



Advanced Medical Systems, Inc.

1020 London Rd.
Cleveland, Ohio 44110
216-692-3270

AMS File

December 11, 1995

Mr. J. R. Madera, Chief
Nuclear Materials Licensing Section
United States Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60523-4351

Re: Advanced Medical Systems Inc. (License No. 34-19089-01)

Dear Mr. Madera:

We are in receipt of your November 29, 1995 letter regarding the foundation drainage system at the Advanced Medical Systems, Inc., (AMS) facility and the results of water sampling that has occurred since the system was remediated. The following are our responses to your questions.

Included herein as Attachment 1 is a summary of the sampling and analysis results from the new foundation drainage system. Grab samples from the discharge line were collected by pumping water out of the new manhole. Rain water was collected from an open 55-gallon drum that was placed in the north west portion of the property during a rain storm. Drinking water was collected from the tap of the Atlas facility, a neighbor to AMS. Composite samples from the poly tanks and from the frac tanks were collected after re-circulating each tank for at least two full tank volumes. Any samples that were "positive" for ^{60}Co above a nominal detection limit of 20 pCi/l were subject to solubility testing.

As of the date of this letter, approximately 50,000 gallons of water have been collected from the new foundation drainage system. On December 5-6, 1995, approximately 19,000 gallons from that volume were discharged into the back parking lot of the London Road facility.

In regard to the four-inch discharge line, a copy of a photograph taken during building construction was given to Mike Weber (USNRC Region III). As I explained to Mr. Weber, that photograph shows the location of a trench where the four-inch line currently exists. Therefore, it is reasonable to assume that when the building footers were poured, this trench was filled with cement. However, AMS did not rely solely on this assumption in concluding that the four-inch line is, in fact, encased.

On August 31, 1995, the position of the four-inch line in the front basement was located. A hole was drilled into the basement less than one (1) foot to the side of the four-inch line and at a

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distance of approximately 10 feet inside (to the west) of the east wall. Drilling continued to a depth of approximately 14 inches, and at no time was subsurface soil encountered. At other basement floor locations, subsurface soils are reached at a depth of six (6) inches. Therefore, AMS concluded that the four-inch line was, indeed, fully-encased in the cement-filled trench.

For additional confirmation, AMS consulted its contract engineer, Mr. John Denega, who reviewed the drawings, discussed the August 31, 1995 drilling effort with me, and made his own observations. His report of findings is included herein as Attachment 2.

I hope that I have resolved your remaining concerns on these issues. Please call me at (216) 692-3270 if further discussion is necessary. Additional information on the "old" and the "new" drainage system is forthcoming in the remediation report.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert Meschter".

Robert Meschter, RSO

cc: D. Cesar
D. A. Miller, Esq. - Stavole & Miller
C. D. Berger, C.H.P. - IEM

ATTACHMENT 1 - RESULTS OF WATER SAMPLING

Collection Date	Collection Location	Results
August 8, 1995	Approx. 10,000 gallons in frac tank (for use in 10,000 gallon flush test)	N.D. - Co-60
August 8, 1995	Approx. 3,000 gallons in "old" Poly tank (from 10,000 gallon flush test)	33 \pm 21 pCi/l Bi-214 54 \pm 22 pCi/l Pb-214 N.D. - Co-60
August 9, 1995	Approx. 3,000 gallons in "old" Poly tank (from 10,000 gallon flush test)	N.D. - Co-60
August 9, 1995	Approx. 3,000 gallons in "old" Poly tank (from 10,000 gallon flush test)	23.1 \pm 9.2 pCi/l Co-60 12 \pm 1.3 pCi/l gross beta(filtered)
August 10, 1995	Approx. 3,000 gallons in "old" Poly tank (from 10,000 gallon flush test)	N.D. - Co-60
October 5, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
October 18, 1995	3,000 gallons in "old" Poly tank (composite)	N.D. - Co-60
October 18, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
October 20, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
October 24, 1995	Cleveland drinking water (grab sample from Atlas facility)	N.D. - Co-60
November 6, 1995	3,000 gallons in "new" Poly tank (composite)	N.D. - Co-60
November 14, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
November 15, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
November 16, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
November 17, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
November 20, 1995	Discharge line from new footer drains (grab sample)	N.D. - Co-60
November 20, 1995	Approx. 22,000 gallons in frac tank No. 1 (composite)	N.D. - Co-60
November 20, 1995	Rain water (composite) collected in barrel on property	N.D. - Co-60
November 29, 1995	Approx. 16,000 gallons in frac tank No. 2 (composite)	N.D. - Co-60

(ATTACHMENT 2 - LETTER FROM J. W. DENEGA, P.E., P.S.



