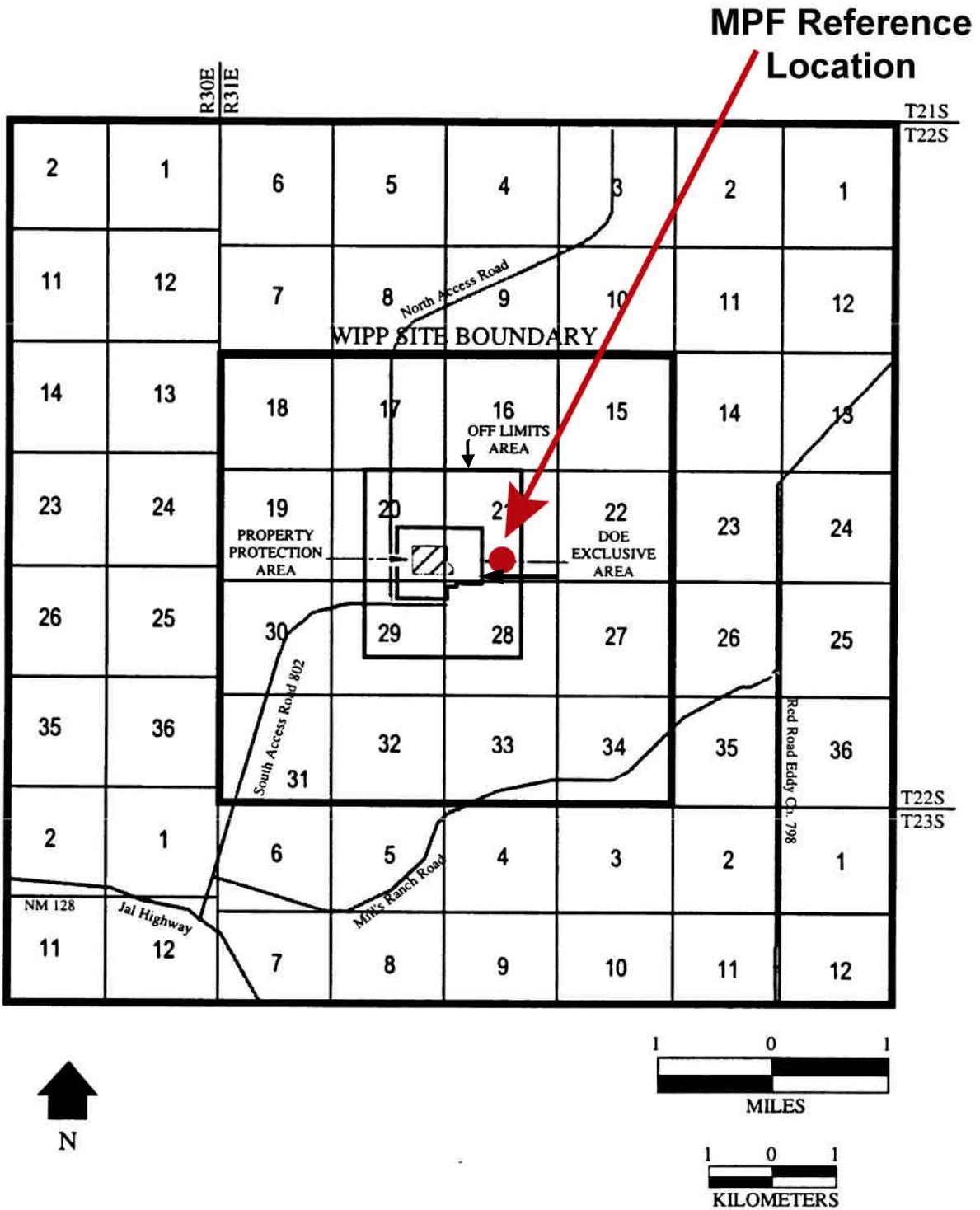


Figure S.3.3.2-5. Carlsbad Site