

issue a Finding of No Significant Impact (FONSI) or to prepare an Environmental Impact Statement (EIS); (2) fulfill the NRC's compliance with the National Environmental Policy Act when no EIS is necessary; and (3) facilitate preparation of an EIS when one is necessary. Should the NRC issue a FONSI, no EIS would be prepared and the license amendment would be granted.

This document serves to evaluate and document the impacts of the proposed action. Other activities on the site have previously been evaluated and documented in the 1999 EA for the Renewal of the NRC license for NFS (Ref. 2). The 1999 document is referenced when no significant changes have occurred. Besides the proposed licensing action, operations will continue to remain limited to those authorized by the license.

Proposed Action

The proposed action is to reduce the source term at the site by removal of contaminated soil to levels at or below those protective of worker health as defined in 10 CFR 20.1201. The licensee's current remediation efforts are being performed under existing license conditions so that activities will be protective of worker health.

Need for Proposed Action

The current license conditions do not authorize removal of contaminated soil, thus the licensee needs approval from the NRC to do so. The proposed action is consistent with the requirements in 10 CFR 70.38 and 10 CFR part 20. At the time of license termination for the entire NFS site, the results of soil removal would be reassessed in order to include any possible contribution from the remediated area in the dose assessment for the entire site.

The proposed action would allow NFS to remove contaminated material and soil until the residual concentrations of radionuclides are at or below levels protective of human health. The major activities include the following:

- Remove buildings, surrounding tanks, utilities, and structures,
- Remove contaminated soil and dispose of it in accordance with regulations controlling material of the concentration in the soil, and
- Backfill the area with clean soil.

NFS will stockpile and cover contaminated soil that exceeds the applicable criteria as appropriate, transport it to a processing area, or load it directly into containers. This material will be disposed of in a licensed facility.

The soil remediation activities proposed are essentially the same as those NFS is currently using in the North Site area. NRC has evaluated these in detail and found that the activities were acceptable in the EA for the North Site remediation (66 FR 27168) (Ref. 3). An existing license condition authorizes building deconstruction; NRC has evaluated this and found all licensed activities to be acceptable during the licensing process. The addition of the relatively small volume of contaminated waste from the contaminated portions of the facility (~ 68,000 cubic ft), to that of the North Site Area (~ 1 million cubic feet), will not have a measurable impact, either locally, in transit to disposal, or at the disposal sites.

Ground water remediation is not a specific goal of this activity. If, however, contaminated ground water is encountered during soil excavation, it will be processed at either the licensee's Wastewater or Ground Water Treatment Facilities.

Alternatives to the Proposed Action

NRC considered two alternatives to the proposed action. These are described below.

Alternative 1—No action.

This alternative is to leave the site in its current, contaminated condition. Leaving the site in this condition would not comply with NRC regulations that require remediation of unused outdoor areas. Therefore, this alternative is not acceptable.

Alternative 2—Require remediation of both groundwater and soil to levels such that doses from all pathways meet criteria for unrestricted use.

This alternative would require calculation of doses from existing contamination both in soil and in water-borne sources. NFS would have to calculate residual contamination limits in both media. NFS would then have to reduce the residual concentration in both media to levels that would limit the all-pathways-dose to 25 mrem/yr as specified in 10 CFR 20.1402.

NRC has concluded that this alternative is not appropriate for the following reasons:

- The active use area of the facility will not be released from the license at this time, therefore it is not available for unrestricted use; and
- The licensee is obligated to remediate affected areas to comply with limits in the License Termination Rule at the time of license termination.

Affected Environment

The affected environment for the proposed action and all of the

alternatives is the NFS site. A full description of the site and its characteristics is given in the 1999 Environmental Assessment (EA) for the Renewal of the NRC license for NFS (Ref. 2).

Facility Operations

Before NFS operations, the area was a farm, as was much of the surrounding area. The area being remediated is inside the plant protected area that is defined by a double security fence. Within the protected area are Banner Spring Branch, a small marsh, open grass-covered grounds, the three surface impoundments, and Pond 4. Banner Spring Branch runs through the property originating in the east just outside the security fence and discharging into Martin Creek to the north. The grounds outside the plant protected area, but inside the outer access control fence (the perimeter fence), include grass-covered fields, wooded areas, and a marsh. Also present are a burial ground and a demolition landfill. Trees cover most of the grounds outside the perimeter fence.

Radiological Status of Surface and Subsurface Soils

The primary radioactive contaminants in the contaminated soils are uranium (U-234, U-235, and U-238), thorium (Th-228, Th-230, and Th-232), plutonium (Pu-238, Pu-239/240, Pu-241, and Pu-242), americium 241, and technetium 99. Levels of radioactive contamination currently exceed the release criteria in soil and sediment across much of the site inside the plant protected area. Contamination is present down to the level of auger refusal in much of the protected area. Contamination also exists between the cobbles.

Environmental Impacts of the Proposed Action

Radiological Impacts

NFS will ship excavated material to a licensed disposal facility. The licensee's radiological protection program requires use of hazardous work permits that will limit dose to workers to less than or equal to the limits in 10 CFR part 20.

Minor spills and releases may occur as contaminated soil is being prepared for shipment or during transport to an offsite disposal facility. Spills and releases of dirt would pose only negligible impact to human health and the environment. In case of a spill of this nature, decontamination efforts and any required notification would be performed in accordance with NFS procedures.