NEFF & ASSOCIATES

PLANNERS • ENGINEERS • SURVEYORS

December 6, 1995

Advanced Medical Systems, Inc.
121 North Eagle Street
Geneva, Ohio 44041

Attn: David Cesar

RE: Response to comments from U.S.N.R.C. dated 29 November
1995 regarding 4" discharge line at 1020 London Road,
Cleveland, Ohio
File No. 10459.007

Dear Mr. Cesar:

On 4 December 1995 Mr. Meschter, Radiation Safety Officer, contacted me concerning the response to the regulatory agency regarding the condition of the 4" discharge line at the 1020 London Road facility. On 6 December 1995 I visited the site to review the matter with him. Review of construction drawings, discussion with him, and my observations of the events relative to this matter were used to arrive at my opinion.

It was disclosed to me that on 31 August 1995 a test hole was made in the basement floor of this facility approximately one foot from the 4" discharge line as shown on the attached exhibit. This test hole was made by Alan Duff of Integrated Environmental Management Inc. in consort with Chris Reed assistant to Mr. Meschter. It was reported to me that this hole was terminated at a depth of 12 to 14 inches without exiting the floor slab, indicating that at the time of construction the trench surrounding the 4" discharge line was filled with concrete at the same time the floor slab was installed.

It is my opinion to a reasonable degree of engineering certainty that the 4" discharge line is included in the concrete floor slab. This opinion is based on the following facts which I perceive to be correct:

1. It is not probable that the increased thickness of concrete found is an isolated event.

Post-It Fax Note	7671	Date	12-11	# of Pages	2
To	BOB	From	DAVID CESAR		
Co./Dept.		Co.			
Phone #		Phone #			
FAX #		FAX #			

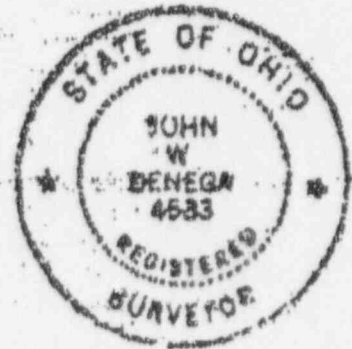
2. The original design of the floor slab was to be six inches thick, as shown on the construction plans. This was confirmed by prior coring performed by another contractor.
3. Photographs taken during construction clearly indicate the existence of a trench at the approximate location of the 4" discharge line.
4. It is reasonable to conclude that the increased thickness of concrete is consistent along the 4" discharge line and that the utility trench was backfilled with concrete at the time the floor slab was installed.

The insitu condition of this 4" discharge line deviates from normal construction for whatever reasons pertinent at the time of construction. Further invasive investigation to substantiate this opinion would be counter productive in that it might breach the integrity of the discharge line, as well as weaken the structure.

Very Truly Yours,

John W. Denega P.E., P.S.

John W. Denega P.E., P.S.
Neff & Associates





George V. Volnovich, Governor

Nancy P. Hollister, Lt. Governor

Charles D. Shipley,

Director

240 Parnass Ave.

P.O. Box 7167

Columbus, OH 43205-0167

(614) 466-2550

Col. Warren H. Davies,

Superintendent

Ohio State Highway Patrol

660 E. Main Street

Columbus, OH 43215

(614) 466-2660

Mitchell J. Brown,

Registrar, Bureau of Motor Vehicles

4300 Kimberly Parkway

P.O. Box 16120

Columbus, OH 43266-0020

(614) 752-7500

Linda Jahlet,

Acting Executive Administrator

Emergency Medical Services

240 Parnass Ave., P.O. Box 7167

Columbus, OH 43205-0167

(614) 466-9447 • (800) 233-0785

EMERGENCY MANAGEMENT AGENCY
2855 WEST DUBLIN GRANVILLE ROAD
COLUMBUS, OHIO 43235-2206
(614) 889-7150

November 1, 1995

Mr. Robert Meschter, RSO
Advanced Medical Systems, Inc.
1020 London Road
Cleveland, OH 44110


