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Pls File

December 14, 1994  
WCC Project 4E08103

Mr. Gary Shear, Chief  
Fuel Cycle and Decommissioning Branch  
U.S. Nuclear Regulatory Commission  
801 Warrenville Road  
Lisle, Illinois 60532-4351

**Re: UPDATE ON PHASE I SCOPING SURVEY OF  
VICINITY PROPERTIES, CAMBRIDGE, OHIO**

Dear Mr. Shear:

The purpose of this letter is to provide you with an update on the Phase I Scoping Survey of vicinity properties in Cambridge, Ohio.

The schedule presented in the October 1994 Phase I Work Plan indicated potential completion of a Phase I Scoping Report by the middle of December 1994, assuming timely turnaround of testing results by the analytical laboratories. The Phase I field work was completed on schedule. However, the laboratory work is requiring a greater amount of time than anticipated for the reasons described below.

**Fate and Transport Parameters.** There are very few labs in the country that have experience determining radionuclide leach rates and radon emanation coefficients. Several weeks were required to identify qualified laboratories, request and receive bids, and negotiate a subcontract. Additionally, the turnaround times for these tests are close to eight weeks. The column leaching tests require an initial three week period for generation of leachate followed by a subsequent three to four week period for radionuclide analysis of the leachate and slag. The radon emanation tests require an initial three week period for ingrowth of Radon-222 followed by a three to four week period for analysis of the gas for Radon-222, and analysis of the slag for Radium-226.

**Analysis of the Radionuclides of Interest.** The radionuclides of interest were tested for using gamma and alpha spectroscopic methods, which required three to four weeks. Preliminary results for the gamma spectroscopic analyses of the slag samples indicated elevated minimum detectable activities (MDAs) for several radionuclides of interest due to the use of a petri dish counting geometry and small sample mass. The gamma spectroscopic analyses are being performed a second time using a greater sample mass to achieve lower detection limits.

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The attached figure presents a revised schedule of activities for the Phase I Scoping Survey. The revised schedule indicates submittal of the Phase I Scoping Report at the end of January 1995.

Please contact me if you have any questions.

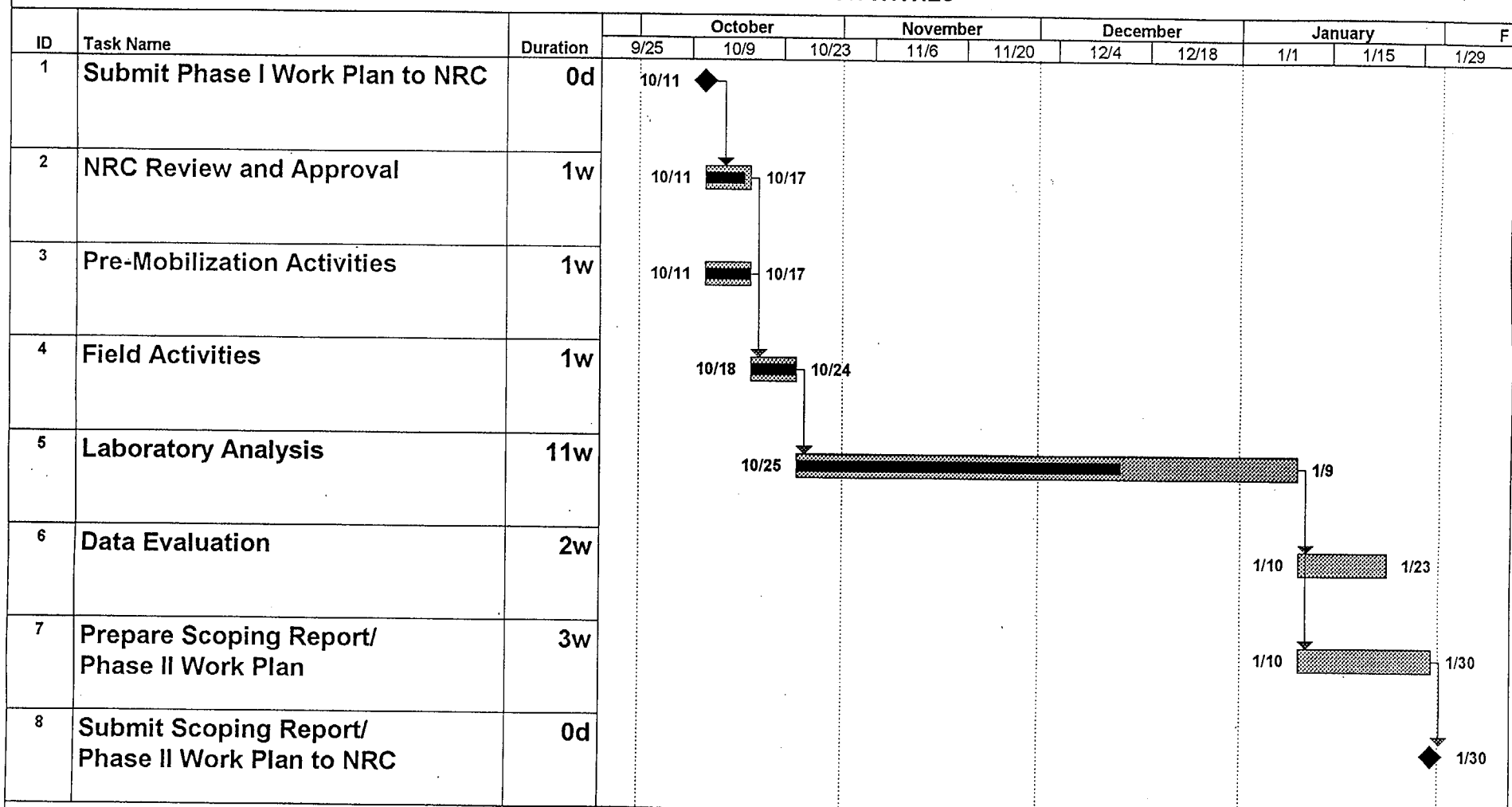
Very truly yours,

  
Rudolph E. Torrini, Jr., Ph.D.  
Project Geologist

cc: Ray Glinski - NRC Region III (2 copies)  
Mike McCann - NRC Region III (1 copy)  
Pat Lee - Cyprus Amax  
C. Corwin Bromley - Cyprus Amax  
Don Patterson - Beveridge & Diamond



**FIGURE 7  
REVISED SCHEDULE OF ACTIVITIES**



Project: Cyprus Foote  
Date: 12/14/94

Task		Summary		Rolled Up Progress	
Progress		Rolled Up Task			
Milestone		Rolled Up Milestone			