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AUG 25 1983

Francis J. Bradley, Ph.D.  
Principal Radiophysicist  
Radiological Health Unit  
New York State Department  
of Labor  
2 World Trade Center  
New York, New York 10047

Dear Dr. Bradley:

We have received and reviewed a preliminary copy of the report of Texas' investigation of the shipment of Americium-241 and associated equipment by EAD to Texas. The information in the report raises a number of questions relating to EAD's activities in New York, their status in Texas, and their plans for shipping the material to Mexico.

As Joel Lubenau discussed with you, we believe it will be beneficial to have a meeting of representatives of the New York and Texas radiation control programs and NRC staff, including a representative of our International Programs office to exchange information on this matter. I have enclosed a list of issues which we believe should be addressed at the meeting (Enclosure 1). Since export of licensed material is regulated by the NRC, our Office of International Programs plans to ensure that the Mexican government is informed of the regulatory safety problems that have been found with this shipment and therefore also plan to attend the meeting.

We have scheduled the meeting for 9:30 a.m., September 13, 1983 in Conference Room 5035, Air Rights Building III, Bethesda, Md. Directions are enclosed (Enclosure 2). We will be pleased to pay your travel and per diem costs. Please contact our contractor, Dimensions Travel (301-986-8949) to make your flight reservations. For travel information other than flight reservations please contact Ms. Carolyn Duggens (Telephone 301-492-9870).

Sincerely,

Donald A. Nussbaumer  
Assistant Director for  
State Agreements Program  
Office of State Programs

Enclosures:  
As stated

cc: J. Dunkleberger, NY State  
Energy Office, w/encl.  
R. Gatliff, TX, w/encl.

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Issues Raised by the Texas Report on EAD

(Ref. Meyer, Tx report dtd 7/22/83)

- o Was the decon and decomm procedure (attach. R) submitted to and approved by NYDL?
- o The occupational MPCair for insoluble  $^{241}\text{Am}$  is  $1 \times 10^{-10}$  uCi/ml. Assuming a resuspension factor of  $10^{-6} \text{ cm}^{-1}$ , removable surface contamination in excess of  $22,000 \text{ dpm}/100 \text{ cm}^2$  could lead to airborne radioactivity greater than the MPC. Levels up to  $5 \times 10^6 \text{ dpm}/100 \text{ cm}^2$  were found by Texas. This raises questions about the adequacy of EAD's program for controlling and evaluating exposures to airborne radioactivity, e.g.

\*In the decon and decomm procedure, full face respiratory protection must be worn for handling the plating bath and the waste water system. Did NYDL approve a respiratory protection program for EAD?

\*In the decon and decomm procedure, a continuous air monitoring system was to be maintained during deconning, consisting of 4 alpha air monitors and 6 breathing zone samples. Results were to be recorded in the "Air Monitoring Log." Has NYDL inspected these records?

\*What bioassays were performed of personnel involved in the decon and decomm? (The decon and decomm procedure references records of urine samples and lung counts).

- o According to the decon and decomm procedure, all radioactive materials were packaged in accordance with DOT 49 CFR, yet the inspections and surveys by Texas and DOT disclosed numerous violations, including improper packaging, improper labelling and excessive contamination. Had NYDL reviewed and approved any EAD procedures for packaging and transporting radioactive materials?
- o EAD's decon and decomm procedure called for decontamination to specific limits. The RSO's surveys of the equipment shipped to Texas show removable contamination to be less than 100 dpm/100cm<sup>2</sup>. Texas' surveys showed levels up to 5x10<sup>6</sup> dpm/100cm<sup>2</sup> and numerous instances where surveys of the same item differed by two, three and four orders of magnitude (Enclosure). In addition, in one case, the gamma radiation level was reported as "0" but a Texas inspector found 2-3 mR/hr (natural gas generator, see attachments C&S). What steps has NYDL taken to ascertain the causes of these discrepancies?
- o Decon and decomm records, according to the procedure are to be stored at a location in Buffalo, NY. Has NYDL examined these records?



