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

U. 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)*

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

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

Rockwell International Corporation

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

412-247-3336

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	Associate Chemical Engineer
b.	David A. Rollins	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)	Ni - 63	Deposited on Au or Pt foil	New England Nuclear Corp. Model NER-002 or Nuclear Radiation Development Corp. Model N1001	10 millicuries
(2)	Pm - 147	Sealed Source	Twin City Corp. 66PC-PM147	Two sources of 600 microcuries each
(3)	Tl - 204	Sealed Source	Twin City Corp. 66PC-Tl204	Two sources of 50 microcuries each
(4)				

	E DESCRIBE USE OF LICENSED MATERIAL
(1)	Electron capture detection in gas chromatographic analysis of organic solvents.
(2)	Coating thickness measurements using beta backscatter technique.
(3)	Coating thickness measurements using beta backscatter technique.
(4)	

FORM NRC-313 I (1-79)

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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)	Gas Chromatograph ECD sealed cell	Perkin-Elmer	009-0282
(2)	Measuring system or pencil probe used in conjunction with NX-500 Beatascope readout.	Twin City Testing Corp.	Type AT system, OD-350 probe
(3)	Measuring system or pencil probe used in conjunction with NX-500 Beatascope readout	Twin City Testing Corp.	Type AT system OD-350 probe
(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)	N.A.					
(2)	N.A.					
(3)	N.A.					
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☐ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

N.A.

☐ b. CALIBRATED BY APPLICANT

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

N.A.

12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
☐ (1) FILM BADGE N.A.		☐ 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

N.A.

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 APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

All sources will be returned to manufacturer per prescribed procedure.

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)* $110.00	b. CERTIFYING OFFICIAL *(Signature)* Raymond P Stir
	c. NAME *(Type or print)* Raymond Pstir
(1) LICENSE FEE CATEGORY: 3L	d. TITLE Associate Chemical Engineer
(2) LICENSE FEE ENCLOSED: $ $110.00	e. DATE 2/29/80

FORM NRC-313 I (1-79)

Item 15

Radiation Protection Program

Wipe tests for radioactivity will be performed at six month intervals by the radiation protection officer. Wipe tests on the ECD Ni-63 sealed source will be performed utilizing test kit (part No. 009-1667) supplied by Perkin-Elmer Corporation for this purpose. The wipe tests will be submitted as prescribed by Perkin-Elmer Corporation to one of the following for a radiation survey.

Nuclear Sources and Services
5711 Ethridge St.
Houston, Texas 77017

or

Nuclear Radiation Development Corp.
2937 Alt Blvd.
Grand Island, New York

Ni-63 foil replacement will be performed by one of the above mentioned companies. Leak testing of the Pm-147 and Tl-204 sealed sources will be performed using a Mark V leak test kit supplied by Applied Health Physics, Inc. Leak tests will be submitted to the same for evaluation.

Applied Health Physics, Inc.
2986 Industrial Blvd.
Bethel Park, PA 15102

Leak test records and certifications will be kept on file by the radiation protection officer.

Analytical instruments using the source devices will be stationed in a single laboratory room in Rockwell International's Chemical Engineering Department. Traffic through this lab area will be restricted and appropriate signs will be posted. When not in use, removable sealed sources will be stored in the Department's key operated safe to which only those individuals specified under item 6 will have access.

The radiation protection officer will directly supervise and be responsible for training the specified technician in item 6 in the safe use of measuring devices utilizing the sources.

Item 16

Formal Training

R. Pstir, Radiation Protection Officer

Received instruction, on the university level through physics and chemistry courses, commensurate with the safe use of analytical instruments employing radioactive detection devices and sources.

Both R. Pstir and D. Rollins will undergo further appropriate training as required in the form of informal courses sponsored by instrument manufacturers.

Item 17

R. Pstir — Associate Chemical Engineer

Education: Received BS degree in chemistry from the University of Pittsburgh in August, 1974.

Experience: Has been employed by Rockwell International since June, 1975, in the Flow Control Division's Chemical Engineering Department in Pittsburgh. Work involvement includes materials analysis and instrumental analyses related to pollution control and industrial hygiene. Through college training, has gained experience with and knowledge of radiation commensurate with the operation of analytical instrumentation employing radioactive source detectors.

D.A. Rollins — Chemical Technician

Education — Received one years training in pollution analysis from Triangle Institute of Technology in Pittsburgh 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 June, 1978, as a chemical technician. Work experience includes extensive use of analytical instrumentation such as AA, IR, AND GC as well as physical test instruments and measuring devices. Has been exposed to some radiation theory through course work but has yet to have worked or gained direct experience with analytical instruments utilizing radioactive sources.

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

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X	a. NEW LICENSE
	b. AMENDMENT TO: LICENSE NUMBER
	c. RENEWAL OF: LICENSE NUMBER 47-19329

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

Rockwell International Corporation

TELEPHONE NUMBER: AREA CODE – NUMBER EXTENSION
412-247-3000

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

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a.	Raymond Pstir	Associate Chemical Engineer
b.	David A. Rollins	Chemical Technician
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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.

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(3)	Coating thickness measurements using beta backscatter technique.
(4)	

License Fee Information
Not Applicable

03052

03052

FORM NRC 313 I (1-79)

COPIES SENT TO OFF. OF INSPECTION

03052

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NAME, ADDRESS, AND FREQUENCY

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Applicant...
Check No. 14164830
Amount/Fee Category ... 3L
Type of Fee ... APPLICATION
Date Check Rec'd ... MAR 2 1980
Received By ... Brown

18. CERTIFICATE
(This item must be completed by applicant)

RECEIVED BY LFMB
Date MAR 20 1980
Log MAR 765 N.L.
By ... Brown
Orig. To ...
Action Compl. 3/24/80

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)* $110.00	b. CERTIFYING OFFICIAL *(Signature)* Raymond Pstir
	c. NAME *(Type or print)* Raymond Pstir
(1) LICENSE FEE CATEGORY: 3L	d. TITLE Associate Chemical Engineer
(2) LICENSE FEE ENCLOSED: $ $110.00	e. DATE 2/29/80

FORM NRC-313 I (1-79)

Item 15

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or

Nuclear Radiation Development Corp.
2937 Alt Blvd.
Grand Island, New York

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Bethel Park, PA 15102

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Flow Control Division
400 North Lexington Avenue
Pittsburgh, Pennsylvania 15208
Telex: 866241
Cable: ROCKWL INT PGH

Rockwell International

July 30, 1981

Division of Fuel Cycle & Material Safety
Office of Nuclear Material Safety & Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Amendment of Materials License 37-19329-01

Gentlemen:

This is to request amendment of Materials License 37-19329-01 issued to Rockwell International Corporation, 400 N. Lexington Ave., Pittsburgh, PA.

David A. Rollins, who is designated in section 12 of the above license as a user of licensed material, is no longer employed by Rockwell International. We request that his replacement, Kenneth J. Uzar, be specified in his place.

I have enclosed a current copy of Materials License 37-19329-01 along with a copy of our original Form NRC-313 for reference. An additional Form NRC-313 is also submitted to designate the amendment, and to which a resume for Kenneth J. Uzar is attached.

A check in the amount of $40 is enclosed to cover the amendment fee.

Very truly yours,

Raymond Pstir

Raymond Pstir
Radiation Protection Officer

RP:ks

Encl.

cc: C.W. Hartle
W.E. Helsey
K.J. Uzar
RP

8603190334