NRC FORM 2
3-82
10 CFR 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR SOURCE MATERIAL LICENSE

APPROVED BY OMB
3150-0019
EXPIRES 12-31-83

Pursuant to the regulations in Title 10, Code of Federal Regulations, Chapter 1, Part 40, application is hereby made for a license to receive, possess, use, transfer, deliver or import into the United States, source material for the activity or activities described.

1. LICENSE INFORMATION *(Check one)*

- [ ] A. NEW LICENSE
- [ ] B. AMENDMENT TO LICENSE NO. _____
- [X] C. RENEWAL OF LICENSE NO. SUC-753
- [ ] D. PREVIOUS LICENSE NO. _____

2. NAME OF APPLICANT

TECHNIWELD INC.

PRINCIPAL BUSINESS ADDRESS

6001 Breakwater Ave.
Cleveland, OH 44102

Applicant: OCT 12
Check No.: 004959
Amount: [illegible]
Type of: See
Date: 9/27/83
Rec'd: [illegible]

3. STATE THE ADDRESS(ES) AT WHICH SOURCE MATERIAL WILL BE POSSESSED OR USED

6001 Breakwater Avenue
Cleveland, OH 44102

4. NAME OF PERSON TO BE CONTACTED CONCERNING THIS APPLICATION

Howard R. Irwin

TELEPHONE NUMBER *(Of person to be contacted)*

412-655-3737

5. DESCRIBE PURPOSE FOR WHICH SOURCE MATERIAL WILL BE USED

Shielding material in Picker Corporation and Advanced Medical Systems teletherapy and radiography machine heads.

6. STATE THE TYPE OR TYPES, CHEMICAL FORM OR FORMS, AND QUANTITIES OF SOURCE MATERIAL YOU PROPOSE TO RECEIVE, POSSESS, USE, OR TRANSFER UNDER THE LICENSE

A. TYPE	B. CHEMICAL FORM	C. PHYSICAL FORM *(Including % U or Th)*	D. MAXIMUM AMOUNT AT ANY ONE TIME *(Kilograms)*
NATURAL URANIUM			
URANIUM DEPLETED IN THE U-235 ISOTOPE	Solid	0.2% machined castings, nickel plated	410
THORIUM *(Isotope)*			

E. MAXIMUM TOTAL QUANTITY OF SOURCE MATERIAL YOU WILL HAVE ON HAND AT ANY TIME *(Kilograms)*

410

7. DESCRIBE THE CHEMICAL, PHYSICAL, METALLURGICAL, OR NUCLEAR PROCESS OR PROCESSES IN WHICH THE SOURCE MATERIAL WILL BE USED, INDICATING THE MAXIMUM AMOUNT OF SOURCE MATERIAL INVOLVED IN EACH PROCESS AT ANY ONE TIME, AND PROVIDING A THOROUGH EVALUATION OF THE POTENTIAL RADIATION HAZARDS ASSOCIATED WITH EACH STEP OF THOSE PROCESSES

See attachment

8. LIST THE NAMES AND ATTACH A RESUME OF THE TECHNICAL QUALIFICATIONS INCLUDING TRAINING AND EXPERIENCE OF APPLICANT'S SUPERVISORY PERSONNEL AND THE PERSON RESPONSIBLE FOR THE RADIATION SAFETY PROGRAM *(or of applicant if an individual).*

Charles Fassinger, President
Robert Kaase, V.P. Manufacturing

9. DESCRIBE THE EQUIPMENT AND FACILITIES WHICH WILL BE USED TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE OR PROPERTY AND RELATE THE USE OF THE EQUIPMENT AND FACILITIES TO THE OPERATIONS LISTED IN ITEM 9. INCLUDE: A. RADIATION DETECTION *(including film badges, dosimeters, counters, air sampling, and other survey equipment as appropriate. The description of radiation detection instruments should include the instrument characteristics such as type of radiation detected, window thickness, and the range(s) of each instrument).*

None required

B. METHOD, FREQUENCY AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED IN A. ABOVE, INCLUDING AIR SAMPLING EQUIPMENT *(for film badges, specify method of calibrating and processing, or name supplier).*

Not applicable

CONTROL NO. 7 0 9 1 5

9C. VENTILATION EQUIPMENT WHICH WILL BE USED IN OPERATIONS WHICH PRODUCE DUST, FUMES, MISTS, OR GASES, INCLUDING PLAN VIEW SHOWING TYPE AND LOCATION OF HOOD AND FILTERS. MINIMUM VELOCITIES MAINTAINED AT HOOD OPENINGS AND PROCEDURES FOR TESTING SUCH EQUIPMENT.

