



STATE OF NEW YORK DEPARTMENT OF HEALTH

Office of Public Health

11 University Place

Albany, New York 12203-3399

Barbara A. DeBuono, M.D., M.P.H.
Commissioner

October 22, 1996

Craig Gordon
U.S. Nuclear Regulatory Commission
State Agreements Program
Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406

96 NOV -6 AM 9:42

OSP

Dear Mr. Gordon:

This is to follow-up on our discussion regarding your presentation on RAMCO irradiators in secondary schools at the All Agreement States meeting on September 18, 1996.

The information contained in your handout provided to meeting participants is misleading. The handout indicates that twelve New York State (outside of NYC) facilities have received RAMCO irradiators and that nine of these are "Unaccounted For." In addition, a table is provided that lists the twelve NYS facilities indicating "No Record" for nine facilities. As mentioned at the meeting, not only are these devices accounted for, we license and inspect those facilities that continue to possess these irradiators. Attached is a table which provides current information on the status of these devices. In the future, we would appreciate an opportunity to review any information concerning our program or licensees, prior to general distribution.

If you have any questions or need additional information, please contact me.

Sincerely,

Stephen M. Gavitt, Chief
Radioactive Materials Section
Bureau of Environmental Radiation
Protection

9611150275 961022
PDR STPRG ESGNY
PDR

Enclosures: NRC handout- "Irradiators in Secondary Schools"
Table- RAMCO Irradiators Licensed by NYS DOH

xc: Karim Rimawi, Ph.D., NYSDOH
Gene Miskin, NYCDOH
Rita Aldrich, NYSDOL
Jack Spath, NYSERDA
Richard Bangart, NRC/OSP

150039

NRC FILE CENTER COPY

SP-AG-20-2

IRRADIATORS IN SECONDARY SCHOOLS

RAMCO GAMMATOR 50

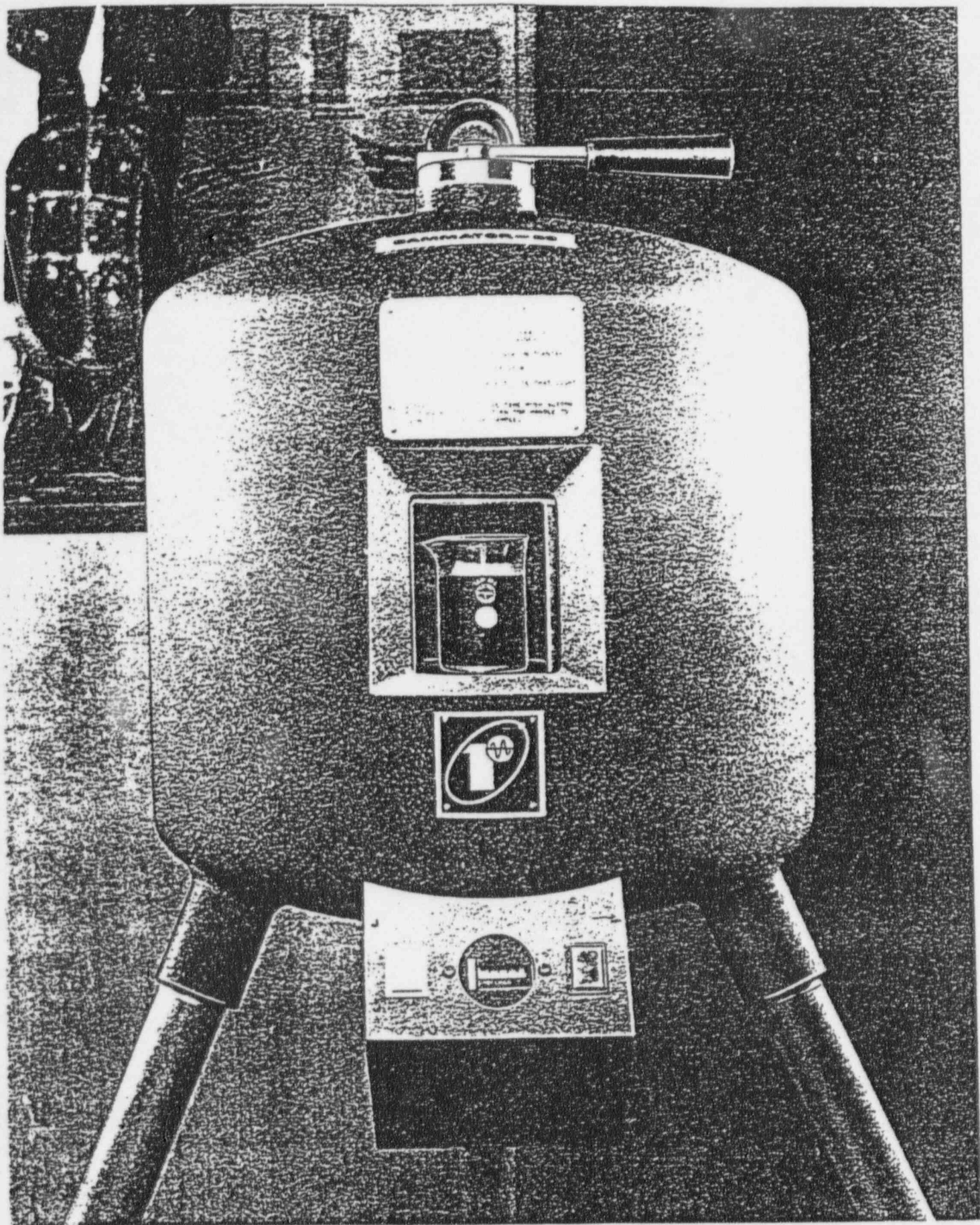
OTHER RADIOACTIVE MATERIAL FOUND IN HIGH SCHOOLS

