



18 OCT 1979

Mr. Robert O. McClintock
Materials Radiological Protection Section
United States Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. McClintock,

This is in response to your letter of September 19, 1979, (Ref. Docket No. 040-00341), concerning your inspection of our activities at the GSA/FPRS Curtis Bay Depot, Curtis Bay, Maryland under NRC License No. STC-133.

We have examined your findings and the infractions cited in the Notice of Violations and wish to advise you, as follows, of the corrective actions which we have and expect to take in regard thereto:

Citation A-1

A regional radiological survey and audit was conducted on September 17-21, 1979, at the GSA/FPRS Curtis Bay Depot by our Zone 1, Regional Radiological Safety Officer. For your information and recordation, the activities of the Office of Property Management have recently been organizationally realigned into three (3) geographical areas, identified as Zones. Zone 1, headquartered in New York, New York, now encompasses our activities located in GSA Regions 1, 2, 3 and the newly formed GSA National Capital Region. Zone 2, headquartered in Chicago, Illinois, encompasses our activities in GSA Regions 5 and 6. Zone 3, headquartered in Ft. Worth, Texas, encompasses our activities in GSA Regions 4, 7, 8, 9 and 10. The results of this survey and audit indicate full compliance with NRC regulations.

To ensure that the Zonal (formerly Regional) Radiological Survey and Audit Functions are carried out in full compliance with, and as specified in the Conditions of our source material license, the responsible operational official for Zone 1 has appointed an Alternate Regional (Zone 1) Radiological Safety Officer. This individual is expected to be fully trained by the end of calendar year 1979, after completion of formal Radiation Safety Course(s) and receiving other training from the Regional Radiological Safety Officer.

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Citation A-2

We are taking the following actions to ensure maintenance of proper instrument calibrations:

- a. We are requiring the Regional Radiological Safety Officers to check the calibration of each usable instrument with material source sets.
- b. A material source set has been purchased and is on hand to check the calibration of the Geiger Counters used to survey licensed material at the Curtis Bay Depot. A source set for our alpha monitoring instrumentation has been on hand at that site and was used during the September, 1979, survey referred to above under Citation A-1.
- c. We are instructing our Regional Radiological Safety Officers to ensure that all radiological monitoring equipment used to monitor radioactive stockpile commodities be calibrated at least annually or more frequently when checks with material source sets indicate that the monitoring equipment is not operating properly. We are currently in the process of establishing arrangements with qualified and licensed commercial and/or governmental sources to provide the necessary instrument calibration services. NRC approval for our use of these sources will first be obtained prior to finalization of these arrangements. We expect to finalize these arrangements within the next 60 days. Following this action, we will request a formal amendment of our license to update and reflect these approved instrument calibration procedures.
- d. All instruments used for monitoring licensed materials at Curtis Bay Depot have been calibrated recently by the Army Environmental Hygiene Agency, Edgewood, Maryland and by contract with Applied Metrology, Laurel, Maryland.

Citation B

It is noted that, Regulation 10, CFR Part 19.12 states, "The extent of these instructions (to employees) shall be commensurate with potential radiological problems in the restricted area." The individuals noted in this citation were not in physical contact with the thorium nitrate and could not enter the storage building. In view of these circumstances,

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the Depot Radiological Safety Officer felt that a briefing on the types of radiation, instructions regarding no unnecessary lingering in the area, expected dose rates, and a statement of depot dose limits, would meet the intent of the regulation. Depot regulations state that when 100 millirem or more are received, the exposed worker will not be allowed to work in the radiation area for one week. (NRC limits allow 1250 millirem in one calendar quarter.) Using NRC criteria, an employee with no previous exposure during a calendar quarter, can receive the full 1250 millirem in one day as long as no additional radiation dose is received to the end of that calendar period. We believe that the stringent nature of our depot requirements, limiting a worker to 100 millirem with a one week period away from the restricted area, led to a misunderstanding by the contractor and his subsequent concern of over exposure. This requirement appears to be unduly restrictive, especially for contract work. We plan to amend depot criteria in this regard. In the future, we will ensure that all Stockpile personnel responsible for the control of radiological activities within the Zonal and Depot areas thoroughly instruct all government and any other persons who are engaged in any work within radiation "restricted areas," in the applicable provisions of the NRC regulations and the conditions of our license.

We trust that the above responses will provide the information requested. In addition, this will confirm your understanding that your office will be notified when repackaging of thorium nitrate material is started at the Curtis Bay Depot.

James B. Ward

for

GEORGE I. PERRYMAN
Assistant Commissioner
Office of Property Management

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