

From: Joseph E. DeCicco (JXD1) *NMS*
To: JAG *John Grobe, Bill*
Date: Tuesday, January 31, 1995 *4:17* pm
Subject: Comments on the 40 page Response to CAL

Attached is a summary of comments and concerns about the CAL response package that you faxed to Stablein on January 27, 1995. They are a summary of concerns from both myself and CJones, with FCombs review.

The other topics that were discussed here were

- a) whether the meeting on February 6, 1995 is to be transcribed - that information/decision/legal opinion will have to come from OGC via MStein or SLewis;
- b) whether it is clear to all participants of the February 9 meeting of what the topics to be discussed were:
 - 1) The inspections by MKurth and WSlawinski
 - 2) The response, dated January 26, 1995, to the CAL, vice the response dated December 28, 1994.

CC: MHS, CGJ

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Concerns:

January 26, 1995 letter from Cesar

1. After filtration and analysis of filtrate to verify concentration is less than a nominal detection limit prior to discharge:

- a. what is the nominal detection limit (200 pCi/l?)
- b. what is the method of discharge or release?
- c. Will this discharge or release method need approval, permits from city, state?

2. Level of water in the manhole:

What is the level that requires pumping, some set level, or a level differential with the level of the basement?

3. The Timetable has no items where NEORSD is involved with approval; can AMS do all of this without involving the District?

January 27, 1995 letter from Cesar

1. In issue 1: The differential of three to four feet is used as a point where pumping would occur to decrease the differential.

a. The phonecon on 27JAN95 discussed a differential of between 18 and 24 inches being the pumping criteria.

b. The letter is not specific as to what "sufficient water from an appropriate location in order to reduce the differential." means.

2. In issue 2: The sampling and discharge of the water from the temporary storage tanks is vague.

- a. Is NEORSD notified?
- b. Discharged to where? sanitary sewer? storm drain sewer, or across the parking lot?
- c. Is this an effluent? where may effluents be discharged?
- d. Who will verify the sampling and analysis? NRC? NEORSD? Independent lab?

3. In issue 3: The paragraph uses two tenses of the verb in relation to contracting.

"A contract has been awarded to ..." in the first sentence, and "AMS will award the contract for water treatment by Friday, January 27, 1995." in the penultimate sentence in this issue. Is there a contract, or will there be

a contract?

4. In issue 4:

a. With the decontamination of the interceptor line, should DWM get involved?

b. The in-line sampler and flow meter information is still sketchy: What type system? Who will do the analysis? Who will verify? Will NEORSD be involved? How often are sample taken?

January 25, 1995 letter John Denega

The term failure is vague. (But so is structural integrity)

The ALARA Comparison Analysis

Option 1 (do nothing) has least impact on exposure and cost; still have a problem with a means of discharge.

Option 4 (fill in connector, and build new one) is the next option with least impact and least cost. However, will leaving cobalt-60 in place be acceptable to Region III (or Bernero)?

April 5, 1995

ROUTING	
✓ DA	HUS
✓ SA	HUS
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L. English	
HUS	

William Schatz, Esq.
General Counsel
Northeast Ohio Regional Sewer District
3826 Euclid Avenue
Cleveland, Ohio 44115-2504

Dear Mr. Schatz:

This letter is in response to your March 6, 1995, letter to the Executive Director for Operations, Nuclear Regulatory Commission, and to Mr. Larry English's March 8, letter to Dr. Carl Paperiello, Director Designate, Office of Nuclear Material Safety and Safeguards, NRC. Both of these letters addressed similar topics, and therefore are addressed here together.

In these letters, you and Mr. English expressed concerns about certain NRC actions regarding Advanced Medical Systems, Inc. (AMS). Specifically, the letters raise concerns regarding any NRC action which would require AMS to discharge water into the sanitary sewer system. The Staff believes that your concerns have been addressed and alleviated by Amendment No. 32 to License 34-19089-1, dated March 17, 1995. A copy of that Amendment has been provided to your staff.

