

**REGIONAL TECHNICAL ASSISTANCE REQUEST FORM**

**Date:** April 21, 1997

**Mail or E-Mail to:** Donald A. Cool (DAC), Mail Stop: T8-F5  
Division of Industrial and Medical Nuclear Safety, NMSS

**If E-Mail, cc:** CLE

**From:** Ronald R. Bellamy, Region I  
Chief, Decommissioning and Laboratory Branch

**Licensee:** Westinghouse Electric Corporation

**License No.:** SMB-1527

**Docket No.:** 040-08976

**Control No.:** 117065

**Letter dated:** April 9, 1996

**Suggested change in licensing procedure (enclosed):** None

**Problem/Issue:** Westinghouse Electric Corporation (Westinghouse) has completed remediation at their licensed facility in Bloomfield, New Jersey. The facility is no longer operational and Westinghouse has requested termination of the license and release of the facility for unrestricted use. The facility previously used thorium metal in the development and production of electrical filaments and processed uranium (uranium without the decay products below uranium-234 present) for work in the Manhattan Project.

By way of the enclosed "Dose Assessment", Westinghouse requests permission to leave persistent or residual contamination in place in three locations where the contamination levels exceed the NRC criteria for release for unrestricted use (Option 1, 1981 NRC Branch Technical Position for "Disposal or Onsite Storage of Thorium or Uranium Wastes From Past Operations" or "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for

***Byproduct, Source, or Special Nuclear Material", FC-83-23). The locations include non-removable contamination imbedded in two drain lines; and contaminated soil and bedrock beneath the basement of a building (Building 7).***

***The first drain line, beneath Building 7, is no longer active and is no longer physically connected to any portion of the storm or sanitary sewer systems. One end of the drain line enters the basement of Building 7. Although this end of the pipe is now accessible, Westinghouse intends to raze the building and fill the basement. The resultant pipe-end would be approximately three to four feet (or more) below grade after completion of these demolition and fill actions. The second drain line is an active portion of a storm water drain system. Westinghouse has attempted decontamination of the storm drain line by pressure-washing the inside of the pipe and collecting the resultant effluent. This decontamination effort was not successful, indicating that the contamination in the line is fixed in place (a report on this pipe decontamination attempt is included with the attached letter dated November 12, 1996).***

***In the basement of Building 7, Westinghouse has removed contaminated piping beneath the basement floor and contaminated soil from the basement excavations and disposed of these materials. Further removal is not cost-effective, particularly because the building is intended to be razed and the basement filled.***

***In each of these cases, the residual contamination is (or will be) underground (minimum depths of approximately three feet) and would not be accessible. Westinghouse believes that removal of any remaining licensed material is not cost-effective considering the negligible, calculated dose impact of leaving the residual***

*material in place and the estimated remediation costs and resultant inconvenience of street repairs. Westinghouse also intends to request a limit on future use of the property by filing a Declaration of Environmental Restriction (similar to a deed restriction under the applicable New Jersey regulations) with the State to limit use of the property to non-residential uses. Westinghouse intends to file this Declaration with the state due to the presence of low-level, residual, non-radioactive contaminants on the site.*

*The enclosed "Dose Assessment" provides two scenarios for each of the locations where material would be left in place. The first scenario is a credible future use scenario that assumes that the material will remain buried in place and covered with soil and there is no intrusion. The second scenario is intended to provide a conservative upper bound on possible future doses based on intrusion. The second scenario was not necessarily intended to simulate an actual credible exposure scenario. In all cases the calculated dose equivalents are less than the proposed limit of 15 mrem/y TEDE (Total Effective Dose Equivalent) for decommissioning, in the proposed Rule -- Radiological Criteria for Decommissioning (59 FR 43200-32). Westinghouse believes that the "Dose Assessment" demonstrates that residual radioactivity at the site has been reduced to levels that are "As Low As Reasonably Achievable" (ALARA).*

- Action Required: Review attached "Dose Assessment" and correspondence. Perform independent calculations as may be needed. A response by December 30, 1996 is requested to support release of the site and termination of the license.*

**Recommended Action: Concur with Region I view that the attached "Dose Assessment" is acceptable and that the portions of the facility discussed in the "Dose Assessment" may be released for unrestricted use. [Region I will not separately release these three areas, but will include these areas in the final release of the facility].**

**Remarks: The Division of Waste Management has made similar determinations in the past. The State of New Jersey has generally accepted this "Dose Assessment" as indicated in the attached correspondence.**

**Headquarter Reviewer: \_\_\_\_\_**

**Regional Reviewer: Mark Roberts**

**Reviewer Code: L8**

**Reviewer Phone No.: (610) 337-5094**

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**Request Needed by: 12/30/96**