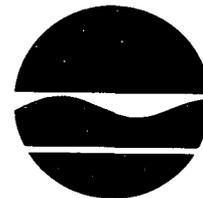


New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling
Commissioner

March 2, 1993

Mr. Dominick Orlando
U.S. Nuclear Regulatory Commission
Mail Stop 5-E4
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Re: Cintichem, Inc.
Town of Tuxedo, Orange County
(Docket 70-687)

Dear Mr. Orlando:

The Department of Environmental Conservation (DEC) has reviewed Cintichem's December 15, 1992 letter responding to the United States Nuclear Regulatory Commission's (NRC) December 4, 1992 request for additional information on Cintichem's proposed soil decommissioning criteria. In addition, DEC staff have met with Cintichem representatives twice to discuss the proposed criteria and the basis for them. We have also received a February 3, 1993 letter from Mr. McGovern of Cintichem clarifying Cintichem's proposed use of the subsurface soil criteria.

The use of dose-based soil guidelines, as suggested by the NRC, is a rational solution to the cleanup of contaminated sites. This allows for the application of site specific cleanup guidelines. At the Cintichem site, the use of 20 feet of building rubble to cover part of the site should allow for consideration of alternative cleanup guidelines for that part of the site. Cintichem's response to this situation has been to propose a set of subsurface cleanup criteria for soils below the building rubble that is different from the surface criteria. However, one issue still remains. It is not proper to release the site for unrestricted use, given the existence of radioactive material at concentrations higher than the surface soil cleanup criteria.

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Our position is that for a site to be released for unrestricted use, all soil on the site must meet the surface criteria. This has been stated to you in two previous letters (September 22, 1992 and December 4, 1992). However, we believe Cintichem's proposal has merit and is worthy of consideration. It is appropriate to use their subsurface criteria as they propose, if a time-dependent deed restriction is used to provide assurance that a lack of information will not result in some unforeseen use of the property that would disturb the soil below the 20 feet of rubble.

In our most recent meeting with Cintichem (February 17, 1993), they agreed to place restrictions on the deed to the site. We propose the following approach to resolve the problem about using the subsurface criteria as proposed by Cintichem:

(1) Based on the actual analyses of those soils classified as complying with the subsurface criteria, but exceeding the surface criteria, determine the inventory of those radionuclides actually present on the site. Calculate the time required for these subsurface soils to meet the surface criteria. That will be the time for which a deed restriction will have to be in place for this property.

(2) As structures and soils are removed from the site, the drainage flow may change. It is possible that contaminated areas that are now relatively dry could receive additional ground water flow, increasing concentrations in the ground water. We propose that Cintichem continue monitoring for mobile radionuclides at a few locations, yet to be selected, for a period of time after site decontamination is completed. It is unlikely that significant increases in ground water concentrations would occur, but if they did, monitoring could allow time to take appropriate measures before the nearby public water supply could be affected. The monitoring would not be required for more than 5 years, if the concentrations of radionuclides in the ground water do not increase significantly.

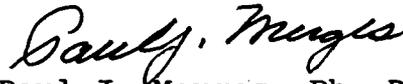
As you know, this Department has had jurisdiction over the regulated release of radioactive materials from Buildings 1 and 2 at the Cintichem site under two Orders on Consent (dated September 13, 1978 and June 6, 1990). In addition, the by-product material processed in the hot cells was possessed and used under a license issued by the State Department of Labor. Before the State ends those regulatory controls over the site, either the site must be ready for unrestricted use, or controls on future uses of the site must be put in place. Therefore, if the currently proposed soil criteria are applied, and there are no restrictions on the site's future use, this Department would

order Cintichem to undertake further decontamination of the subsurface soils. We are not opposed to the release of this site for unrestricted use, provided the soil decontamination criteria applied are adequate to protect the public and the environment under that scenario.

In response number 8 of its December 15, 1992 submission, Cintichem provided further information on the K_d values used in the RESRAD modelling. We agree that empirical data should be used to develop K_d values and are interested in discussing with you the NRC's assessment of Cintichem's response.

Please call me if you have any questions.

Yours truly,



Paul J. Merges, Ph. D.
Chief, Bureau of Radiation
Division of Hazardous
Substances Regulation

cc: J. McGovern, President/Plant Manager, Cintichem
A. Dorozynski, Supervisor, Town of Tuxedo
R. Aldrich, NYSDOL