Amendment No. 32 authorized the processing of the water in and around the basement of the facility. The processed water is to be stored in above ground tanks at the facility. The amendment does not address the evaporation of treated water nor does it order AMS to discharge water into the sanitary sewer system. NRC is reviewing the licensee's plans for evaporation of treated water.

Additional concerns expressed in both letters will be considered, as appropriate, during our ongoing regulatory review of AMS' activities.

If you wish to discuss this matter any further, please contact me at (301) 415-7197.

Sincerely,

Donald A. Cool, Director
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material Safety
and Safeguards

cc: L. English

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LETTER TO MR. W. SCHATZ, AMS - DATED: April 5, 1995

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 15, 1995

OFFICE OF THE
GENERAL COUNSEL

Anthony Stavole, Esq.
Stavole & Miller
1604 Illuminating Building
55 Public Square
Cleveland, OH 44113

VIA FACSIMILE AND
U.S. MAIL

In the Matter of
ADVANCED MEDICAL SYSTEMS, INC.
Material License No. 34-19089-01
Docket No. 30-16055-ML-REN

Dear Mr. Stavole:

In a telephone call on May 10, 1995, confirmed by letter dated May 18, 1995, I advised you that Section 3, "Decommissioning Cost Estimate for the London Road Site in Cleveland Ohio," of AMS' January 26, 1995, submittal regarding its application for renewal of its license had been placed in NRC's Public Document Room. As a consequence of AMS' failure to properly designate this information as proprietary, pursuant to 10 C.F.R. § 2.790, the information was unfortunately placed in the PDR. In the May 18 letter, I further advised you that the information was in the process of being withdrawn from the PDR and local public document rooms pending a submission by AMS of an application and affidavit requesting that this information be withheld, pursuant to 10 C.F.R. § 2.790. The May 10 letter further advised you that if the Staff did not receive an application and affidavit, pursuant to 10 C.F.R. § 2.790, within ten days from the date of the letter, the Staff would assume that AMS no longer wished to designate the information in question as proprietary. By letter dated May 30, 1995, your request for an extension of time, until June 12, 1995, in which to file an application and affidavit was granted. In the May 30 letter, I advised you that if the Staff did not receive an application and affidavit by June 12, 1995, the Staff would assume that AMS no longer wished to designate the information in question as proprietary.

Since no application nor affidavit has been received as of the date of this letter, the Staff assumes that AMS no longer wishes to designate the information as proprietary. Accordingly, the information has been placed back in the PDR.

Sincerely,

Marian L. Zobler
Marian L. Zobler
Counsel for NRC Staff

cc: Service List

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DOROTHY
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 23, 1995

MEMORANDUM TO: John R. Madera, Chief
Nuclear Material Licensing Section, Region III

FROM: Donald A. Cool, Director
Division of Industrial and
Medical Nuclear Safety, NMSS

SUBJECT: TAR CONTROL NUMBER 98334 RE ADVANCED MEDICAL
SYSTEMS LICENSE NO. 34-19089-01

This memorandum is in response to your Technical Assistance Request (TAR) dated June 12, 1995, which requested assistance in the review of the licensee's proposal to evaporate water containing cobalt-60.

On review of the information provided in the TAR, it is felt that the authorization to operate the evaporator should be granted upon adequate response of AMS to your deficiency letter.

Item F. of your draft deficiency letter should be expanded to require indication of how the licensee might demonstrate compliance with effluent limits of Appendix B of 10 CFR Part 20. Downwind surveys, such as air samples or removable contamination surveys, could be performed. From the information AMS supplied in the COMPLY code submitted to the U.S. Environmental Protection Agency, the stack height above the roof top is two meters at the west end of the building. Assuming predominant westerly winds, surveys downwind from the stack on the roof would be appropriate.

CONTACT: Joe DeCicco
(301) 415-9833

Dup
Tp
XN
98334

JUN 25 1995

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 3, 1995

MEMORANDUM TO: George Pangburn, Acting Chief
Operations Branch
Division of Industrial and Medical
Nuclear Safety, NMSS

FROM: Michael F. Weber, Chief *Michael F. Weber*
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management, NMSS

SUBJECT: REVIEW OF ADVANCED MEDICAL SYSTEMS CONCEPTUAL
DECOMMISSIONING PLAN

In response to your request, we reviewed the Advanced Medical Systems Conceptual Decommissioning Plan, dated October 20, 1995. We are attaching our comments.