- o EAD's license also authorized the possession of Cm, Pu and Gd. Were any of these materials possessed by EAD? If so, how were they disposed of?
- o What was EAD's compliance history? (Dates of inspections, findings, adequacy of responses, repeats, orders?)
- o Attachment S (Haygood's 6/28/83 letter) reports that Bradley informed Texas that the RSO was told by "upper management" at EAD not to placard the trailers. This suggests that NYDL has information indicative of a willful violation of DOT requirements [which are referenced in Code 38 (38.39)] and thus opening a possibility for a criminal penalty. What action was NYDL taken on this matter?
- o Code 38.29, "Vacating Premises" requires licensees to decon to Table 5 levels; supply copies of the final survey to NYDL and to the landlord, owner or successor occupant; and cannot vacate, sell or transfer the premises until the survey has been verified and accepted by NYDL. What is the status of EAD's compliance with 38.29?
- o What is the condition of the drain lines from the plant? Have they been surveyed for radioactivity?
- o Has NYDL inspected and surveyed the vacated EAD premises? If so, what were the results?

Were soil samples taken and surveys of the environs made at the old facility?

- o Is there a possibility that excess equipment from EAD has been recycled into the private sector? Is it possible that "midnight requisitions" have been made? Has NYDL examined these possibilities?
- o Has NYDL coordinated with NYDEC (which has issued a permit to EAD) and with NYDH (which investigated a complaint of unlawful burial at EAD)?

# Comparison of EAD and Texas Survey Results

	EAD Decon Requirement	EAD Survey Result Removable dpm/100cm <sup>2</sup>	Tx Survey Result Removable dpm 100/cm <sup>2</sup>
ove Boxes	Decon externally below spec limit*	30;24	1060; 2460; 5390
ears	Decon to lowest possible level	18	4280
ste Water	Decon internally and externally below spec limit	30;21	2890; 6210; System 63,700; 96,100; 377,000; 384,000; 5,280,000
uum eaner	Decon externally below specific limits	27	7790; 80,800

\*"Spec limits" are not specifically defined in the procedure but reference is made to 49 CFR Code 38, Table 5 which provides limits for removable alpha: 33 average and maximum dpm/100cm<sup>2</sup>. DOT limits are 2200 dpm/100cm<sup>2</sup> or 22,000 dpm/100 cm<sup>2</sup> if the shipment is exclusive use vehicle. As a comparison, NRC guidance for decontamination is 20 dpm/100 cm<sup>2</sup> ("Guidelines for Decontamination of Facilities and Equipment for Release for Unrestricted Use or Termination Licenses. . ." December, 1975).



July 13, 1989

The Honorable John J. LaFalce  
Room 1304 Federal Building  
111 West Huron Street  
Buffalo, New York 14202

Dear Congressman LaFalce:

This is in response to your letter dated June 22, 1989, regarding the EAD Metallurgical Inc. facility located in Tonawanda, New York. I would like to note that New York is an Agreement State having entered into an agreement in 1964 with the Nuclear Regulatory Commission (NRC) pursuant to the Atomic Energy Act of 1954, as amended. Under the agreement the State has the authority to regulate certain radioactive materials within its State boundary. Therefore, the State of New York has the regulatory jurisdiction over the EAD Metallurgical Inc. facility. The New York State licensing contact person is:

Dr. F. J. Bradley  
Principal Radiophysicist  
Radiological Health Unit  
Division of Safety & Health  
State Department of Labor  
One Main Street, Room 813  
Brooklyn, New York 11201  
(718) 797-7641

Enclosed are the reports and correspondence that the NRC has issued relating to the EAD Metallurgical Inc. license termination and subsequent facility decontamination. That information is a result of periodic review of actions taken by New York and their technical assistance requests to us. An index of the enclosures is also provided. We hope this information will be of assistance to your constituent; however, if you have further questions, please do not hesitate to contact me.

Sincerely,

*Signed*

Dennis K. Rathbun, Director  
Congressional Affairs  
Office of Governmental and  
Public Affairs

Enclosures:  
As stated

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As stated

Distribution:

SA RF NYDOL File  
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\*See previous concurrence.

OFF : SLITP:SA : SLITP:SA:AD : SLITP:D : GPA : GPA : CA : 7/10/89  
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