REMOVAL

GAMMATOR 50

BACKGROUND

- Manufactured by Radiation Machinery Corporation (RAMCO)
Parsippany, New Jersey
- Dry Storage, Self-contained
- Current activity 200 + Curies Cs-137 (original 380-480 Ci)
- Distributed in 1960's under "Atoms for Peace Program"
- RAMCO dissolved by bankruptcy court
- AEC licenses terminated in early 1970's
- Identified in NRC followup of ORNL list of terminated/sealed sources license files



NEW YORK STATE DEPARTMENT OF HEALTH 87

GAMMATOR 50
RADIATION MACHINERY CORPORATION

RAMCO IRRADIATORS

- NRC DISTRIBUTION DATA

120 UNITS - U.S.

48 in AGREEMENT STATES- 32 UNACCOUNTED FOR

- DISTRIBUTED TO:

Colleges/Universities
High Schools
Hospitals
Privately-owned companies

- Most licenses retired or terminated
- NRC followup in non-Agreement States only

↑ what about NRC facilities?
why is the focus of this presentation
on A.S.?

AGREEMENT STATE DISTRIBUTION

48 UNITS: 32 UNACCOUNTED

(16 RETURNED/LICENSED)

	COLLEGES/UNIVERSITIES	HIGH SCHOOLS	HOSPITALS	PRIVATE	TOTALS
CALIFORNIA	1 (4)	0 (1)	1 (1)	0	2 (6)
FLORIDA	2 (2)	3 (3)	0	1 (1)	6 (6)
GEORGIA	2 (2)	0	0	0	2 (2)
ILLINOIS	1 (1)	1 (1)	0	2 (2)	4 (4)
IOWA	0 (1)	0	0	0	0 (1)
MARYLAND	0 (1)	0	0	1 (1)	1 (2)
NY STATE	4 (6)	3 (3)	0 (1)	2 (2)	9 (12)
NY CITY	1 (4)	2 (3)	1 (3)	0 (1)	4 (11)
S. CAROLINA	1 (1)	0	0	0	1 (1)
TENNESSEE	1 (1)	0	0	0	1 (1)
TEXAS	1 (1)	0	0	0	1 (1)
WASHINGTON	0	1 (1)	0	0	1 (1)

TOTALS - 32 (48)

SUNY Buffalo #1049 4 sources
SUNY ST.B. #455 2 sources - 8000
14320

RAMCO IRRADIATORS IN AGREEMENT STATES

TOTAL: 48

MARYLAND: 2

- * American Type Culture - No Record
- * John Hopkins - Licensed

NEW YORK CITY: 11

- ↓ NO
- * Adelphi University - Transferred to Rochester Institute of Technology - ON LIC #45 8406 (2 sources)
 - * Brooklyn College - Returned
 - * Bronx High School of Science - No Record
 - * Long Island University - No Record
 - * New York Hospital - Licensed
 - * New York University Medical Center - Returned
 - * Hospital of Special Surgery - No Record
 - * St. Joe's High School - No Record
 - * St. John's University - Returned
 - * Shil-la-Art Gems, Inc. - Returned
 - * Mother Cabrini High School - Returned

