



CHEMICALS DIVISION  
RARE EARTHS

W. R. GRACE & CO.  
DAVISON CHEMICAL DIVISION  
BALTIMORE 3, MD.

July 24, 1964

REPLY TO:  
P.O. BOX 188  
POMPTON PLAINS,  
NEW JERSEY  
TEMPLE 5-3060

United States Atomic Energy Commission  
Region I, Division of Compliance  
376 Hudson Street  
New York, New York

Attention: Mr. Robert W. Kirkman, Director

Gentlemen:

In reference to your letter CO:I:EE, dated July 17, 1964, we wish to advise you of our position with respect to the items listed on Form AEC-592 for our License Number STA-422.

With respect to item (a), the objective expressed in pages 18 and 19 of our Health Physics Manual dated 1/1/60, has been carried out by the Health Physics Department of this plant. We have monitored equipment leaving the plant site to insure that surface contamination has been removed. We will, however, carry out periodic surveys to determine the concentration of removable surface contamination existing within the restricted and unrestricted areas of the plant site. The object of these surveys will be to monitor the cross-contamination within the plant. The results will be recorded in units of activity, i.e. microcuries of thorium removable per square foot of surface area, which appears to be compatible with standards of measurement set out in 10 CFR 20.

With respect to item (b), the current method of thorium sludge burial was suggested and later observed and approved by your representative, Mr. Paul Klevin, during an inspection on June 29, 1961. We agree however that the intent of the regulation is to minimize excessive local concentrations of source material and that this intent would be more satisfactorily accomplished by excavating individual monthly burial pits, rather than the single trench and multiple back-fill system we are now using. Therefore, we will excavate individual pits for the accumulation of less than 50,000 microcuries of natural thorium so that the pit is well separated from any adjacent burial as set forth in 10 CFR 20.

Very truly yours,

Richard M. Mandle  
Plant Manager

RMM:MCB  
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## DECONTAMINATION PROCEDURES

Personal decontamination methods to be used are dependent upon the contaminating material and the area of the person contaminated. Generally the following procedure is to be used immediately.

First notify Health Physics; specific measures will then be carried out by this office. Thorough washing with soap and water and then rinsing off with large quantities of water is the best general decontamination method for the hands and other parts of the body. For well localized contamination, however, it is recommended that the area be washed off and cleansed with swabs and later, if necessary, by using a general washing. This avoids the dangerous procedure of spreading the contamination needlessly.

The following specific measures should be followed with the guidance of Health Physics:

(a) For general hand washing: the hands should be washed two to three minutes in tepid water using mild soap. Rinse thoroughly and repeat a maximum of four times. If the required degree of decontamination is not then reached, proceed with (b).

(b) Using a soft brush, wash and rinse three times in 8 minutes of which no less than 6 minutes should be spent in scrubbing. Use only light pressure so as not to abrade the skin. Rinse thoroughly and monitor.

Generally, persons with any wounds or cuts will not be permitted to work in a radioactive area, unless specific approval is obtained from Health Physics. Any wounds, cuts or bruises received while working with, in or near radioactive materials should be flushed with water immediately and must be referred to the Health Physics Department immediately so that more specific measures can be taken.

Equipment may be decontaminated by washing with detergent and water until the desired permissible level of activity is obtained. Other chemicals which may be used include ammonium citrate, trisodium phosphate and ammonium bi-fluoride. Equipment once contaminated, must be treated in the exact same method as other primary radioactive materials. Health Physics will supervise the decontamination of this material and equipment.

Health Physics will also monitor contaminated areas and determine the most practical method decontamination. The method used will include those mentioned under equipment and personal decontamination in addition to washing, surface stripping and repainting.