



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

NOV 23 1992

Docket No. 70-139

Mr. Donald P. Chabot
Plant Environmental Engineer
Engelhard Corporation
Route 152
Plainville, Massachusetts 02762

Dear Mr. Chabot:

The U.S. Nuclear Regulatory Commission has recently received a copy of the U.S. Environmental Protection Agency's (EPA) Administrative Order I-92-1051 which requires the Engelhard Corporation to evaluate the nature and extent of any releases of hazardous waste or hazardous constituents at the Engelhard site in Plainville, Massachusetts. As you know, the site in question was formerly licensed by the U.S. Atomic Energy Commission, the predecessor of the NRC, to possess low-enriched uranium for the manufacture of uranium fuel elements.

A facility assessment by the EPA published in September 1991, indicated that some areas onsite had above background levels of gross alpha and gross beta activities. Therefore, the NRC requests that an analysis for gross alpha and gross beta be performed on all soil, sediment and water samples taken for the facility investigation and stabilization measures undertaken in response to EPA's order. In areas where gross alpha data exists, and there is an indication of residual contamination above applicable standards, (see below) NRC requests that additional samples be taken and analyzed isotopically to determine the source of the high radiological readings. Analytical methods should be used that take into account the probable chemical form of the uranium at this site.

For soil and sediment samples, the NRC enriched uranium unrestricted release standard is 30 pCi/g total uranium, as contained in option 1 of the Branch Technical Position (BTP) entitled "*Disposal or Onsite Storage of Thorium or Uranium Waste From Past Operations*," published in the Federal Register (46 FR 52061). The radiological dose from the BTP soil standard has been calculated to be 2.3 mrem/yr Total Effective Dose Equivalent from any foreseeable use of the property. For ground water samples, 20 ug/l (30 pCi/l) of total uranium will be used as a reference standard. This is consistent with EPA's proposed National Primary Drinking Water Regulations for Radionuclides (56 FR 33050) which, for uranium, is meant to protect against both toxic effects and adverse radiological exposure.

500250

9212030054 921123
PDR ADDCK 07000139
C PDR

B1149

11/24/92

11/17/92

NOV 23 1992

Donald P. Chabot

- 2 -

Please confirm within 30 days of the date of this letter that Engelhard Corporation will perform the analyses identified above. Questions should be directed to Jack D. Parrott, of my staff, at 301-504-2565.

Sincerely,

John H. Austin, Chief
Decommissioning and Regulatory
Issues Branch
Division of Low-Level Waste Management
and Decommissioning, NMSS

cc: R. Brackett, EPA
J. Chormann, MA DEP

Distribution: Central File# 70-139 NMSS r/f LLDRr/f JParrott
TCJohnson LBell JAustin MWeber WBrach RBangart
JRoth,RI JSurmeier JCopeland
PDR YES NO Category: Proprietary ___ or CF Only ___
ACNW YES ___ NO ___

G:\ENGEL.JDP

OFC	LLWM <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LLWM	<input checked="" type="checkbox"/>	LLWM	<input checked="" type="checkbox"/>	LLWM	<input checked="" type="checkbox"/>
NAME	JParrott	LBell	TCJohnson	JAustin				
DATE	11/16/92	11/18/92	11/20/92	11/23/92				

C = COVER

E = COVER & ENCLOSURE

N = NO COPY