

FROM: Kawecki Chemical Company  
New York 17, New York

DATE OF DOCUMENT  
1-9-63

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1-11-63

NO.: 232

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TO: AEC  
LOR

ORIG.: CC: OTHER:  
x 3

ACTION NECESSARY  CONCURRENCE  DATE ANSWERED:  
NO ACTION NECESSARY  COMMENT  BY:

CLASSIF.: POST OFFICE  
REG. NO:

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ENCLOSURES: (4 aya. rec'd)

Form AEC-2 dtl. 1-9-63 rec. source matl.  
lic. to cover 11,000 tons of Malayan Fir  
slag for use at : County Line, Boyertown,  
Pennsylvania.

REMARKS: Mail Room Distribution:  
1-cc Copy

ACKNOWLEDGED

U. S. ATOMIC ENERGY COMMISSION MAIL CONTROL FORM

DOCKET NO. 40-6940

# KAWECKI CHEMICAL COMPANY

E&R File Copy

Manufacturers of Chemicals, Metals and Alloys

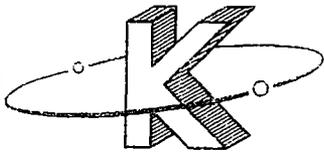
Reply to: 220 East 42nd Street, New York 17, N.Y.

Telephone MURRAY Hill 2-7143

CABLE ADDRESS: KAWECKIKEM NEW YORK

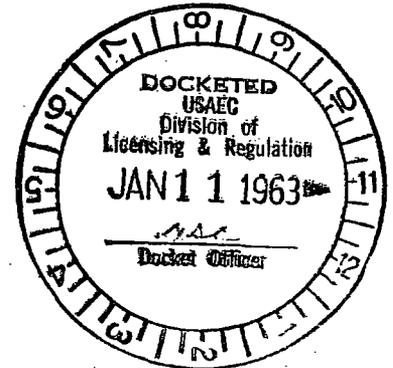
Plant at Boyertown, Pennsylvania

January 9, 1963



United States Atomic Energy Commission  
Washington 25, D.C.

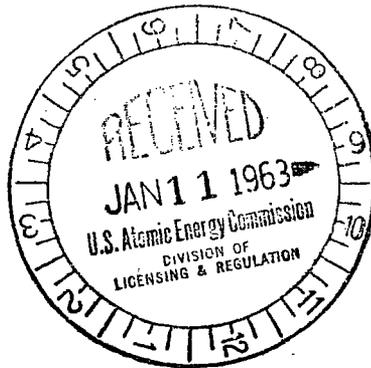
Attention: Director, Division of Licensing  
& Regulation



Gentlemen:

With reference to Form AEC-2, Application for Source Material License, Kaweck Chemical Company has purchased 11,000 tons of Malayan Tin Slag for delivery around May 1, 1963. At this time the company feels that it cannot properly complete sections #8 - #14 of the form. Composition of the Tin Slag is approximately as follows:

SnO	0.87%
SiO <sub>2</sub>	22.98
FeO	9.68
Al <sub>2</sub> O <sub>3</sub>	10.04
CaO	24.00
MnO	2.09
ZnO	0.48
MgO	1.25
Cr <sub>2</sub> O <sub>3</sub>	0.02
P <sub>2</sub> O <sub>5</sub>	0.57
WO <sub>3</sub>	1.53



TiO <sub>2</sub>	8.28
Ta <sub>2</sub> O <sub>5</sub>	4.74
Cb <sub>2</sub> O <sub>5</sub>	4.37
ZrO <sub>2</sub>	4.50
V <sub>2</sub> O <sub>5</sub>	0.41
As	0.01
S	0.03
Na <sub>2</sub> O + K <sub>2</sub> O	0.80

Our purpose is to to extract Tantalum and Columbian values from the tin slag to be used in the normal course of our business, rather than for any of the source materials. We, however, are not confident that the samples we have received are truly representative as far as the source materials are concerned. Therefore, we also are unable to specifically state how we will handle and process the tin slag for recovery of the tantalum and columbian values, nor whether the source material, if any, will be recovered.

