

Suffolk, Virginia from the National Priorities List (NPL) and requests comments on this proposal. The NPL constitutes appendix B of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR part 300. This proposal for partial deletion pertains to the soil in the Impregnation Kit Area of Nansemond.

Nansemond is located in Suffolk, Virginia, near the northwestern end of State Route 135. It was once a U.S. military facility. It is situated at the mouth of and to the east of the Nansemond River, on the south side of Hampton Roads, and contains approximately 975 acres. It is bordered to the west by the Nansemond River, to the north by the James River (Hampton Roads) and to the east by Streeter Creek.

The Impregnation Kit Area (also known as the "Impregnite Kit" or "XXCC3" area) is an approximately 300,000 square foot, rectangular area in the southwestern portion of Nansemond, about 1000 feet from the Nansemond River. Only soil in this area is proposed for deletion from the NPL; ground water beneath the Impregnation Kit Area is not proposed for deletion.

The U.S. Department of the Army apparently disposed of "impregnation" or "impregnite" kits in this area. Impregnation kits consist of two substances: (a) XXCC3, which is a fine, white, granular, crystal powder consisting of 90–92% octachlor carbonilide ( $C_{13}H_4Cl_8N_2O$ ) and 8–10% zinc oxide, and (b) a "honey-like syrup" or "black waxy material." XXCC3 was used to neutralize chemical agents, and the impregnation kits disposed of in the Impregnation Kit Area were probably used as a protective coating on an under garment for older military issue chemical suits. EPA found several hazardous substances in the soil of the Impregnation Kit Area at concentrations greater than background concentrations, including zinc (11,100 milligrams per kilogram), carbon tetrachloride (20,700 micrograms per kilogram (ug/kg)), chloroform (20,600 ug/kg), and TNT (279 ug/kg).

A contractor for the United States Army Corps of Engineers (the Corps) removed the buried kits and surrounding contaminated soil in December 1998 and January 1999. In all, the contractor removed 857 tons of impregnation kits and associated soil. Confirmation sampling shows that the contractor successfully removed the impregnation kits and associated contaminated soil. In the process, the Corps and EPA found that disposal activities and associated soil contamination were limited to a circle approximately 270 feet in diameter,

covering 57,255 square feet, rather than 300,000 square feet, as originally estimated in EPA's Final Hazard Ranking System ("HRS") Package. No further response action is appropriate to protect human health, welfare, and the environment in relation to the soil in the Impregnation Kit Area (all 300,000 square feet) and, therefore, EPA proposes to delete the soil in this area from the NPL.

Ground water beneath the Impregnation Kit Area has not been fully characterized and is not proposed for deletion from the NPL. Although some sampling and evaluation has been completed, more study is needed to better understand whether the ground water is contaminated and, if so, to what extent. Hazardous substances, including explosives, have been detected in ground water at other locations within Nansemond. It has not been clearly demonstrated that hazardous substances, pollutants or contaminants have been, or continue to be, released into the ground water beneath the Impregnation Kit Area at levels of concern to human health or the environment. Data gathered so far do not appear to indicate unacceptable human health threats from ground water beneath the Impregnation Kit Area, except perhaps if used for drinking water. Accordingly, the present owner of the property has agreed to prohibit drinking of ground water beneath the Impregnation Kit Area through a restrictive covenant, or similar legal device, in a deed. In addition, a City of Suffolk ordinance, section 90–126, requires all new premises, buildings or dwellings abutting a city water main to connect to the water main. This means that, under current law, any new buildings on the Impregnation Kit Area would connect to the city water main, reducing the likelihood that people would choose to drill wells and use ground water beneath the Impregnation Kit Area. The EPA and Corps plan future investigations to determine whether the ground water beneath the Impregnation Kit Area, and other areas within Nansemond, poses a risk to human health or the environment.

## II. NPL Deletion Criteria

This partial deletion is proposed in accordance with 40 CFR 300.425(e) and the Notice of Policy Change: Partial Deletion of Sites Listed on the National Priorities List, 60 FR 55466 (November 1, 1995). The NCP establishes the criteria that EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate to protect public health or

the environment. In making such a determination pursuant to § 300.425(e), EPA will consider, in consultation with the Commonwealth, whether any of the following criteria have been met:

- Section 300.425(e)(1)(i). Responsible parties or other persons have implemented all appropriate response actions required; or
- Section 300.425(e)(1)(ii). All appropriate responses under CERCLA have been implemented, and no further response action by responsible parties is appropriate; or
- Section 300.425(e)(1)(iii). The remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.

Deletion of a portion of a site from the NPL does not preclude eligibility for subsequent CERCLA actions at the area deleted if future site conditions warrant such actions. Section 300.425(e)(3) of the NCP provides that CERCLA actions may be taken at sites that have been deleted from the NPL. A partial deletion of a site from the NPL does not affect or impede EPA's ability to conduct CERCLA response activities at areas not deleted and remaining on the NPL. In addition, deletion of a portion of a site from the NPL does not affect the liability of responsible parties or impede agency efforts to recover costs associated with response efforts.

## III. Deletion Procedures

Deletion of a portion of a site from the NPL does not itself create, alter, or revoke a person's rights or obligations. The NPL is designed primarily for informational purposes and to assist agency management. The following procedures were used for the proposed deletion of the soil in the Impregnation Kit Area at Nansemond:

1. In December 1998 and January 1999, a contractor for the U.S. Army Corps of Engineers removed impregnation kits and associated contaminated soil from the Impregnation Kit Area. Subsequent soil sampling confirmed that the kits and contaminated soil had been successfully removed. Residual concentrations of hazardous substances, pollutants and contaminants in the soil are less than EPA Region III's Risk-Based Concentrations for soil in residential use and less than concentrations that might contaminate ground water, with the exception of arsenic. The arsenic concentrations, however, are within the range of concentrations that occurs naturally in the soil in this region of Virginia. A geophysical investigation of the Impregnation Kit Area and 20