

December 4, 1996

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-III-96-070A

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region III staff (Lisle, Illinois) on this date.

Facility  
S. C. JOHNSON AND SON, INC.  
S. C. Johnson And Son, Inc.  
Racine, Wisconsin  
License No: 48-06453-01

Licensee Emergency Classification  
Notification of Unusual Event  
Alert  
Site Area Emergency  
General Emergency  
X Not Applicable

Subject: MISSING DENSITY GAUGE SOURCE (UPDATE)

On November 21, 1996, NRC Region III (Chicago) initiated a special inspection at the licensee's facility to review the circumstances surrounding a missing sealed source containing 300 millicuries (11,100 MBq) of americium-241. The americium-241 is sealed in ceramic enamel which is bonded to a stainless steel capsule. The gauge containing the source was removed from a process line in late August 1996 in preparation for replacement. The gauge was placed in an unsecured area of the licensee's plant and subsequently disassembled by licensee staff. Parts of the gauge were placed in non-radioactive trash bins, and some parts were placed in bins containing metal for recycling. The part of the gauge containing the americium-241 source was most likely disposed of as non-radioactive trash prior to transfer to a municipal landfill in Franklin, Wisconsin.

Parts of the gauge that were kept for recycling were transported to a scrap metal recycler by licensee staff. The recycler noted a radiation warning sign on a part and rejected the shipment.

Licensee staff subsequently brought the metal parts to a different scrap metal recycler, and the shipment was accepted.

NRC inspectors conducted inspections at the licensee's facility, the landfill and both scrap metal recyclers. Additionally, NRC inspectors performed radiation surveys at the licensee's facility and the scrap metal recycler that accepted the metal parts. Based on the radiation survey results obtained, there was no indication of the source or that it had leaked.

The licensee continues to search for the source with the help of a consultant. The licensee and its consultant are evaluating the feasibility of source retrieval from the landfill. If the source is in the landfill, it would not represent a significant environmental hazard as long as it remained in the protective housing with the source shutter closed.

An NRC Region III inspector will be at the licensee's facility on December 5, 1996, to continue the inspection.

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The State of Wisconsin and the NRC Office of Nuclear Material Safety and Safeguards have been notified of this updated information. The information in this preliminary notification has been reviewed with licensee management.

This information is current as of 11:00 a.m. (CST) on December 4, 1996.

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