ACKNOWLEDGED

An analysis reported by Knight Laboratories of Liverpool has indicated an approximate 0.05% Thorium oxide content. Again, we would be more confident of the actual composition after we investigate for ourselves.

Kawecki Chemical Company feels that it is in the best interests of all concerned to await receipt of the tin slag, and at that time take positive representative samples for analysis. After which, we can notify the necessary parties not only as to the proper handling procedures but also the method by which the material will be processed.

Form AEC-2 has been completed to the best of our ability; if the procedures as outlined above do not meet with your approval, please notify me.

Yours very truly,

KAWECKI CHEMICAL COMPANY



P.M. Nisselson

PMN/nr

encl.

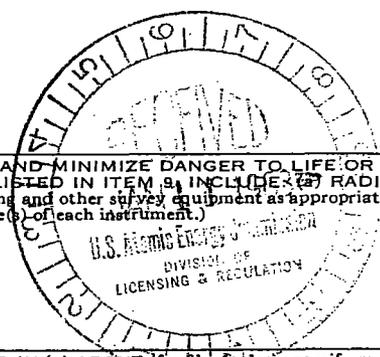
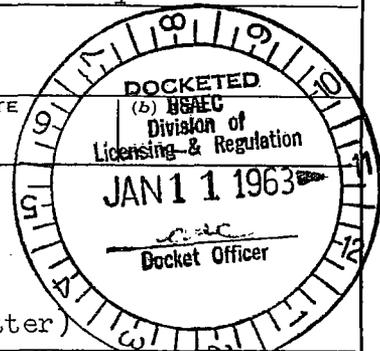
UNITED STATES ATOMIC ENERGY COMMISSION

*File Copy*

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. _____</p>	<p>2. NAME OF APPLICANT</p> <p><b>KAWECKI CHEMICAL COMPANY</b></p> <p>3. PRINCIPAL BUSINESS ADDRESS</p> <p>County Line, Boyertown, Pennsylvania</p>																
<p>4. STATE THE ADDRESS(ES) AT WHICH SOURCE MATERIAL WILL BE POSSESSED OR USED</p> <p>Boyertown, Pennsylvania</p>																	
<p>5. BUSINESS OR OCCUPATION</p> <p>Inorganic Chemistry</p>	<p>6. (a) IF APPLICANT IS AN INDIVIDUAL, STATE CITIZENSHIP</p> <p>-</p>																
<p>7. DESCRIBE PURPOSE FOR WHICH SOURCE MATERIAL WILL BE USED</p> <p>Recover Tantalum and Columbium values</p> <p style="text-align: right;">(See attached letter)</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:25%;">(a) TYPE</th> <th style="width:25%;">(b) CHEMICAL FORM</th> <th style="width:25%;">(c) PHYSICAL FORM (Including % U or Th.)</th> <th style="width:25%;">(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></td> <td></td> <td></td> </tr> </tbody> </table> <p>(e) MAXIMUM TOTAL QUANTITY OF SOURCE MATERIAL YOU WILL HAVE ON HAND AT ANY TIME (in pounds)</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			
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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>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>11. 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, INCLUDING RADIATION DETECTION AND RELATED INSTRUMENTS (including film badges, dosimeters, counters, air-monitoring and other survey equipment as appropriate. The description of radiation detection instruments should include the type of radiation detected and the range of each instrument.)</p>																	
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232

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

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.

(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.  
 (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:  
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 (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.*

KAWECKI CHEMICAL COMPANY

*(Applicant named in Item 2)*

Dated January 9, 1962

BY: *Henry I. Sharpe*  
 H.T. Sharpe

Asst. Secretary

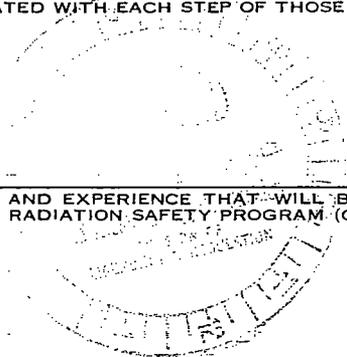
*(Title of certifying official authorized to act on behalf of the applicant)*

**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.

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.

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