

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Helen F. Hoyt, Chairperson
Ernest E. Hill
David R. Schink

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In the Matter of)	Docket No. 30-6931-SP
)	(Renewal of Byproducts
ARMED FORCES RADIOBIOLOGY)	Material License No.
RESEARCH INSTITUTE)	19-08330-03)
)	(ASLBP No. 82-469-01-SP)
(Cobalt-60 Storage)	
Facility))	March 14, 1983

MEMORANDUM AND ORDER

Introduction

On July 16, 1982, the Atomic Safety and Licensing Appeal Board granted Citizens for Nuclear Reactor Safety, Inc. (CNRS) standing to intervene in this proceeding. Armed Forces Radiobiology Research Institute (Cobalt-60 Storage Facility), ALAB-682, 16 NRC ___ (1982). On January 5, 1983, CNRS filed a "Supplement to Petition for Leave to Intervene" in which it set forth specific contentions which it wished to litigate. Pursuant to Board Order dated February 2, 1983, the Licensee and the Staff responded to CNRS' filing. A special prehearing conference was convened pursuant to an Order of February 9, 1983, in Bethesda on March 4, 1983 to address matters raised in the "Supplement to Petition for Leave to Intervene."

Having considered the proposed contentions, the responses by the Licensee and the Staff, and the entire record in the proceeding, the Board by this Memorandum and Order sets forth its rulings on the

admissibility of the contentions below. For convenience, each contention is set out before the Board discusses its admissibility.

Contention I - Security

1. Licensee has not adequately addressed the possibility and consequences of terrorist diversion of radioactive material from the cobalt storage room and AFRRRI facility. Licensee possesses in accessible form one of the largest inventories of radioactive Cobalt-60 in the United States and has a history of unauthorized entries into and exits from the building which houses the cobalt. Licensee has failed to demonstrate that terrorist diversion of its cobalt could be prevented or that the public health and safety could be adequately protected in the event of a successful terrorist attempt.

2. Licensee has not adequately addressed the possibility and consequences of sabotage of the cobalt storage facility. Licensee has failed to demonstrate that terrorist activities could not precipitate:

- (a) a rupture of the cobalt storage tank;
- (b) a pumping defect or failure;
- (c) a break in the feeder line;
- (d) an explosion;
- (e) a combination of these types of problems.

Licensee has not demonstrated that the public health and safety could be adequately protected in the event of such terrorist acts.

Both the Licensee and the Staff oppose admission of both parts of this contention. Both note that CNRS has not identified any regulatory standard which would be violated by a lack of security information concerning the Cobalt-60 byproducts material facility. In addition, the Staff concludes that the contention lacks basis.

The Board finds that the contention has sufficient basis. CNRS has alleged that the building which houses the cobalt has a history of unauthorized entries and exits. CNRS admits that it is not certain from

the documents it has whether these unauthorized entries and exits were specifically related to the Cobalt-60 facility (Tr. at 181). On the other hand, there is logic to CNRS' argument that "a breach of security into the building which houses the controlled access area is a breakdown of the first line of defense to the security of the controlled access area itself" (Tr. 229). Common sense says that controls on access to the building exist to assist in providing security to the facilities inside the building.

The Board does not agree that, because there is no NRC regulation or regulatory guidance on security requirements for materials byproducts facilities, the Board may not consider whether there is adequate security at such a facility. In Trustees of Columbia University, ALAB-50, 4 AEC 849, 854-55 (1972), the Appeal Board reached a conclusion about the health and safety effects of a research reactor although the regulations provided no specific standards for the evaluation of an accident situation in a research reactor. It is therefore apparent that an NRC adjudicatory board may consider health and safety issues although the issues are not governed by specific regulatory standards.

There is a regulatory requirement for a materials byproduct license that "[t]he Applicant's proposed equipment and facilities are adequate to protect health and minimize danger to life or property." 10 C.F.R. § 30.33(a)(2). This Board believes that, although there are no specific security requirements in the regulations, common sense dictates that a certain level of security is necessary to ensure that public health can be adequately protected, particularly in the special circumstances of this case where the material is housed in close

proximity to a reactor. The Board accepts this contention to assure that that level of security is present in this facility.

