FORM NRC-313 I (1-79) 10 CFR 30

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

See attached instructions for details.

Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

1. APPLICATION FOR: *(Check and/or complete as appropriate)*

	a. NEW LICENSE
X	b. AMENDMENT TO: LICENSE NUMBER
	c. RENEWAL OF: LICENSE NUMBER

2. APPLICANT'S NAME *(Institution, firm, person, etc.)*

Rockwell International Corp.

TELEPHONE NUMBER: AREA CODE – NUMBER EXTENSION

(412) 247-3000

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

Raymond Pstir

TELEPHONE NUMBER: AREA CODE – NUMBER EXTENSION

(412) 247-3236

4. APPLICANT'S MAILING ADDRESS *(Include Zip Code)*

400 N. Lexington Ave.
Pittsburgh, PA 15208

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED *(Include Zip Code)*

400 N. Lexington Ave.
Pittsburgh, PA 15208

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL
(See Items 16 and 17 for required training and experience of each individual named below)

	FULL NAME	TITLE
a.	Raymond Pstir	Chemical Engineer
b.	Kenneth J. Uzar	Chemical Technician
c.		

7. RADIATION PROTECTION OFFICER

Raymond Pstir

Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.

8. LICENSED MATERIAL

LINE NO.	A ELEMENT AND MASS NUMBER	B CHEMICAL AND/OR PHYSICAL FORM	C NAME OF MANUFACTURER AND MODEL NUMBER *(If Sealed Source)*	D MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
(1)	NOTE: All information for items 8-16 same as license			
(2)	37-19329-01.			
(3)				
(4)				

	E DESCRIBE USE OF LICENSED MATERIAL
(1)	
(2)	
(3)	
(4)	

9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)			
(2)			
(3)			
(4)			

10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED *(alpha, beta, gamma, neutron)* E	SENSITIVITY RANGE *(milliroentgens/hour or counts/minute)* F
(1)						
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☐ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

☐ b. CALIBRATED BY APPLICANT

Attach a separate sheet describing method, frequency and standards used for calibrating instruments.

12. PERSONNEL MONITORING DEVICES

TYPE *(Check and/or complete as appropriate.)* A	SUPPLIER *(Service Company)* B	EXCHANGE FREQUENCY C
☐ (1) FILM BADGE		☐ MONTHLY
☐ (2) THERMOLUMINESCENCE DOSIMETER *(TLD)*		☐ QUARTERLY
☐ (3) OTHER *(Specify)*: _____		☐ OTHER *(Specify)*:
_____		_____
_____		_____

13. FACILITIES AND EQUIPMENT (Check were appropriate and attach annotated sketch(es) and description(s).

☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS *(Include filtration, if any)*, ETC.

☐ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING *(fixed and/or temporary)*, ETC.

☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.

☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures *(if needed)*, day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.

16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.

    a. Principles and practices of radiation protection.

    b. Radioactivity measurement standardization and monitoring techniques and instruments.

    c. Mathematics and calculations basic to the use and measurement of radioactivity.

    d. Biological effects of radiation.

17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

18. CERTIFICATE

(This item must be completed by 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 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

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.

a. LICENSE FEE REQUIRED *(See Section 170.31, 10 CFR 170)* $40.00	b. CERTIFYING OFFICIAL *(Signature)* Raymond Pstir
	c. NAME *(Type or print)* Raymond Pstir
(1) LICENSE FEE CATEGORY: 3L (Amendment)	d. TITLE Chemical Engineer
(2) LICENSE FEE ENCLOSED: $	e. DATE 7/29/81

FORM NRC-313 I (1-79)

ITEM 17

Kenneth J. Uzar -- Chemical Technician

Education: Received two years training in laboratory technology from Parkway West Area Technical School and is currently attending the University of Pittsburgh in a night school program leading to a BS degree in chemistry.

Experience: Has been employed by Rockwell International Corporation's Flow Control Division since November, 1978, as a chemical technician. Work experience includes extensive use of analytical instruments such as AA, IR, GC, and X-ray diffraction as well as physical test instruments and measuring devices. Has been exposed to both the theory and operation of analytical instruments utilizing radioactive source detectors through college training and industrial analysis.

U. S. NUCLEAR REGULATORY COMMISSION
MATERIALS LICENSE

This Copy Is For Your File.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter 1, Parts 30, 31, 32, 33, 34, 35, 36, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s); and to import such byproduct and source material. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Rockwell International Corporation 400 N. Lexington Avenue 2. Pittsburgh, Pennsylvania 15208	3. License number 37-19329-01 4. Expiration date April 30, 1985 5. Docket or Reference No.

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Nickel 63	A. Foils contained in Perkin-Elmer Model 009-0282 detector cells	A. Not to exceed 15 millicuries per foil
B. Promethium 147	B. Sealed sources (Twin City Testing Corporation Model 66PC-PM147)	B. Not to exceed 600 microcuries per source
C. Thallium 204	C. Sealed sources (Twin City Testing Corporation Model 66 PC-T1204)	C. Not to exceed 50 microcuries per source

9. Authorized use

A. For use in Perkins-Elmer gas chromatographs for sample analysis.
B. and C. For use in Twin City Testing Corporation Model NX-500 Beatascope for coating thickness measurements.

PDR 8603190337

MATERIALS LICENSE

Supplementary Sheet

License Number 37-19329-01

CONDITIONS

Docket or
Reference No. _____

10. Licensed material shall be used only at 400 N. Lexington Avenue, Pittsburgh, Pennsylvania.

11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."

12. Licensed material shall be used by, or under the supervision of, Raymond Pstir or David A. Rollins.

13. Detector cells containing licensed material shall not be opened or the foil sources removed from the detector cell by the licensee.

14. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in Section 20.203(a)(1), Title 10, Code of Federal Regulations, Part 20, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.

15. A. Each chromatograph detector containing Nickel 63 shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a detector received from another person shall not be put into use until tested.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the surfaces of the device in which the foil is mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the foil from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the test with the U. S. Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement, 631 Park Avenue, King of Prussia, Pennsylvania 19406, describing the equipment involved, the test results, and the corrective action taken.

CONDITIONS

D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.

16. A. (1) Each sealed source containing licensed material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.

(2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

(3) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within five (5) days of the test with the U. S. Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement, 631 Park Avenue, King of Prussia, Pennsylvania 19406, describing the equipment involved, the test results, and the corrective action taken.

D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.

CONDITIONS

17. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.

18. The licensee shall conduct a physical inventory every six (6) months to account for all foils and sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantitie and kinds of byproduct material, location of foils and sealed sources, and the date of the inventory.

19. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in application dated February 29, 1980. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

For the U. S. Nuclear Regulatory Commission

Date APR 11 1980

by Material Licensing Branch
Division of Fuel Cycle and
Material Safety
Washington, D.C. 20555