

IE.14-2

HEAVY MINERALS CO.

836 South Michigan Avenue  
Chicago 5, Illinois

December 1, 1954

Atomic Energy Commission  
Raw Materials Division  
Washington, D. C.

Attention: Mr. Radford Faulkner

Gentlemen:

CRUDE THORIUM HYDROXIDE

We propose to sell crude thorium hydroxide to the Atomic Energy Commission over a four year period, starting during the fourth quarter of 1955. The crude thorium hydroxide we propose to supply will be produced by a process based on the caustic attack of monazite, which process, as well as the characteristics of the product, is known to the Commission.

The crude thorium hydroxide we propose to supply will comply with the following specification:

Moisture	60% maximum
Thorium oxide and uranium oxide	45% minimum (dry basis)
Insolubles in nitric acid	40% maximum (" " )
Rare earth oxides	15% maximum (" " )
Phosphorus pentoxide	3% maximum (" " )
Chlorine	3% maximum (" " )
Fluorine	0.1% maximum (dry basis)
Balance --hydroxide radical and minor impurities.	

In evaluating this specification the Commission should not compare it with specifications of thorium hydroxide made by other processes, such as the sulphuric acid attack of monazite. This specification should be evaluated on the basis of the requirements of the additional processing that the Commission will perform on the crude hydroxide we will supply.

We propose the contract specify our commitment to furnish 55 tons of thorium oxide and that the Commission agree to purchase up to 65 tons annually. Deliveries are to be made in suitable returnable 55-gallon steel drums.

The product we propose to furnish contains uranium oxide amounting to approximately 10 percent of the thorium oxide (dry basis). It is proposed that the Commission pay \$4.50 per pound of contained uranium oxide (U3O8), such payment to be in addition to a price, f. o. b. Chattanooga, Tenn., of \$4.25 per pound of contained thorium oxide (ThO2), both prices to be subject to a mutually agreeable escalation clause.

Very truly yours,

HEAVY MINERALS CO.

E. E. Wyatt  
Executive Assistant



EEW:rs:rb