SUBJ: Advanced Medical Systems, Inc. Emergency Plan, Revision O, September 21, 1995

Dear Mr. Meschter:

Please consider the enclosed comments to Revision O of your Emergency Plan.

Thank you for the opportunity to comment on the latest revision of your plan. If you have any questions, please contact Ms. Carol O'Claire of my staff at (614) 799-3915.

Sincerely,


JAMES R. WILLIAMS
Chief of Staff

CAO:bn

ENCLS: as stated

Mission Statement

...to save lives, reduce injuries and economic losses on the streets and highways of Ohio, and to regulate driver licensing and vehicle registration with the most cost effective methods available.



Comments to Advanced Medical Systems, Inc. "Emergency Plan for the London Road Facility," Revision 0 - September 21, 1995.

Section 2.1.1, Page 2-2, last paragraph: You may consider using EPA 400-R-92-001, USEPA's "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents" dated May 1992 as your reference for guidance instead of ICRP 40 dated 1984. This will change the dose limits but not the intent of the paragraph. The dose limits for evacuation using EPA 400 is 1,000 to 5,000 millirem. Sheltering doses are not "clear cut". Guidance for sheltering can be found in EPA 400, 2.3.1, Pages 2-5 and 2-6.

Section 4.4. Coordination with Participating Government Agencies: The Ohio Emergency Management Agency should be included in this list. Please consider the following language to be included: "The Ohio Emergency Management Agency (EMA) coordinates state response in the event of an accident with offsite consequences. The Ohio EMA has the capability to monitor an offsite release and assist in the provision of radiological assessment. Their office is located in Columbus; however, they maintain a county liaison in Lake county approximately one (1) hour driving time from AMS."

Section 5.5: It is unclear whether you are referencing onsite (AMS) emergency workers or offsite emergency workers. Dose limits for offsite emergency workers will be decided by the assessment leader, the Ohio Department of Health (ODH).

Section 5.7: The State of Ohio should be notified if a contaminated injured person is transported offsite. This will more than likely be of media interest; therefore, the State would like first-hand information before the media reports in local papers. Please consider the following language to be added to Section 5.7: "The State of Ohio will be notified in the event of the transport of a contaminated injured person to any local hospital."

Section 7.3. Drills and Exercises: The Ohio EMA requests participation in the biennial exercises and quarterly communication drills.

Figure 7. AMS Response Organizations: Please place the Ohio Emergency Management Agency under AMS (Radiation Surveys and Assessments).

Section 13, Appendix D, ISP-37, Emergency Response and Notifications, Section 5.10, Emergencies Involving Significant (greater than 50 rad) Personnel Exposure (External): Please clarify that the dose limits relate to onsite individuals and not offsite. Also you may wish to consider the dose limits as referred to in Section 5.5.

Section 13, Appendix D, ISP 37, Section 7, Documentation: Are the forms referred to in Section 7.2.6 and 7.2.7 State forms?

Appendix D, Attachment 1, Page 14 of 22, Radiological Incidents/Events Classification: If Ohio EMA is to provide monitoring teams to confirm safe offsite levels (as in the Letter of Agreement), Ohio EMA should be notified of any event that has a release potential. Please consider adding Ohio EMA to the notifications for all levels of "minor release".



State of Ohio Environmental Protection Agency

STREET ADDRESS:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

October 25, 1995

Robert Meshter
Advanced Medical Systems, Inc.
1020 London Rd.
Cleveland, Ohio 44110

Dear Mr. Meshter:

I was recently provided with a September 21, 1995 copy of the Emergency Plan for Advanced Medical System's London Road Facility. I had provided comments to Mr. Cesar on the January, 1995 plan for this facility in a letter dated May 31, 1995. On September 25, 1995 I wrote to you in response to your letter of September 12, 1995 regarding emergency response to your facility by the Ohio EPA.