This is not to say, however, that the necessary level of security is the same as that in 10 C.F.R. Part 73. Materials byproducts licenses are not within the scope of Part 73. See 10 C.F.R. § 73.1(b).

Parts 1 and 2 of Contention I - Security are admitted.

Contention II - Accidents

1. Licensee has not adequately demonstrated that there could not be a recurrence and escalation, with adverse impacts on the public health and safety, of the accident which began in its cobalt storage room on April 22, 1981 and continued unmitigated until May 16, 1981, during which time radioactive cobalt remained continuously exposed above the shielding water.

2. Licensee has failed to adequately address the possibility and consequences of other accident scenarios at the cobalt facility that would pose a significant hazard to the health and safety of the surrounding community and environment. Such scenarios would include but would not be limited to a loss-of-shielding accident, caused by a pumping defect or failure, break in the shielding water tank feeder line, or rupture of the shielding tank itself, in turn caused by an explosion in the contiguous TRIGA reactor facility or shock waves from sources external to the AFRRRI complex such as a Metro tunnel explosion or natural gas pipeline rupture.

The Licensee opposes admission of either part of this contention, arguing that there is no basis for considering escalation of the "accident" described in part 1 and that there is no regulatory requirement for consideration of the accident scenarios postulated in part 2. The Staff believes that part 1 of the proposed contention is admissible, but that part 2 lacks basis and is not.

Insofar as part 1 of this contention is concerned, CNRS has described a particular event (referred to by CNRS as an "accident" and by the Licensee as an "incident"), and alleged that a similar event could occur in the future with adverse impacts on public health and

safety. By postulating a particular "accident" which is credible (by virtue of its having occurred before), CNRS has provided a basis with specificity for this contention.

Licensee's argument that the consequences of such an "incident" would be inconsequential is not addressed to the "basis with specificity" requirement for admission of contentions, but to the merits of the contention. The Board may not, at this stage of the proceeding, address a contention's merits. Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 547-49 (1980).

Part 2 of the proposed contention is much broader than is part 1. It does not truly put the parties on notice of what they would have to defend against or oppose. See Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974).

In support of part 2 of this contention, at the special prehearing conference, CNRS presented a letter which described a specific incident during which approximately 40,000 gallons of water were pumped into the sanitary sewage system. CNRS' Offer of Proof #5. This same letter, however, indicates that there was no radiological contamination of the water. CNRS apparently would have liked the Washington Suburban Sanitary Commission to have corroborated this lack of contamination (Tr. at 237, 241). However, no basis has been provided which would cause the Board to believe the water could have been contaminated. CNRS' desire to have had local agencies corroborate the Licensee's tests for radioactivity simply does not provide a basis for looking at the

public health and safety consequences of an incident which apparently involved no radiation releases.

Part 1 of Contention II - Accidents is admitted; part 2 of Contention II - Accidents is not admitted.

Contention III - Emergency Planning

Licensee has failed to demonstrate that its emergency response capabilities and those of the surrounding Bethesda community would be adequate to protect the public health and safety in the event that one or more of the acts of terrorism or accidents described above occurred. Given the near identity in operating personnel, location, security procedures, safety systems, emergency and evacuation plans of Licensee's cobalt facility and TRIGA reactor, Licensee has not adequately demonstrated that the deficiencies inherent in the reactor's Emergency Plan, which Intervenor has identified with particularity in the TRIGA licensing renewal proceeding (Docket No. 50-170), are not also present in Licensee's Emergency Plan for its cobalt facility.

Both the Licensee and the Staff oppose admission of this contention, noting that there is no regulatory requirement that materials byproducts licensees prepare comprehensive emergency plans. The Staff further notes that NUREG-0767, "Criteria for Selection of Fuel Cycle and Major Materials Licenses Needing Radiological Contingency Plans" (July 1981), does not require that sealed sources have Radiological Contingency Plans. The Cobalt-60 which is the subject of this proceeding is a sealed source. See 10 C.F.R. § 30.4(r)(1982). CNRS has not provided any basis for requiring an emergency plan in this case.

