



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

MEMORANDUM FOR: Engelhard Corporation Files - Docket No. 70-139

THRU: Tim Johnson, Chief
Decommissioning Section

FROM: Jack D. Parrott, Hydrogeologist
Decommissioning Section

SUBJECT: TRIP REPORT - MEETING AT ENGELHARD CORPORATION RCRA SITE,
PLAINVILLE, MASSACHUSETTS, CONCERNING RADIOLOGICAL
CONTAMINATION RELATED TO ATOMIC ENERGY COMMISSION
LICENSED ACTIVITIES

On January 17, 1992, Jerry Roth of NRC Region I and myself met with representatives of U.S. EPA Region I, and Engelhard Corporation at Engelhard's plant in Plainville, Massachusetts. This plant will soon be subject to a U.S. EPA RCRA administrative order to characterize and clean-up the site. Besides NRC personnel, attendees were:

Don Chabot, Plant Environmental Engineer, Engelhard Corporation
Bob Berlin, Radiological Consultant to Engelhard Corporation
Bob Brackett, RCRA Office, Waste Regulation Section, U.S. EPA Region I
Andrea Simpson, Office of General Counsel, U.S. EPA Region I
Jim Cherniak, Office of Air and Radiation, U.S. EPA Region I

The meeting began with a review of the history of the site in relation to the RCRA actions. In 1986, Engelhard Corporation was contacted by the EPA concerning the characterization of the site solid waste management units. In 1987, the characterization began and radiological contamination was found. Groundwater monitoring wells were installed on-site and on neighboring property down gradient from the site. The radiological contamination detected so far is confined to the site. Hazardous waste has been detected in on-site soil and groundwater and in off-site groundwater. This site was brought to NRC's attention by Bob Brackett late last year because RCRA does not have authority over source, by-product or special nuclear materials.

Plant records indicated that Engelhard had used AEC licensed enriched uranium on-site in the late 1950s to early 1960s under a subsidiary named D.E. Makepeace. A gamma survey was done in 1988 on buildings 1 and 2, the only buildings on-site at the time licensed activities took place, and around the septic system and pump house. Inside the buildings, maximum readings of 70-80 uR/hr were found in isolated areas. Sludge inside the unused septic tank was also found to be contaminated. Engelhard plans to submit the results of the gamma survey and other radiological sampling at a later date.

After a review of the site history, Engelhard's goals for this site in conjunction with the pending RCRA actions were discussed. Engelhard wants to decontaminate their facility so that it can be sold. At present the company is selling off the assets from this site with the goal of selling the land and buildings after total closure in 1993.

They requested clean-up criteria and we told them to use Reg. Guide 1.86 and BTP 81. Engelhard would like to remove all radiological contamination from this site before the end of the year to avoid increased low-level waste disposal costs. They also requested that an ORAU survey be done of the site after decontamination, we told them this was standard procedure. We also told them that more radiological characterization needs at this site, they agreed. Due to a problem with the EPA's analytical procedures for uranium, Jerry Roth

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gave Don Chabot and Bob Berlin the procedures that ORAU uses for uranium analysis and suggested their use.

The pending RCRA actions at this site pertain to the heavy metal and organic solvent contamination which have been found. Some of this hazardous waste may be commingled with the radioactive waste. Since it will probably take a number of months for RCRA actions to be initiated at this site, it is not likely that the RCRA and NRC actions will occur concurrently. However, NRC will suggest that gross alpha and beta analysis be added to the RCRA site characterization parameters to screen for areas of undiscovered radiological contamination.

At the end of the meeting we toured the portions of the facility where licensed materials were used and saw where radiological contamination had been detected. Before leaving the site it was decided that the next step would be for Engelhard to send NRC a letter outlining a schedule for the characterization and decontamination of the radiological contamination on and off-site.



Jack D. Parrott, Hydrogeologist

cc: Jerry Roth, RI
John Austin
Nick Orlando