

Non-Radiological Impacts

Portions of the site, primarily the ground water, are contaminated with solvents (perchloroethylene (PCE) and trichloroethylene (TCE)) from NFS activities. These materials are the subject of an U.S. Environmental Protection Agency (EPA) and Tennessee Department of Environment and Conservation (TDEC) Resource Conservation and Recovery Act (RCRA)/Hazardous and Solid Waste Amendments (HSWA) Permit requiring investigation and remediation in a timeframe agreed upon between, EPA, TDEC and NFS. Separate from the proposed action, however, NFS has recently implemented a pilot groundwater remediation study to accommodate all groundwater contaminants; *i.e.*, radioactive and non-radioactive. These activities were reviewed in the North Site EA by the NRC, TDEC and EPA, and are not specifically addressed herein (Ref. 3).

Historical and Archaeological Resources

The Tennessee Historic Preservation Officer reviewed the site for historic structures during the EA for the North Site decommissioning and determined "that there is no national register of historic places listed or eligible properties affected by this undertaking." This activity is in the same general area as the North Site decommissioning activities (Ref. 4), therefore, the Historic Preservation Office was not consulted for this EA.

Biota

In the consultations for the EA on the North Site area, the U.S. Fish and Wildlife Service (FWS) determined that there are two Federally endangered mollusks (*Epioblasma torulosa torulose* and *Alasmodonta reveneliana*) in the Nolichucky River upstream of the NFS site; these will not be affected by the planned operation. There is also a Federally threatened plant in the vicinity of the NFS site: Virginia spiraea (*Spiraea virginiana*). These evaluations collectively considered the entire NFS site area, and concluded that because of the industrial nature of the NFS site and surrounding area, there is no suitable habitat for these species at the site. The FWS confirmed that these are the only listed species in Unicoi County (Ref. 5).

Water Resources

Ground water remediation is not a specific part of the proposed alternative. The contamination, except that encountered during soil excavation, will remain in the alluvial groundwater. However, as previously discussed in the North Site decommissioning plan (Ref.

3), this groundwater will not be used as a water supply, therefore it will not contribute to a dose to members of the public.

Surface water is not expected to be impacted from approval of this amendment application. There will be no direct effluent discharges to surface water as a result of the proposed activity. Surface water is expected to continue to be protected from site activities through release limits and monitoring programs, as required by the National Pollutant Discharge Elimination System (NPDES) permit, which is regulated by the TDEC.

Construction Impacts

No building destruction will occur as part of this action; removal of buildings was previously authorized and evaluated by license condition. Soil excavation will be done in the same manner as for the North Site that NRC previously evaluated and authorized (Ref. 6). No adverse effects will occur in the environment from this activity.

Impacts to Aesthetic, Economic, Cultural, Social, Air Quality, Noise Resources and Habitat Destruction

There will be no discernable impacts on aesthetics, socio-economics or cultural resources because the work is being done by existing staff and the physical configuration of the facility will remain the same.

There may be minor, temporary impacts on air quality and noise during remediation activities. NFS has dust-control measures in place for excavation activities, and the use of equipment will not significantly change from the current industrial environment.

Environmental Monitoring

NFS conducts a sampling program of ambient soil, vegetation, surface water, and sediment to monitor impacts from the Erwin Plant to the surrounding area. Details of the monitoring program are described in the Renewal EA (Ref. 2). Also, environmental dosimeters are at onsite and offsite locations to monitor ambient external dose rates and to assist with the assessment of potential accidents.

The areas to be remediated will remain within licensee control and will be monitored according to the pertinent provisions of the license for operational and environmental monitoring.

Agencies and Individuals Consulted, and Sources Used

U.S. Environmental Protection Agency, Region IV

EPA Region IV has reviewed the proposed action and concludes that:

- The RCRA/HSWA Permit issued to NFS will be used to enforce appropriate groundwater pilot studies and necessary groundwater remediation of all contaminated groundwater; and

- The RCRA/HSWA Permit issued to NFS will be used to enforce appropriate and necessary layered institutional controls (ICs).

- EPA Region IV has no objection to the proposed activity (Ref. 7).

Tennessee Department of Environment and Conservation (TDEC)

TDEC has no objections to the proposed action (Ref. 8).

U.S. Fish and Wildlife Service (FWS)

The U.S. Fish and Wildlife Service was consulted for North Site decommissioning (Ref. 5). Its evaluations collectively considered the entire NFS site area, and concluded that because of the industrial nature of the NFS site and surrounding area, there is currently no suitable habitat for the three local endangered/threatened species at the site. FWS was contacted to confirm that there are still only three listed species in Unicoi County, TN.

Finding of No Significant Impact

Based upon the environmental assessment, the Commission has concluded that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has concluded that environmental impacts associated with the proposed action would do not warrant the preparation of an Environmental Impact Statement. It has been determined that a Finding of No Significant Impact is appropriate.

References

1. B. Marie Moore, April 3, 2002. License Amendment Request to Include Source Reduction Measures as Authorized Decommissioning-Related Activities. (ADAMS accession number ML021010075).
2. T. Cox, U.S. Nuclear Regulatory Commission, Letter to T.S. Baer, Nuclear Fuel Services, Inc., "Finding of No Significant Impact and Environmental Assessment (TAC NO. L30873)," January 29, 1999.
3. Nuclear Fuel Services, Inc. (NFS). 1999. North Site Characterization Report for Nuclear Fuel Services, Inc., Erwin, Tennessee, Revision 1.
4. Tennessee Historical Commission May 22, 2002. Personal communications between Jennifer Bartlett and Julie Olivier.
5. U.S. Fish and Wildlife Services, Tennessee Field Office, November 12,