



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 25, 1995

MEMORANDUM TO: Engelhard Corporation Files
Docket File No. 070-00139

THRU: Timothy C. Johnson, Chief
Low Level Waste and Decommissioning
Projects Branch,
Division of Waste Management, NMSS

FROM: Richard H. Turtill, Project Manager
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management, NMSS

SUBJECT: REVIEW AND REQUEST FOR ADDITIONAL INFORMATION FROM ENGELHARD
CONCERNING RADIOLOGICAL HEALTH AND SAFETY PLANS FOR
CHARACTERIZATION AND DECONTAMINATION

Background:

The NRC completed review of two documents submitted by Engelhard Corporation in support of characterization and decommissioning activities at the SDMP-designated site in Plainville, MA. Headquarters and Region I staff reviewed Engelhard's "Radiological Health and Safety Plan For Radiological Exterior Characterization Survey at the Engelhard Corporation at Plainville, Massachusetts," and "Radiological Health and Safety Plan for the Building Interior Decontamination at the Engelhard Corporation Site at Plainville, Massachusetts," (RADHASPs). These documents were submitted to NRC in September 1994, and form the basis for radiological health and safety at the Engelhard facility during clean-up of contaminated areas at the site.

In March 1995, NRC provided comments to Engelhard concerning the RADHASPs. Engelhard responded in April 1995. NRC staff reviewed Engelhard responses and elected to provide further comments by phone on July 21, 1995. The nature of these comments, and Engelhard's responses, follow.

Discussion:

Participants in the phone conversation held July 21, 1995, among NRC, Engelhard Corporation, and Engelhard contractors Foster-Wheeler Environmental Corporation and Hilbert Associates, Inc., included:

Richard Turtill - U.S. NRC
David Fauver - U.S. NRC
Steve Graham - Foster-Wheeler Environmental Corporation

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Steve Miller - Hilbert Associates, Inc.
Don Chabot - Engelhard Corporation

The discussion focused on methods for measuring activity at the site, as well as on specific action levels, both of which are referred to in the RADHASP. NRC staff requested Engelhard clarify in Table 8.1, ACTION LEVELS of the exterior RADHASP, assumptions used to determine action levels. NRC also requested that this table be revised to clarify that the limits for enriched uranium surface contamination are expressed as alpha contamination, not beta/gamma.

NRC staff also requested Engelhard to provide additional information in the RADHASP that identifies action levels for effluents from the site.

Finally, NRC requested Engelhard to provide additional information on the methods for determining the enrichment of the uranium contamination at the Engelhard site.

Conclusion

Engelhard Corporation, through its contractors, committed to provide NRC with a revised RADHASP that would amend the current proposed characterization and decommissioning plans for work at Engelhard's Plainville site. Changes to the RADHASP will primarily address concerns raised by NRC about action levels and other information pertaining to measurement techniques at the Plainville site. In addition, Engelhard will prepare a technical paper for NRC that will discuss analytic methods and techniques to be used at the site during characterization and decommissioning activities.

In further discussions with Engelhard, Don Chabot of Engelhard committed to providing the above referenced information within the next three weeks.

Steve Miller - Hilbert Associates; Inc.
 Don Chabot - Engelhard Corporation

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Steve Miller - Hilbert Associates, Inc.
Don Chabot - Engelhard Corporation

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NRC staff also requested Engelhard provide additional information in the RADHASP that identifies action levels for effluents from the site and other concentration guidelines.

Finally, NRC also requested Engelhard provide a short technical paper on analytic methods and techniques used at the site to identify and measure radiological contaminants at the site. The isotopes of concern at the Engelhard site include U²³⁸, U²³⁵, and U²³⁴.

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Engelhard Corporation, through its contractors, committed to provide NRC with a revised RADHASP that would amend the current proposed characterization and decommissioning plans for work at Engelhard's Plainville site. Changes to the RADHASP will primarily address concerns raised by NRC about action levels and other information pertaining to measurement techniques at the Plainville site. In addition, Engelhard will prepare a technical paper for NRC that will discuss analytic methods and techniques to be used at the site during characterization and decommissioning activities.

In further discussions with Engelhard, Don Chabot of Engelhard committed to providing the above referenced information within the next three weeks. Should Engelhard's submittals provide adequate responses to all outstanding concerns raised by NRC staff, Engelhard's characterization plans, and decommissioning plans for exterior work at the site, will have received complete approval by NRC.

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