



THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY

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NSJ
November 27, 1979
OOC-79-245

Director
Nuclear Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, PA 19406

Reference: IE Bulletin 79-19

Dear Sir:

We have just received your follow-up letter requesting our immediate response to the referenced IE Bulletin. For some reason or other, the Bulletin failed to reach the proper office at the Applied Physics Laboratory and it is solely for this reason that a timely reply was not submitted to you.

Because of the extremely low volume of waste materials generated and disposed of by the Applied Physics Laboratory, I hope you will concur with us in the view that the requirements of Action Items 1 through 8 have little reasonable application in our case. While the Laboratory, indeed, is an NRC licensee, it has historically used relatively few byproduct materials and, over the past 13 years, has made only one disposal of such materials no longer needed.

In July, 1979, the Laboratory, employing the services of a commercial disposal organization (namely, Radiation Service Organization, Laurel, Maryland), made its first disposal since at least 1966. At the time of the July disposal, all services, including packaging, labeling, transportation, etc., were provided by the Radiation Service Organization. The specific items disposed of consisted of the materials listed on the Attachment hereto. I wish to point out that all of the listed materials were in solid, sealed-source form.

In view of the fact that we anticipate there will be a further period of 10 to 15 years before another disposal is arranged, we believe that it will serve no useful purpose to comply with Action Items 1 through 8 at this time. We assure you, however, that we will familiarize ourselves with the pertinent rules and regulations of both NRC and DOT at the time of our next disposal and will comply fully with the prescribed disposal procedures as they then exist.

Very truly yours,

Russell Thrall
Office of Counsel

RT:mp

cc: NRC Office of Inspection & Enforcement
Division of Fuel Facility & Materials Safety Inspection
Washington, D.C. 20555

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Radioactive Materials Disposal List

<u>APL #</u>	<u>Isotope</u>	<u>Activity</u>	<u>Remarks</u>
1	¹⁴ C Carbon	0.13 uCi	USN - MP 11374
2	⁶⁰ Cobalt	0.0478 uCi	"
3	²⁰⁴ Thallium	0.0353 uCi	"
4	²¹⁰ Bismuth	0.024 uCi	"
5	²³⁴ Protactinium	0.116 uCi	"
11	²²⁶ Radium	3.0 ug	Sealed
12	²⁴¹ Am - ²⁴⁴ Cm	0.06 uCi, 0.14 uCi	Deposited on platinum disc
13	²²⁶ Radium	1.0 mCi	Platinum capsule
14	²²⁶ Radium/Ba	4.59 mCi	Neutron source (7 x 10 ⁴ N/sec)
18	²⁰⁷ Bismuth	1.0 uCi	Plastic disc
19	⁵⁵ Iron	1.0 mCi	Fused to platinum disc
20	⁶⁰ Cobalt	0.01 mCi	Stainless rod - USN R&D 81318
24	²⁴¹ Americium	0.115 uCi	Platinum foil
27	¹⁴⁵ Samarium	10.0 uCi	Mylar film disc
31	²²⁸ Thorium	1.2 uCi	Disc
33	¹³⁹ Cerium	10.0 uCi	Stainless rod - 0.9 mg/cm ² cover
73	⁵⁷ Cobalt	1.0 mCi	#A 787 7/1/74
51	⁵⁷ Cobalt	10.0 mCi	1/8/71
67	¹²⁵ Antimony	5.0 mCi	7/1/73
52	⁶⁰ Cobalt	100.0 uCi	SN 399072
53	¹³⁷ Cesium	100.0 uCi	SN 399071
54	¹³⁷ Cesium	8.0 uCi	Check source disc
55	²² Sodium	0.38 uCi	#71206-2
56	²⁰⁴ Thallium	0.14 uCi	#71206-6
57	⁹⁰ Strontium	19,400 CPM	SN #5120

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APL #	Isotope	Activity	Remarks
58	²³⁹ Plutonium	5275 CPM	SN #P5564
62	¹³⁷ Cesium	unknown	Check source
66	²¹⁰ Polonium/Be	1.0 mCi	Neutron source
97	²⁴¹ Am - ⁹⁹ Tc	10.0 uCi - ²⁴¹ Am 100.0 uCi - ⁹⁹ Tc	#B-578 (10/1/76)
45	²²⁶ Radium	7.0 uCi	AN/PDR 27 Test source
28	¹³³ Barium	10.0 uCi	On mylar film
93	²⁴¹ Am - ⁹⁰ Sr.	10.0 uCi each	#B-573 9/15/76
95	²⁴¹ Am - ⁹⁰ Sr.	10.0 uCi each	#B-576 9/15/76
96	²⁴¹ Am - ⁹⁹ Tc	10.0 uCi - ²⁴¹ Am 100.0 uCi - ⁹⁹ Tc	#B-577 10/1/76
98	²⁴¹ Am - ⁹⁹ Tc	10.0 uCi - ²⁴¹ Am 100.0 uCi - ⁹⁹ Tc	#B-579 10/1/76
-	⁶⁰ Co	0.4 uCi	-
-	¹¹⁹ Tin	0.75 uCi	#848 3/6/69
68	^{125M} Tellurium	4 x 10 ⁻³ uCi	643-300 3/5/74
69	¹²⁵ Iodine	5 x 10 ⁻⁵ uCi	643-222 10/31/72
70	^{125M} Tellurium	6 x 10 ⁻⁶ uCi	643-243 3/17/73
71	¹²⁵ Iodine	8 x 10 ⁻⁴ uCi	643-256 7/6/73
-	unknown	unknown	2-spark gap tubes
-	¹³⁷ Cesium	unknown	3-electron tubes
-	unknown	unknown	small gamma emitter
-	unknown	unknown	radioactive foils
-	²³³ Uranium	unknown	small qty. depleted ²³³ U
-	²²⁶ Radium	approx. 60.0 ug	PACE noise gen. foils
-	Uranium nitrate	unknown	-
-	¹³⁷ Cesium	0.9 uCi	- 2179 360
-	²²⁶ Radium	approx. 1.0 ug	-
-	4 oz. oil	unknown	Contaminated with ¹³³ Barium
-	Misc. swipes & swabs	unknown	-