

Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA 19406-1415

July 8, 2003

Dr. Sattar Lodhi,

The following is additional information on the water temperature of the pool.

The maximum operating temperature will nominally be 100 degrees F. This will be maintained with a heat exchanger if necessary (see Figure 9-G-GENESIS Water Purification System Schematic). During the initial source loading with the contained curies the temperature will very likely be below 100 degrees F. It is not expected that the temperature will be below ambient room temperature. The initial loading will enable us to determine the water temperature and project the need and/or size of a heat exchanger appropriately.

The sources are not in contact with the pool water during normal operations. Therefore, water temperature will not have an effect on the sources. There are no components in the pool with would be affected by water temperature in the range.

The limiting factor to water temperature is the filter material. The material has a specified maximum operating temperature of 140 degrees F.

If you have any question I can be reached at 267-566-2922.

Sincerely,

Marie Turner

Irradiation Services Manager/Radiation Safety Officer

Cc: Jim Wood, President