

FORM AEC-2  
(2-61)  
Previous editions  
are obsolete.

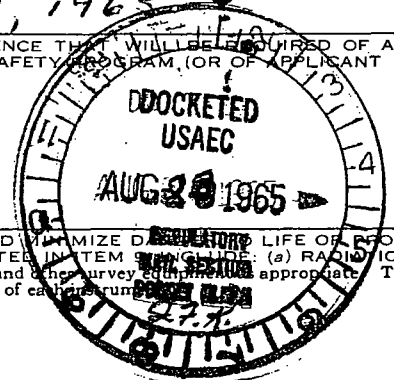
FORM APPROVED  
BUREAU OF BUDGET NO. 38-R002.9.

UNITED STATES ATOMIC ENERGY COMMISSION

APPLICATION FOR SOURCE MATERIAL LICENSE

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.

<p>1. (Check one)</p> <p><input checked="" type="checkbox"/> (a) New license</p> <p><input type="checkbox"/> (b) Amendment to License No. _____</p> <p><input type="checkbox"/> (c) Renewal of License No. _____</p> <p><input type="checkbox"/> (d) Previous License No. <u>STC 681</u></p>	<p>2. NAME OF APPLICANT</p> <p style="font-size: 1.2em;"><u>Kawoeki Chemical Company</u></p> <p>3. PRINCIPAL BUSINESS ADDRESS</p> <p><u>220 E. 42 Street</u> <u>New York N.Y. 10017</u></p>																
<p>4. STATE THE ADDRESS(ES) AT WHICH SOURCE MATERIAL WILL BE POSSESSED OR USED</p> <p><u>B-11 Yard, Canton Railroad Storage Yards, Baltimore, Md.</u> <u>and at Vanadium Corp. of America Plant at Cambridge, Ohio</u></p>																	
<p>5. BUSINESS OR OCCUPATION</p> <p><u>Chemical Manufacturer</u></p>	<p>6. (a) IF APPLICANT IS AN INDIVIDUAL, STATE CITIZENSHIP _____ (b) AGE _____</p>																
<p>7. DESCRIBE PURPOSE FOR WHICH SOURCE MATERIAL WILL BE USED</p> <p><u>Material to be stored indefinitely or until processing operations are begun. 100 Tons to be stored at Cambridge, Ohio, balance at Baltimore, Md.</u></p>																	
<p>8. 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</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">(a) TYPE</th> <th style="width: 20%;">(b) CHEMICAL FORM</th> <th style="width: 20%;">(c) PHYSICAL FORM (Including % U or Th.)</th> <th style="width: 40%;">(d) MAXIMUM AMOUNT AT ANY ONE TIME (in pounds)</th> </tr> </thead> <tbody> <tr> <td>NORMAL URANIUM</td> <td></td> <td></td> <td></td> </tr> <tr> <td>URANIUM DEPLETED IN THE U-235 ISOTOPE</td> <td></td> <td></td> <td></td> </tr> <tr> <td>THORIUM</td> <td><u>ThO<sub>2</sub></u></td> <td><u>Slags</u></td> <td><u>~12.7 TONS - ThO<sub>2</sub></u></td> </tr> </tbody> </table> <p>(e) MAXIMUM TOTAL QUANTITY OF SOURCE MATERIAL YOU WILL HAVE ON HAND AT ANY TIME (in pounds)</p> <p><u>approx. 12.7 TONS as 0.11% ThO<sub>2</sub> in Tin Slags.</u></p>		(a) TYPE	(b) CHEMICAL FORM	(c) PHYSICAL FORM (Including % U or Th.)	(d) MAXIMUM AMOUNT AT ANY ONE TIME (in pounds)	NORMAL URANIUM				URANIUM DEPLETED IN THE U-235 ISOTOPE				THORIUM	<u>ThO<sub>2</sub></u>	<u>Slags</u>	<u>~12.7 TONS - ThO<sub>2</sub></u>
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<p>9. 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 HAZARDS ASSOCIATED WITH EACH STEP OF THOSE OPERATIONS.</p> <p style="font-size: 1.2em; text-align: center;"><u>Storage only as stated in correspondence dated</u> <u>Jan. 9, 1963, June 6, 12, 18 &amp; 19, 1963</u></p>																	
<p>10. DESCRIBE THE MINIMUM TECHNICAL QUALIFICATIONS INCLUDING TRAINING AND EXPERIENCE THAT WILL BE REQUIRED OF APPLICANT'S SUPERVISORY PERSONNEL INCLUDING PERSON RESPONSIBLE FOR RADIATION SAFETY PROGRAM, (OR OF APPLICANT IF APPLICANT IS AN INDIVIDUAL).</p> <p style="font-size: 1.2em; text-align: center;"><u>See No 9</u></p>																	
<p>11. DESCRIBE THE EQUIPMENT AND FACILITIES WHICH WILL BE USED TO PROTECT HEALTH AND MINIMIZE DANGERS TO LIFE OR PROPERTY AND RELATE THE USE OF THE EQUIPMENT AND FACILITIES TO THE OPERATIONS LISTED IN ITEM 9 ABOVE. (a) RADIATION DETECTION AND RELATED INSTRUMENTS (including film badges, dosimeters, counters, air-monitoring and other survey equipment appropriate. The description of radiation detection instruments should include the type of radiation detected and the range(s) of calibration.)</p> <p style="font-size: 1.2em; text-align: center;"><u>See No 9</u></p>																	
<p>(b) METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED IN (a) ABOVE (for film badges, specify method of calibrating and processing, or name supplier.)</p> <p style="font-size: 1.2em; text-align: center;"><u>See No 9</u></p>																	



