Advanced Medical Systems, Inc.
1020 London Road
Cleveland, OH 44110
(216) 692-3270

June 13, 1995

Mr. James Caldwell
Nuclear Materials Inspection, Section 2
United States Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60523-4351

Re: Application to Amend License No. 34-19089-01 - Control No. 98604

Dear Mr. Caldwell:

On March 22, 1995, Advanced Medical Systems, Inc. (AMS) requested amendment of License No. 34-19089-01 to permit re-connection of the AMS foundation under drain system to a new manhole and lateral. Supplement 4 to that request contained a description of when and under what conditions the under drain system was to be reconnected to the new lateral.

To date, we have received no response on this application. However, since the March 22, 1995 submittal, many of the assumptions used to generate Supplement 4 are no longer valid. For example:

- For a variety of reasons (e.g., process difficulties, delays in receiving confirmatory analytical results, and permitting/approval delays), a significantly greater of volume of water must be treated than was originally anticipated.
- The storage capacity for the treated water (e.g., in collapsible storage tanks located in the AMS warehouse) is finite, and the maximum capacity is rapidly approaching.
- AMS has been unable to obtain approval from the Northeast Ohio Regional Sewer District to connect the new lateral discharge line to the London Road Interceptor.

Because of these changes, AMS is submitting a Revised Supplement 4 (attached) that reflects our current position on when and under what conditions the under drain system will be reconnected to the new lateral.

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Once the USNRC has approved this amendment item, AMS is prepared to escalate the basement water treatment process to its maximum rate, install a discharge line from the building to a new

manhole on the property, remediate the sewer lines, re-connect the foundation drainage system to the new manhole, and begin managing the groundwater that collects around the basement from a pumping location in the new manhole.[1] However, it is critical that the USNRC take positive action on this request as soon as possible. In the very near future, we will have lowered the basement water level sufficiently to permit access to the contaminated discharge lines. If we are unable to re-connect the foundation drainage system to the newly-stalled manhole immediately after the lines are remediated, there will be no mechanism (access point) for removal of groundwater that will quickly return to surround the base of the building, and the basement will again fill with water. Until such time as the NEORSD permits us to connect a new lateral to the London Road Interceptor, you can be sure that the radiological characteristics of the groundwater pumped out of the new manhole will meet the USNRC's release criteria prior to its disposition.

Since this letter contains additional information in support of a previous amendment request (USNRC Control Number 98604), no fee is attached. If you have any questions, please contact me at (216) 692-3270. Your prompt attention to this matter is appreciated.

Sincerely,

Robert Meschter

Robert Meschter, RSO

cc: D. Cesar
D. A. Miller, Esq., Stavole & Miller

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1 We are confident that rapid completion of these steps will reduce the ultimate quantity of water that must be treated, prevent the re-occurrence of basement flooding, improve our ability to manage the groundwater that will quickly surround the building after the remedial actions are implemented.

SUPPLEMENT 4 (Revised)
FINAL REPAIR OF FACILITY DRAINAGE SYSTEM

Pursuant to Amendment No. 32 (March 17, 1995) of License No. 34-19089-01, a new discharge line and manhole from the AMS facility was to be installed. However, because approval to connect this line to the London Road Interceptor has not been granted, construction of the new lateral will stop at (and include) the manhole on the AMS property. When the existing lateral connection has been de-watered, the soils in the immediate vicinity of the four-inch discharge line from the building and the footer drains will be excavated. Once access to these locations is achieved, the lines will be isolated from the drainage system, the four-inch line and the existing lateral system will be "grouted" in, the foundation drainage system will be remediated as necessary, and re-connected to the new manhole. The following is the proposed sequence of events:

Step Number	Item	Comments
1	Install new manhole.	The new line will extend from the building to a manhole positioned on the AMS property. This new line will not be connected to the foundation drainage system at this time.
2	De-water existing lateral.	Water will be pumped into storage tanks.
3	Gain access to the 4-inch line and the 15-inch line.	Soil excavated in the immediate vicinity of the lines will be screened as it is removed to identify the presence of radiological constituents. Soil that exhibits a statistically-significant increase in count rate above background will be collected and analyzed for ^{60}Co concentrations prior to disposition. Soil that meets the screening criteria, or that contains less than 8 pCi/g of ^{60}Co from follow-up analyses, shall be used as backfill. Soil in excess of 8 pCi/g shall be containerized and stored in the AMS facility until site decommissioning.
4	Expose and remediate (as necessary) the 15-inch line.	The contamination status of the footer drainage system will be evaluated by the on-site Project Manager and the AMS Radiation Safety Officer. As necessary, the system will be decontaminated by the on-site project manager. The 4-inch line will be disconnected from the footer drains.
5	Create a water injection point.	A water injection point in/near the existing sump pit will be created and used to flush the foundation drainage system.
6	Flush and sample the foundation drainage system.	3,000 gallons of water currently stored in above-ground storage tanks and confirmed to contain no detectable ^{60}Co will be pumped into the injection point and re-collected at the site of the disconnected 4-inch line. The re-collected water will be stored in an empty above-ground storage tank and sampled. If detectable ^{60}Co is noted, an additional 3,000 gallons will be injected. This process will continue until there is no detectable ^{60}Co.
7	Grout in 4-inch line and existing lateral/manhole	

Step Number	Item	Comments
8	Connect foundation drainage system to new manhole.	
9	Back-fill excavated areas.	
10	Pump and tank groundwater out of new manhole	Water that accumulates in the manhole will be pumped into an above-ground storage tank. When the tank contains approximately 10,000 gallons, a sample will be collected and analyzed. If it contains no detectable ^{60}Co, it will be discharged. If detectable ^{60}Co is noted, an additional 10,000 gallons will be collected and sampled. This process will continue until there is no detectable ^{60}Co.
11	Connect the new lateral to the London Road Interceptor	Once authorization has been received from the NEORSD, the new lateral connection will be extended from the new manhole to the London Road Interceptor, and the use of the sanitary drainage system at AMS will be re-instated.

Any water collected during the remediation process will be sampled for its radiological constituents. Water that does not meet the release criteria will be treated by the methodology of multi-stage filtration and/or ion exchange prior to disposition. The release criteria shall be as described in the February 1, 1995 letter from J. Grobe to D. Cesar (e.g., less than 200 pCi/l of soluble ^{60}Co, consistent with Information Notice 94-07, "Solubility Criteria for Liquid Effluent Release to Sanitary Sewerage Under the Revised 10 CFR Part 20".

Modifications to this plan may be implemented, as deemed necessary by the on-site project manager, after consultation with the RSO and the excavation contractor, to accommodate dynamic conditions or unexpected circumstances. Health and safety coverage for this operation will be consistent with the requirements of RWP 95-10 (Rev. 1).