None required

10. DESCRIBE PROPOSED PROCEDURES TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE AND PROPERTY AND RELATE THESE PROCEDURES TO THE OPERATIONS LISTED IN ITEM 7; INCLUDE:
A. SAFETY FEATURES AND PROCEDURES TO AVOID NONNUCLEAR ACCIDENTS, SUCH AS FIRE, EXPLOSIONS, ETC., IN SOURCE MATERIAL STORAGE AND PROCESSING AREAS.

Storage vault is of fireproof construction. Manufacturing areas are fully sprinkled by an automatic system. Notification of fire dept. is automatic

B. EMERGENCY PROCEDURES IN THE EVENT OF ACCIDENTS WHICH MIGHT INVOLVE SOURCE MATERIAL.

Notify Mr. Charles Fassinger, President, Techniweld Inc. Telephone home: 216-467-5820, business: 216-961-6015. He will determine the extent of damage and consult with Advanced Medical Systems personnel if necessary. In the event of a fire, inform firefighters of the location of depleted Uranium.

C. DETAILED DESCRIPTION OF RADIATION SURVEY PROGRAM AND PROCEDURES.

No program required.

11. WASTE PRODUCTS

A. QUANTITY AND TYPE OF RADIOACTIVE WASTE THAT WILL BE GENERATED

☒ NONE WILL BE GENERATED

☐ SEE ATTACHED SUPPLEMENTAL SHEET

B. DETAILED PROCEDURES FOR WASTE DISPOSAL

12. IF PRODUCTS FOR DISTRIBUTION TO GENERAL LICENSEES OR TO THE GENERAL PUBLIC UNDER AN EXEMPTION CONTAINED IN 10 CFR 40 ARE TO BE MANUFACTURED, USE A SUPPLEMENTAL SHEET TO FURNISH A DETAILED DESCRIPTION OF THE PRODUCT, INCLUDING:

A. PERCENT SOURCE MATERIAL IN THE PRODUCT AND ITS LOCATION IN THE PRODUCT.

B. PHYSICAL DESCRIPTION OF THE PRODUCT INCLUDING CHARACTERISTICS, IF ANY, THAT WILL PREVENT INHALATION OR INGESTION OF SOURCE MATERIAL THAT MIGHT BE SEPARATED FROM THE PRODUCT.

C. BETA AND BETA PLUS GAMMA RADIATION LEVELS *(Specify instrument used, date of calibration and calibration techniques used)* AT THE SURFACE OF THE PRODUCT AND AT 12 INCHES.

D. METHOD OF ASSURING THAT SOURCE MATERIAL CANNOT BE DISASSOCIATED FROM THE MANUFACTURED PRODUCT.

13. CERTIFICATE
(This must be completed by the applicant)

The applicant and any official executing this certificate on behalf of the applicant named in item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 40, and that all information contained herein, including any supplements attached hereto, is true to the best of our knowledge and belief.

Charles R. Fassinger	CHARLES R. FASSINGER	10-7-85
APPLICANT'S SIGNATURE	PRINTED OR TYPED NAME	DATE

PRESIDENT

TITLE OF CERTIFYING OFFICIAL AUTHORIZED TO ACT ON BEHALF OF THE APPLICANT

WARNING: 18 U.S.C. Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

7. Techniweld is a vendor of Advanced Medical Systems, Inc. which manufactures teletherapy equipment. Techniweld is involved in the machine head manufacturing process. The company performs a number of welding and machining operations on the head castings and shutter plug and rotor assemblies. The depleted Uranium which is the subject of this license is received in the form of finished castings, already machined, drilled and nickel plated by another vendor.

The depleted Uranium parts range in size from 6.6 Kgs. to a maximum of 107 Kgs. They have been designed for use as shielding material. The parts, in the form received and in the quantities requested, present no hazard to personnel or property.

The parts are received in closed containers, properly marked with the radiation symbol and 'Caution Radioactive Material' warning. At the time of receipt, verification of the part type and quantity is made. The quantity received is that required to complete the customer's order. Techniweld does not desire to provide long term storage of depleted Uranium for its customer.

Until the components are needed in the manufacturing area, they are stored in their containers inside a fireproof vault, which has limited access. As needed, they are removed from this storage area and taken to the manufacturing areas. Gloves are worn when direct handling of the parts is necessary. The parts are secured within either the head castings or the shutter plug and rotor assemblies, then the subassembly is sent to another vendor for lead filling. After lead pouring, the subassemblies are returned to Techniweld (the depleted Uranium components are now encased in lead) for final machining. The depleted Uranium parts are not modified in any way by Techniweld personnel, nor are they subjected to any welding or machinery operations.