11(c). VENTILATION EQUIPMENT WHICH WILL BE USED IN OPERATIONS WHICH PRODUCE DUST, FUMES, MISTS, GASES, ETC.

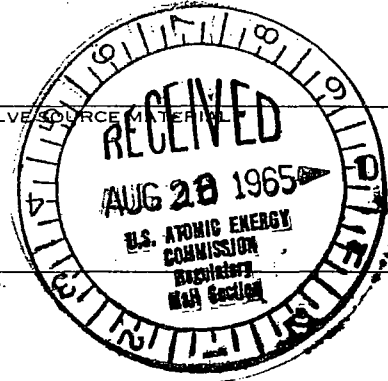
See No 9

12. DESCRIBE PROPOSED PROCEDURES TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE AND PROPERTY AND RELATE THESE PROCEDURES TO THE OPERATIONS LISTED IN ITEM 9; INCLUDE:

(a) PROCEDURES FOR USE OF NUCLEAR MATERIALS AND SAFETY FEATURES AND PROCEDURES TO AVOID NONNUCLEAR ACCIDENTS, SUCH AS FIRE, EXPLOSION, ETC., IN SOURCE MATERIAL STORAGE AND PROCESSING AREAS.

See No 9

(b) EMERGENCY PROCEDURES IN THE EVENT OF ACCIDENTS WHICH MIGHT INVOLVE SOURCE MATERIAL



(c) DETAILED DESCRIPTION OF RADIATION SURVEY PROGRAM AND PROCEDURES.

13. WASTE PRODUCTS: If none will be generated, state "None" opposite (a), below. If waste products will be generated, check here  and explain on a supplemental sheet:

- (a) Quantity and type of radioactive waste that will be generated. *None*
- (b) Detailed procedures for waste disposal.

14. IF PRODUCTS FOR DISTRIBUTION 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 technique 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.

### CERTIFICATE

(This item must be completed by applicant)

15. The applicant, and any official executing this certificate on behalf of the applicant named in Item 1, 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 and correct to the best of our knowledge and belief.

Kawacki Chemical Company  
(Applicant named in Item 2)

Dated 23 August 1965

BY: Henry T. Shargo

Manager Development Sales  
(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.