Moreover, the contention itself appears to be concerned with the Emergency Plan for the TRIGA reactor on the same site. The alleged inadequacies in that Plan are the subject of a contention in the proceeding to renew the license for that reactor. There appears to be

no reason to litigate them again in the context of this proceeding. The Board believes, however, that if the Emergency Plan is found adequate for the reactor, it would easily be sufficient to cover any emergency which could conceivably be attributable to the smaller radiation source represented by the Cobalt-60 facility.

Contention III - Emergency Planning is not admitted.

Contention IV - Siting

Licensee has not adequately demonstrated that the site of its cobalt storage facility, with its exceedingly large inventory of radioactive material, vulnerability to acts of terrorism, and demonstrated susceptibility to accidents, in the midst of a densely populated residential/urban area and in close proximity to numerous schools, hospitals and nursing homes, less than five miles from the nation's capital, does not constitute a significant hazard to the public health and safety.

* The Licensee and the Staff argue that CNRS has not identified any regulatory requirement which CNRS alleges the facility will violate. Both the Licensee and the Staff also maintain that it is nonsensical to consider siting when the facility is already in existence.

CNRS argues that the site must be considered in determining whether accident and security risks present undue risks to public health and safety. CNRS urges the Board to adopt standards similar to those in promulgated regulations which set radioactive release limits for power reactors (Tr. 204-05).

Relicensing is rather late to consider whether this facility is optimally located. Hence, the Board would expect the contention to be quite specific and have a clearly set out basis. Cf. Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 NRC ___, Slip Op. at 10 n.5 (March 4, 1983)

(suggesting in dictum there is a more stringent threshold for a contention which could have been investigated at an earlier licensing stage). If CNRS expected the Board to adopt the radioactive release limits for power reactors, CNRS needed to show that these limits could have been violated. There is no such indication. Indeed, CNRS has provided no basis or indication that there have been any radioactive releases from the Cobalt-60 facility.

If CNRS' goal is actually to consider the public health consequences of accidents or security breaches, the Board has admitted contentions on those issues. There is no need to admit this contention to re-address them.

Contention IV - Siting is not admitted.

Contention V - National Environmental Policy Act

Neither Licensee nor the Nuclear Regulatory Commission Staff has prepared a legally adequate environmental cost-benefit analysis of the action to renew the cobalt material license which, inter alia, considers alternatives to relicensing and balances the need for the license against the environmental hazards associated with its possession and use.

Both the Staff and the Licensee note that under 10 C.F.R. § 51.5(a)-(d) (1982), renewal of a materials byproducts license is not an action for which either an Environmental Impact Statement or an Environmental Impact Appraisal need be prepared. The Licensee states, in addition, that renewal of an existing license is not a major federal action significantly affecting the quality of the human environment.

10 C.F.R. § 51.5(d)(4) states:

(d) Unless otherwise determined by the Commission, an environmental impact statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the following types of actions:

(4) Issuance of a materials license or amendment to or renewal of a materials . . . license

Thus, the Commission has determined that no cost/benefit analysis is ordinarily legally required for renewal of a materials license. The Commission did reserve for itself, and we as its representatives could exercise, the power to determine that one must be prepared in a particular case. In order for a cost/benefit analysis to be legally required, the Board would have to find that the license renewal would be a "major Federal action[] significantly affecting the quality of the human environment." National Environmental Policy Act § 102, 42 U.S.C. § 4332 (1976). CNRS has provided no basis upon which the Board could make such a finding. Therefore, the contention is without basis.

Contention V - National Environmental Policy Act is not admitted.

The Board has determined that CNRS has proposed 2 admissible contentions and, therefore, is admitted as an intervenor and a hearing will be held in this matter.

ORDER

For all the foregoing reasons and based upon a consideration of the entire record in this matter, it is

ORDERED

1. That CNRS' Contention I - Security and Part 1 of Contention II - Accidents are admitted;

2. That CNRS' Part 2 of Contention II - Accidents, Contention III - Emergency Planning, Contention IV - Siting, and Contention V - National Environmental Policy Act are denied;

3. That CNRS is admitted as an intervenor in this proceeding;
4. That a hearing will be scheduled on this matter.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD



Helen F. Hoyt, Chairperson
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland
this 14th day of March, 1983.