A review of the September 95 plan revealed:

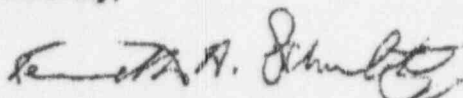
- 1) The letter of commitment for emergency response and notification procedures from Ohio EPA dated September 25 was not incorporated. I trust that you now have a copy of this letter to include in Appendix E.
- 2) Appendix D lists Jane Harf, Chairperson-Ohio EPA and her office telephone number on page 16 and 22. Jane Harf is the Chair of the State Emergency Response Commission (SERC). Under Section 3750.06 of the Ohio Revised Code release notification to the SERC is to be made to the Ohio EPA's Emergency Response Unit at 1-800-282-9378. Notifications for releases that meet the criteria set forth under Chapter 3750-25 of Ohio's Administrative Code must be initiated within thirty minutes.
- 3) I would recommend that the references to the Community Right-to-Know (EPCRA) Statute be changed from the federal section references, to the Ohio EPCRA references as set forth in Chapter 3750 or refer to both.
- 4) 4.4, bullet three - The Ohio EPA regional office is located in Twinsburg.
- 5) As noted in item two above, the contact number listed in Table 2 - Off-site Emergency Response Team for the Ohio EPA needs to be corrected. There are several individuals who are available to take release reports, therefore it is not necessary to list a name.

Robert Meshter
Page 2

- 6) Both federal and state statutes require release reports to be verbally made followed up by a written report if 10 curies or more of Cobalt - 60 are released. The connection from 5.1.2.4.4 on page 3 of 22 of Appendix D, Attachment 1 and Attachment 2 should note that the LEPC and fire department are a part of the notification scheme.

If you have any questions regarding these comments, please feel free to contact me at 614-644-2260.

Sincerely,



Kenneth A. Schultz, Manager
CEPP Section

cc: Mike Weber, NRC Region III
Larry Grove, Ohio EMA
Mike Kalstrom, Cuyahoga County LEPC
Jackie Mallott, AGO



Advanced Medical Systems, Inc.

1020 London Road
Cleveland, OH 44110
(216) 692-3270

FAX # (216) 692-3269

FAX MESSAGE

TO: Mike Weber

FROM: Bob Meschter

FAX NO:

DATE: 12-12-95

PAGE OF 1.5

FOR our conversation this AM, the attached comments on our EPLAN are being forwarded via FAX. You (NRC) are already in possession of comments from NEORSD, therefore we are not forwarding those.

PLEASE note that the 60 day comment period has elapsed. No comments have been received from Cleveland F.D., Police, EMS, University Hosp, LEPC or others.

We will take the comments provided by OHIO EMA & EPA under advisement & incorporate as appropriate.

Thank you.

Robert Meschter
RSO

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AMS File

December 13, 1995

Northeast Ohio Regional Sewer District
ATTN: Lawrence K. English
Assistant General Counsel
3826 Euclid Avenue
Cleveland, Ohio 44115-2504

Dear Mr. English:

I am writing in response to your letter of October 9, 1995, in which you discuss the emergency response status of Northeast Ohio Regional Sewer District (NEORS) with respect to emergencies at Advanced Medical Systems, Inc. (AMS).

Your letter states that my letter to you of June 8, 1995 "confirmed" that NEORS is a "first responder" to emergencies at AMS. Please be aware that my June 8, 1995 letter did not determine that NEORS is a first responder to emergencies at AMS, but simply acknowledged the NEORS representations in its April 6, 1995 letter to us that it was a first responder. The purpose of my letter was to advise you that AMS had agreed to send its emergency plan to NEORS, and forward NEORS's comments on the emergency plan to NRC. We regret that our letter apparently did not effectively communicate this message to you.

The term "first responder" is neither defined nor required by 10 CFR 30. However, 10 CFR 30.32(i)(3)(viii) does require, in part, that a licensee's emergency plan contain a commitment to and a brief description of the means to promptly notify offsite response organizations when an emergency is declared. The plan must also contain a commitment to notify the NRC immediately after the appropriate offsite response organizations have been notified.