License No. 034-19089-01
Docket No. 030-16055

Attachment: As stated

CONTACT: T.C. Johnson, NMSS
415-7299

9/19/95
TA
3/b

9/19

Comments on AMS Conceptual Decommissioning Plan1. Items to be Decommissioned, pp. 2-9

We assume that the project manager agrees with the scope of the proposed decommissioning and that the sources of contamination are reasonably represented in the report.

2. Decommissioning Cost Estimates, 2nd Para., p. 15

AMS is proposing to base its decommissioning financial assurance amount on a SAFSTOR approach using a 50 year storage period. In the Statement of Considerations for the 1988 decommissioning rulemaking (53 FR 24018) "the intent of the rule is to provide the necessary guidelines with regard to use of decommissioning alternatives in a manner which protects the public health and safety." In the 1988 rulemaking, provisions for deferring dismantlement are applicable only to power reactors where up to a 60 year period is specifically allowed. Deferred decommissioning for materials licensees and non-power reactors is not specifically allowed because the supporting analyses in the "Generic Environmental Impact Statement on Decommissioning Nuclear Facilities" (GEIS), NUREG-0586, showed that there would be no significant advantages to delaying decommissioning for these types of licensees. Factors that need to be considered in addressing decommissioning alternatives include the following:

- a. Occupational exposures
- b. Costs
- c. Waste disposal
- d. Financial viability of licensee
- e. Financial assurance provisions

In allowing up to a 60 year period for decommissioning power reactors, there is about an 80 percent saving in occupational exposures for the deferred option. The overall costs between DECON and SAFSTOR are about the same. For a 50 year SAFSTOR period the waste volumes are 90 percent less than with DECON. For a utility, utilities are considered to be fundamentally strong financial corporations due to the monopolistic system they operate in. Because the costs of DECON and SAFSTOR are similar, decommissioning financial assurance is provided at levels that could fund decommissioning even if a utility is unable to do so anytime during the SAFSTOR period.

The GEIS indicates that there may be cases for materials licensees where deferred decommissioning may be the most protective of public health and safety. In Chapter 14 of the GEIS, it is stated that deferred dismantlement could be a preferred option for source manufacturers which use short-lived nuclides that decay within a few weeks or months. However, longer SAFSTOR periods are not discussed as being suitable. This is especially the case of AMS, where there the viability of the corporation is tentative due to its substantive decommissioning obligations and the speculative nature of its limited business prospects for marketing teletherapy sources in the third world. By providing decommissioning financial assurance at a level that

Attachment

- 2 -

would not allow the complete remediation of the facility at any time during the SAFSTOR period, the public taxpayer could be forced to accept a decommissioning obligation that substantially exceeds the proposed level of funding.

3. Decommissioning Cost Estimates, 2nd Para., p. 15

AMS estimates that the SAFSTOR period maintenance and surveillance costs would be 4 staff-hours per week. Based on the contamination levels in the building, the groundwater seepage into the basement, restrictions on releasing water to the sewerage system, and possible structural damage to the building, this estimate appears to be very low. These low maintenance and surveillance costs substantially affect the long-term decommissioning costs.

4. Decommissioning Cost Estimates, 2nd Para., pp. 15-16

AMS is assuming that the lateral connection to the sewer system will remain in place during the SAFSTOR period. What is the rationale for this? There appears to be no cost beneficial reason to delay the remediation of this contamination.

5. Duration of Safe Storage Period, p. 19

The report states that the safe storage period is consistent with U.S. EPA policy. What policy is this? Note that our policy, embodied in the 1988 regulations, is that there is no significant benefit for delaying decommissioning at materials licensee facilities.

6. Table 3

Will a more detailed decommissioning cost estimate be submitted? This table is a summary of cost calculations, but does not provide sufficient detail for us to verify the cost estimates. We will review the detailed cost estimate when it is submitted.