

February 5, 1997

MEMORANDUM FOR LICFILE 45-11496-01
 FROM: E. Wright
 SUBJECT: CONTINUED OPERATION OF POOL IRRADIATOR DURING LICENSE RENEWAL

This memo is provided at the request of B. Mallett to document RII basis for allowing continued operation of the ARECO pool irradiator during the renewal process.

In our letter to the ARECO dated January 9, 1997, we raised additional safety issues regarding procedures for irradiation of large quantities of methyl Methacrylate, sealed source leak test procedures and current condition of old cobalt 60 sources. The licensee is currently developing a response to our letter and expects to forward it to us in about 1-2 weeks.

Even though our letter addresses pertinent safety issues which need to be documented in the licensee's renewal application, we do not consider these issues to represent significant potential for eminent danger to health or property. Our basis is as follows:

1. The licensee has had an outstanding safety record for its operations during the time frame 1969 to the present. To our knowledge, during this time frame, the licensee has had no reportable radiation safety events or any lost time accidents involving the irradiator operations.
2. The current loading of the irradiator is the lowest in the licensee's operational history (10,000 curies of cobalt 60). Initially the pool loading was 65,000 curies of cobalt 60 and in 1986 1.25 megacuries of cesium 137. The cesium 137 was transferred to DOE in August 1996.
3. The licensee continues its operations under the terms and conditions of License No. 45-11496-01 (deemed timely filed authorization 2/8/88). Pertinent procedures and engineering controls include, but are not limited to the following: (a) control of shielding water level and water purity; (b) Radiation monitoring of pool water demineralizer; (c) External radiation level monitor over pool to detect any increase in radiation levels; (d) Periodic radiological analysis of pool water to detect potential leaking of sealed irradiator sources and re-venting of radon gas; (e) Containers containing wood chipping impregnated with methyl Methacrylate during irradiation to reduce potential for fire; and (f) procedures to prevent result in damage to sealed sources.

RE: DR. J.

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