



an American Ecology company

March 31, 2008

Mr. Dennis Lawyer
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, Pa 19406

Re: Control No. 141270

Dear Mr. Lawyer:

This letter is in response to your request in our telephone conversation of March 31, 2008 to explain why there exists a difference between the concentration of ^{14}C in the soil in the Beltsville data and the concentration I entered in the Resrad model. Since in most circumstances the effects of individual, small projects on post-closure doses are small, in order for the dose to be visualized, I use the latest approved Resrad model without any radionuclides present other than those in the mix we will be receiving from the customer. Thus, relatively small doses will not be obscured by larger ones. As you are aware Resrad works only with concentrations of radionuclides, so I will calculate the total activity of the radionuclide(s) in the total mass of material to be received and divide that number by the sum of the masses of the contaminated zone used in the model of the site and the total mass for the project. This will generate the concentration used in our Resrad model for that particular customer.

I hope this is sufficient for your purposes. If you require additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Charles R. Meyer".

Charles R. Meyer, CHP
Corporate Radiation Officer
US Ecology, Inc.