

| FORM NRC-313 I (1-79) 13 CFH 30 APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL | | 1. APPLICATION FOR: <i>(Check and/or complete as appropriate)</i> | | |
|---|--|---|---|--|
| 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. | | <input type="checkbox"/> a. NEW LICENSE | | |
| | | <input checked="" type="checkbox"/> b. AMENDMENT TO LICENSE NUMBER 34-07269-01 | | |
| | | <input type="checkbox"/> c. RENEWAL OF LICENSE NUMBER | | |
| 2. APPLICANT'S NAME <i>(Institution, firm, person, etc.)</i> The Standard Oil Company (Ohio) TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (419) 693-0771 Ext. 490 | | 3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION Brian P. Sumner TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (419) 693-0771 Ext. 490 | | |
| 4. APPLICANT'S MAILING ADDRESS <i>(Include Zip Code)</i> The Standard Oil Company (Ohio) P.O. Box 696 Toledo, Ohio 43694-0696 | | 5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED <i>(Include Zip Code)</i> Same as #4 | | |
| (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 <i>(See Items 16 and 17 for required training and experience of each individual named below)</i> | | | | |
| FULL NAME | | TITLE | | |
| a. R.A. Whitmore | | Control Systems Specialist | | |
| b. | | | | |
| c. | | | | |
| 7. RADIATION PROTECTION OFFICER B.P. Sumner | | 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 | | | | |
| L I N E NO. | ELEMENT AND MASS NUMBER A | CHEMICAL AND/OR PHYSICAL FORM B | NAME OF MANUFACTURER AND MODEL NUMBER <i>(If Sealed Source)</i> C | MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D |
| (1) | Cesium - 137 | Sealed Source | Ohmart A-2102 | 100 MC |
| (2) | Cesium - 137 | Sealed Source | General Nucleonics, Inc. Amersham CDC-808 | 6 sources of 50 MC each |
| (3) | | | | |
| (4) | | | | |
| DESCRIBE USE OF LICENSED MATERIAL E | | | | |
| (1) | To be used in an Ohmart SH-100 Source Holder - to measure process level at Crude I Vac Tower | | | |
| (2) | To be used as a coke drum level sensor at Coker I | | | |
| (3) | | | | |
| (4) | 8509160012 850816 REG3 LIC30 34-07269-02 PDR | | | |

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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) | Source Holder | Ohmart | A-2102 |
| (2) | Source Holder | Ohmart | Amersham CDC-808 |
| (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) | GM Survey Meter | Victoreen | Model 493 | 1 | C, B-G, A, B, G | mr/h 0-50 c/m 0-300 |
| (2) | | | | | | |
| (3) | | | | | | |
| (4) | | | | | | |

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

| | | |
|--|---------------------------|---|
| <input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY Victoreen Instrument Division 10101 Woodland Ave. Cleveland, Ohio 44104 | Frequency: once a year | <input type="checkbox"/> 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 |
|--|--|--|
| <input checked="" type="checkbox"/> (1) FILM BADGE <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____ _____ _____ | ICN Pharmaceuticals, Inc. Life Science Group 26201 Miles Road Cleveland, Ohio 44138 | <input type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input checked="" type="checkbox"/> OTHER (Specify): <u>Bi-weekly</u> |

13. FACILITIES AND EQUIPMENT (Check where 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.

N/A

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

Application is for sealed sources and devices that will be returned to the manufacturer for disposal.

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.

SEE ATTACHMENT #1

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.

SEE ATTACHMENT #2

- 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.

SEE ATTACHMENT #3

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) | b. CERTIFYING OFFICIAL (Signature) <i>C.M. Tyler</i> |
| | c. NAME (Type or print) C.M. Tyler |
| (1) LICENSE FEE CATEGORY: 170.31-3L | d. TITLE Plant Manager |
| (2) LICENSE FEE ENCLOSED: \$ 40.00 | e. DATE 10/29/81 |

ITEM 15

CONTROLS - Sources in appropriate holders are shipped and stored in shielded holders supplied by instrument manufacturers to meet N.R.C. and I.C.C. regulations. Sourceholders are subsequently handled only by employees specifically assigned to this task, working under supervision of qualified foremen. Sources are removed from vessels whenever entry by others is required for repairs to vessel interiors. Handling is kept to a minimum and storage is remote from any working areas.

RADIATION SURVEY - Radiation level is determined initially at time of installation by source suppliers. Subsequent surveys are made at intervals by radiation officer named in Item 5.

MAINTENANCE OR REPAIR - Repairs will normally be made by suppliers at installation site. Where it is necessary to return sources to suppliers, sources intact in holders will be shipped in accordance with suppliers instructions in shipping and storage holders. Suppliers, local public health agencies and regional office of the A.E.C. will be contacted immediately in the event of accidents involving source holders. Emergency sites will be barricaded and monitored to prevent entry until resumption of normal activities has been authorized by a properly qualified person.

LEAK TESTS - Will be performed on source holder surfaces every three years by the two individuals named in Item 4 and 5. Leak test kits will be supplied and analyzed by suppliers of sources and holders.

MONITORING - Periodic monitoring of source site area is made to determine radiation levels in adjacent working areas and in proximity to holders. Suitable warning signs are erected at safe approach distances.

All persons who may at any time handle sources or service instruments in proximity to source wear film badges. Film is changed bi-weekly and reports are kept in permanent files. All these persons are given annual medical examinations by qualified specialists in the field of medical radiology.

ITEM 16

(6) R.A. Whitmore, Control Systems Specialist

(a)

- (1) Company Training Program, 40 hours, on the job training
- (2) Ohmart Corporation, 40 hours, Formal Course June 1978

(b)

- (1) Company Training Program, 40 hours, on the job training
- (2) Ohmart Corporation, 40 hours, Formal Course June 1978

(7) B.P. Sumner, Personnel Staff Assistant

(a)

- (1) Ohmart Corporation, 14 hours, Formal Course July 1981
- (2) Practical Aspects of Industrial Hygiene, 40 hours
National Safety Council, September 1981
- (3) Industrial Hygiene Course, University of Toledo, Winter
Quarter, 1978

(b)

- (1) Ohmart Corporation, 14 hours, Formal Course July 1981
- (2) Practical Aspects of Industrial Hygiene, 40 hours
National Safety Council, September 1981
- (3) Industrial Hygiene Course, University of Toledo, Winter
Quarter, 1978

(c)

- (1) Ohmart Corporation, 14 hours, Formal Course July 1981
- (2) Practical Aspects of Industrial Hygiene, 40 hours
National Safety Council, September 1981
- (3) Industrial Hygiene Course, University of Toledo, Winter
Quarter, 1978

(d)

- (1) Ohmart Corporation, 14 hours, Formal Course July 1981
- (2) Practical Aspects of Industrial Hygiene, 40 hours
National Safety Council, September 1981
- (3) Industrial Hygiene Course, University of Toledo, Winter
Quarter, 1978

ITEM 17

(6) R.A. Whitmore

| <u>ISOTOPE</u> | <u>MAXIMUM AMOUNT</u> | <u>WHERE EXPERIENCED GAIN</u> | <u>DURATION OF EXPERIENCE</u> |
|--------------------|-----------------------|-------------------------------|-------------------------------|
| C ₅ 135 | 2.4 C | Toledo Refinery | 14 yrs. |
| C ₀ 60 | 200 MC | Toledo Refinery | 6 yrs. |

TYPE OF USE

Liquid & Coke Density
Coke Density

ATTACHMENT #3

09399