NEW YORK: 12

- OW Post
- ✓ CW Post - No Record 542
 - ✓ Great Neck High School - No Record 1164
 - * State of New York - No Record - WCLTR #448
 - * Nippi of New York - No Record
 - * Dominican College - Returned - no license
 - ✓ Rochester Institute of Technology - Licensed #22 (2 units?)
 - ✓ Hofstra University - No Record #11-2
 - * SUNY - No Record
 - ✓ Albany Medical Center - Licensed - 1983 → present - no x-ator
 - ✓ New York Institute of Technology - No Record - #3169 for GC only
 - ✓ Tappan Zee High School - No Record #1145 T-3/90
 - ✓ Patchogue High School - No Record #1137

FLORIDA: 6

- * University of Florida - No Record
- * Crystal Lake High School #155 - No Record
- * Florida State University - No Record
- * Martin Marietta - No Record
- * Crystal Lake High School #56 - No Record
- * Community High School - No Record

GEORGIA: 2

- * Fernback Hall - No Record
- * Georgia State University - No Record

SOUTH CAROLINA: 1

- * East Carolina University - No Record

TENNESSEE: 1

- * Middle Tennessee University - No Record

IOWA: 1

- * Graceland College - Licensed

ILLINOIS: 4

- * Northern Illinois University - No Record
- * Cary Grove High School - No Record
- * ITT - No Record
- * United Blood Service - No Record

CALIFORNIA: 6

- * Los Angeles School District - Returned
- * San Joaquin College - Returned
- * California Museum of Science - Returned
- * Saddleback College - Returned
- * San Bernardino College - No Record
- * Children's Hospital - No Record

TEXAS: 1

- * Abilene College - No Record

WASHINGTON: 1

- * Clover Park High School - No Record

IRRADIATOR REMOVAL

- Facility has primary responsibility
- DOE assistance in some cases
- Transportation and shipping arrangements needed
- CONTACTS: DOUG BROADDUS (301) 415-5847 or RSAO

RADIOACTIVE MATERIALS INADEQUATELY CONTROLLED IN HIGH SCHOOLS

- GAMMATOR 50 UNITS FOUND IN TWO NEW JERSEY HIGH SCHOOLS
- DRUM CONTAINING WASTE FROM H.S. (CT) CHEMISTRY LAB REJECTED BY DISPOSAL FACILITY (NJ) WHEN FOUND TO CONTAIN RADIUM-226
- OLD SOURCES TAKEN TO OYSTER CREEK (NJ) NPP AND REQUESTED LICENSEE DISPOSE OF THEM

NEED TO COMMUNICATE WITH LOCAL BOARD OF EDUCATION / SECONDARY SCHOOLS AND PROVIDE INFORMATION ON HOW TO CONTROL MATERIAL

**Facilities NRC has listed as "No Record"
for RAMCO Irradiators**

Facility		NYSDOH License No.	Comments
Adelphi University		45	840 curies (2 sources); license issued 7/8/69; not transferred to R.I.T. as stated by NRC; Date of last inspection- 11/20/95
Long Island University/ C.W. Post		542	400 curies (may have other campuses in NYC) date of last inspection - 12/17/92, inspection scheduled for 11/96.
Great Neck High School		1164	License terminated 10/96; source transferred to J.L. Shepard
State of New York (DOH - WCL&R)		448	290 curies of Cs-134/Cs-137 date of last inspection - 7/23/96
Nippi of New York			No record of a license at DOH; may be licensed by DOL
Dominican College		1150	License terminated 6/95; source transferred to UMASS @ Amherst
Rochester Institute of Technology		1078	840 curies (2 sources); added to license 7/8/69; received directly from RAMCO date of last inspection - 7/2/96
Hofstra University		11-2	330 curies; date of last inspection - 5/19/93
SUNY	Buffalo	1049	1600 curies (4 sources) in an Isomedix irradiator; date of last inspection - 7/9/96
	Stony Brook	455	800 curies (2 sources) in a RAMCO irradiator and 1632 curies (4 sources) in an Isomedix irradiator; date of last inspection - 12/7/95
Albany Medical Center		590	400 curies in an Isomedix irradiator transferred from Sterling-Winthrop approximately 8 years ago; date of last inspection - 8/26/96
New York Institute of Technology		3169	Licensee contacted; no record of RAMCO irradiator; current license for Ni-63 for use in a gas chromatograph issued 11/95 (two other campuses in NYC)
Tappan Zee High School		1145	License terminated 3/90; source transferred to J.L. Shepard
Patchogue-Medford High School		1187	400 curies; date of last inspection - 4/22/94