In addition, 10 CFR 30.32(i)(4) requires that a licensee allow offsite response organizations expected to respond in case of an accident 60 days to comment on the licensee's emergency plan before submitting it to NRC. The licensee must provide any comments received within the 60 days to NRC with the emergency plan.

As a practical matter, the number of offsite response organizations receiving an immediate notification must be kept low, and is typically limited to those organizations with an immediate response function to perform (e.g., extinguish fires, assess releases, shelter/evacuate the public, etc.). It is understood that additional organizations may be notified and requested to assist after initial assessments and protective actions have been started.

NRC does not determine the "first responder" or "secondary responder" status of a government agency. However, since NRC is responsible for ensuring that a

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Northeast Ohio Regional
Sewer District

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licensee's emergency plan complies with the requirements of 10 CFR 30.32(i), NRC does ensure that the agencies listed as offsite response organizations are adequate to assure compliance with the regulations.

NRC has reviewed the AMS emergency plan and considers the agencies identified to receive an immediate notification, before NRC is notified, to be appropriate.

Regarding your concern about NEORSD's ability to review and respond to AMS' emergency plan and to have its comments formally considered by NRC, please be aware that AMS has provided NRC a copy of the NEORSD comments on the emergency plan (June 23, 1995 letter from NEORSD to AMS) and the AMS response to those comments (September 22, 1995 letter from AMS to NEORSD). NRC recently received the NEORSD comments on AMS' revised emergency plan (November 30, 1995 letter from NEORSD to AMS). NRC will consider these documents during its review of the revised emergency plan.

Should you have any further questions regarding AMS, please do not hesitate to contact me.

Sincerely,

Original Signed By
Cynthia D. Pederson for

James L. Caldwell, Deputy Director
Division of Nuclear Materials Safety

Docket No. 030-16055
License No. 34-19089-01

Attachments: 6/8/95 ltr-NRC to NEORSD
4/6/95 ltr-NEORSD to NRC

See Attached Distribution

DOCUMENT NAME: G:\LTRS2LIC\MTLS\030\95316055.L37

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DATE	12/12 /95		12/12 /95		12/12 /95 via phone		12/12 /95 via phone		12/13 /95	

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Sewer District

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Distribution

Robert Meschter
Radiation Safety Officer
Advanced Medical Systems, Inc.
121 N. Eagle Street
Geneva, OH 44041

Michael R. White, Mayor
City of Cleveland
601 Lakeside Avenue
Cleveland, OH 44114

Erwin J. Odeal, Executive Director
Northeast Ohio Regional Sewer District
3826 Euclid Avenue
Cleveland, OH 44115

Michael Kalstrom, Secretary
County of Cuyahoga
Cuyahoga Emergency Management
Assistance Center
1255 Euclid Avenue, Room 102
Cleveland, OH 44115-1807

Marian Zobler
U.S. Nuclear Regulatory Commission

bcc:

C. Jones, NMSS
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E-mail:

Bruce Berson (BAB1)
Joe DeCicco (JXD1)
Jim Caldwell (JLC1)
Fred Combs (FCC)
Donald Cool (DAC)
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Gary Shear (GLS)
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Tim Johnson (TCJ)
John Madera (JRM4)
Kevin Null (KGN)
Cindy Pederson (CDP1)

Bill Brach (EWB)
Mike Stein (MHS)
Mike Weber (MFW1)
Marian Zobler (MLZ)
Bernie Bordenick (BMB)
Josie Piccone (JMP1)

Robert E. Owen, Administrator
Department of Health
246 North High Street, 3rd Floor
P.O. Box 118
Columbus, OH 43266

Lisa Mehringer
City of Cleveland Law Department
601 Lakeside Avenue, Room 106
Cleveland, OH 44114

Erv Ball, Deputy Director
Cuyahoga County Board of Health
1375 Euclid Avenue, Suite 524
Cleveland, OH 44115

Jane Harf, Chairperson
Ohio State Emergency Response
Commission
1800 Watermark Drive
P.O. Box 163669
Columbus, OH 43216-3669