



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building

P.O. Box 8469

Harrisburg, PA 17105-8469

July 10, 2002

**Bureau of Radiation Protection**

Mr. Larry Camper, Chief  
Decommissioning Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
And Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Re: Cabot Reading Site Decommissioning

Dear Mr. Camper:

The Pennsylvania Department of Environmental Protection, Bureau of Radiation Protection (PADEP-BRP) has received your June 20, 2002 response to the Department's concerns about the radiologic assessment of the Cabot Corp. site in Reading, PA, as detailed in our letter of May 2, 2002. We have also reviewed the NRC's proposed draft Environmental Assessment (EA) and Safety Evaluation Report (SER) which was provided to us on June 14 and signed on June 20, 2002

After careful re-consideration of all of the information available to the Department, including your recent letter, EA, and SER, it is clear to us that there is a fundamental disagreement between the Commonwealth of Pennsylvania and the NRC regarding this site. Basically, we are convinced that there is inadequate knowledge about the radiologic conditions at this site (in particular, the sloped surface of the slag pile). Without a better understanding of the radiologic conditions on the slope of the slag pile, both at the surface and below grade, the Department does not believe there is assurance that the public health and safety will be adequately protected if the Cabot license is terminated without further investigation and assessment of the site.

Your responses to the Department's comments in our May 2 letter refer to NRC analyses based on a resident gardener scenario. The SER indicates that the maximum annual TEDE for this scenario is calculated to be 20 mrem/yr. However, since NRC's position is that no residence is possible on this small land area, the scenario is actually for a "non-resident" gardener. As pointed out by your consultant, Sandia National Laboratories, in their June 2000 report, a structure that facilitates some occupancy on the site (e.g., a trailer) cannot be ruled out, and exposures exceeding the 25 mrem/yr limit would result.

Furthermore, all of the scenarios that consider an eroded surface condition do not account for the significantly higher uranium and thorium concentrations in slag materials that are known to be buried well below the surface. Since no one can predict with certainty that the slope of the slag pile will not be disturbed in the distant future, the Department still believes that a scenario that considers significant excavation of the slope must be considered. However, there is inadequate knowledge of the radiological

contamination in the currently buried blocks of slag to carry out a meaningful analysis of an excavation scenario. This is one of the reasons we suggested that trenching of the slope may be necessary to adequately characterize this area.

As we indicated in our May 2 letter, leaving the site in its present condition with inadequate characterization of the subsurface radiological conditions, will result in this site becoming a defacto unlicensed burial site for uncharacterized radioactive material. With this in mind, our reading of the NRC regulations is that 10 CFR 20.2002 should apply to the current conditions at the Cabot Reading site.

One of the questions raised in the Department's May 2 letter was not addressed, namely, whether NRC intends to afford an opportunity for a licensing hearing for the Commonwealth (and other parties). Whether NRC offers an opportunity for a hearing, or not, we understand that in accordance with 10 CFR 2.1205 the Commonwealth may request a hearing on NRC's proposed action to approve Cabot's proposal to terminate its license with no further characterization and assessment of the Reading site. In this connection we note that both the City of Reading (City) and the Redevelopment Authority of the City of Reading (Authority) raised some of the same concerns in their requests for a hearing in 1998.

Attached are some additional comments, which should be considered along with this letter, and our May 2 letter as PADEP comments on the NRC SER and EA.

Sincerely,



David J. Allard, CHP  
Director  
Bureau of Radiation Protection

Attachments: Additional Comments

cc: R. Barkanic, ARRP, PADEP  
T. Crowley, SCRO, PADEP  
C. Paperiello, Deputy EDO, NRC  
M. Virgilio, Director, NMSS, NRC  
J. Greeves, Director, Waste Mgt. Div., NRC  
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Sheri Minnick, EPA, Region III  
J. Kopenhaver, SCRO, PADEP  
R. Maiers, PADEP  
Redevelopment Authority of the City of Reading  
T. Knapp, Cabot Performance Materials

Mr. Larry Camper, Chief

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bcc: B. Snyder  
B. Werner  
J. Whitehead