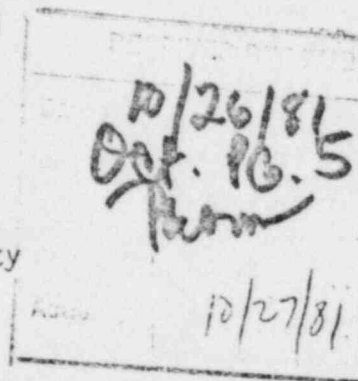




MSA Research Corporation • Evans City, Pennsylvania 16033 • Telephone: 412/538-3510

8 October 1981

Mr. Frederick Combs
Radioisotopes Materials Licensing Branch
Division of Fuel Cycle and Material Safety
U.S. Nuclear Regulatory Commission
Washington, DC 20555



Re: Byproduct Material License No. 37-00261-04

Dear Mr. Combs:

Mine Safety Appliances Company (MSA) developed and manufactured the Billionaire for detection of trace quantities of toxic and/or reactive gases. A 0.6 millicurie Americium-241 alpha source is used in the ion chamber to ionize the influent air or gas. A total of 108 of these instruments are installed in Titan-II missile silos at the present time.

The U.S. Air Force intends to issue a contract to MSA for reconditioning of these instruments. It is anticipated that many of the ion chambers will require replacement and this will entail:

1. Removal of the ion chamber from the instrument,
2. Replacement with new ion chambers
3. Replacement of Am-241 foil in those ion chambers that are removed

Applicant	131840 (11/80)
Check No.	131840-34
Amount/Fee Category	Applying
Type of Fee	Applying
Date Check Rec'd	10/22/81
Received By	Jackson

MSA personnel will be required to remove and replace the chambers in the field. They will be trained in proper techniques of chamber removal, leak testing, packaging for shipment and labeling.

Removal and replacement of Am-241 foils in the ion chambers will be done by a subcontractor, Applied Health Physics, Inc., Bethel Park, PA 15102. AHP will be responsible for counting leak test samples, and for storage and disposal of spent foils, also.

Training of MSA personnel will be done under the supervision of Mr. S.J. Rodgers, Radiation Health Officer and Mr. J.V. Friel. Mr. Rodgers will be responsible for maintaining an inventory of the Am-241 foils and leak test records.

8505290750 850226
REG1 LIC30
37-00261-04

PDR

SENT TO OFF. OF
INSPECTION AND ENFORCEMENT
Division of Mine Safety Appliances Company

Applicant	8089135
Check No.	8089135
Amount/Fee Category	Applying
Type of Fee	Applying
Date Check Rec'd	10/26/81
Received By	Thom

09301

C.C.

34-15060



8 October 1981

We request the following modification to MSAR Byproduct Material License No. 37-00261-04:

<u>By-Product Material</u>	<u>Chemical and/or Physical Form</u>	<u>Maximum Amount</u>
Am-241	Foils for ion chambers	100 mc (not to exceed 0.6 mc per foil)

The following conditions will apply:

1. Licensed material will be stored, used and transferred from the MSA Evans City Plant, Evans City, PA 16033 to Little Rock AFB, AR 72076; Davis-Monthan AFB, AZ 85707; McConnell AFB, KS 67221 and Applied Health Physics, Inc.
2. Licensed material will be shipped, received and used under the supervision of Mr. Sheridan Rodgers or Mr. Joseph Friel.
3. Mr. Rodgers will be responsible for all record keeping.
4. Leak tests will be performed prior to removal, replacement and/or shipment of ion chambers.

If there are any questions, please feel free to contact me.

Sincerely,

Sheridan J. Rodgers
Radiation Health Officer

/bhh

Enclosure (check [\$40.00]-amendment fee)

09301