

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

U.S. NUCLEAR REGULATORY COMMISSION

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

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

See attached instructions for details.

a. NEW LICENSE

b. AMENDMENT TO:
LICENSE NUMBER

c. RENEWAL OF:
LICENSE NUMBER

30-17435-01

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.

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

Navajo Agricultural Products Ind.

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
(505) 327-5251

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

Charles Higgins

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
(505) 327-5251 ext.: 263

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

P. O. Box #86
Farmington, New Mexico 87401

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

P. O. Box #86
Farmington, New Mexico 87401

(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. Charles Higgins

Agronomist

b. Gilbert Manuelito

Field Scout

c.

7. RADIATION PROTECTION OFFICER

Brian Bowman

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	CHEMICAL AND/OR PHYSICAL FORM	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source)	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
	A	B	C	D
(1)	Americium 241 Berillium	solid	Campbell Pacific Nuclear, 503 Hydro	50 millicuries X 2 probes
(2)			Probe nuclear depth gauge	
(3)	(Same)	(Same)	(Same)	(Same)
(4)				

DESCRIBE USE OF LICENSED MATERIAL
E

(1) Neutron probe to monitor soil mositure

(2) (same)

(3)

(4)

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30-17435-01 PDR

9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED.	NAME OF MANUFACTURER	MODEL NUMBER
	A.	B.	C.
(1)	B. O. R. Duty Station 371	Campbell Pacific Nuc.	503 Hydroprobe
(2)			
(3)			
(4)			

10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT	MANUFACTURER'S NAME	MODEL NUMBER	NUMBER AVAILABLE	RADIATION DETECTED (alpha, beta, gamma, neutron)	SENSITIVITY RANGE (milliroentgens/hour or counts/minute)
	A	B	C	D	E	F
(1)	NONE					
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☒ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

Campbell Pacific Nuclear

☐ 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	Siemens Gama Sonics P. O. Box #1367 Des Plaines, IL 60018	<input type="checkbox"/> MONTHLY
<input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)		<input checked="" type="checkbox"/> QUARTERLY
<input type="checkbox"/> (3) OTHER (Specify): _____ _____ _____		<input type="checkbox"/> OTHER (Specify): _____ _____ _____

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.

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.

Sealed source

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)

b. CERTIFYING OFFICIAL (Signature)

c. NAME (Type or print)
Charles Higgins

(1) LICENSE FEE CATEGORY:

d. TITLE
AGRONOMIST

(2) LICENSE FEE ENCLOSED: \$

e. DATE
2/22/82



CPN CORP
130 SO. BUCHANAN CIRCLE
PACHECO, CA 94553
415-687-6472

AUTHORIZED TRAINING CLASS

MONDAY, FEBRUARY 22, 1982
FIESTA INN
2100 So. Priest
Tempe, Arizona 85282

THURSDAY, FEBRUARY 25, 1982
HOLIDAY INN
2020 Menaul N.E.
Albuquerque, N.M. 87107

THE CPN NUCLEAR GAUGE OPERATOR TRAINING CLASS - - - is a one day class concentrating on essential engineering and radiation safety factors to permit the prospective nuclear gauge user to use the gauge efficiently and accurately and with complete safety.

The carefully prepared class provides the user with sufficient basic nuclear physics (presented in easily understood layman's terms) to permit understanding of how the gauge measures moisture and density to provide maximum field accuracy and prevent errors from misapplication of the device.

This authorized class satisfies the requirements of the NCR and the Agreement States regarding training for portable low millicurie devices used for construction and agricultural testing. A CERTIFICATE OF COMPLETION is given to each individual who successfully completes the class.

The class starts at 8:00 AM and concludes at 5:00 PM. Lunch is from 12:00 to 1:00 PM and is included in the course fee along with necessary training materials.

The attendee should bring a simple calculator for aid in preparation of Field Work Sheets.

The class fee is \$30.00 PRE-REGISTERED, or \$35.00 NOT PRE-REGISTERED. Due to the popularity of this class, we request your PRE-REGISTRATION no later than five working days prior to the class date to assure adequate seating space and luncheon reservations.

For further information please contact: THELMA DANA, CPN TRAINING COORDINATOR, 415/687-6472.
LINDA STEPHENS

Please return the bottom portion with your reservation and retain the top for location.

RETURN BELOW RESERVATION TO CPN CORP., ADDRESS ABOVE

We wish to send _____ person(s) to the CPN CLASS to be held: CHECK BOX APPLICABLE

MONDAY, FEBRUARY 22, 1982
Fiesta Inn
Tempe, Arizona ☐

THURSDAY, FEBRUARY 25, 1982
Holiday Inn
Albuquerque, N.M. ☒

Our PRIMARY interest in the use
of Nuclear Testing Gauges is:

☐ Construction Testing
☐ Agricultural Application
☐ Roof Testing

NAMES OF THOSE ATTENDING:

1) CHARLES HIGGINS

2) GILBERT MANUELETO

Please Print

3) JACK MYRICK

4) _____

COMPANY:

NATI

BILL FIRM:

☒

ADDRESS:

BOX 86, FARMINGTON N.M.

CHECK ENCL:

87410

Note: There will be a \$10.00 "NO SHOW" charge as we must guarantee Pre-Registered Luncheons.

NO DUPLICATION AND INFO. ONLY

Item 15, 16, 17

The radiation protection officer will be Brian Bowman who is an employee of the Bureau of Reclamation. He has a certificate of Completion of a course on Radiation Safety and Use of Soil Gauges, provided by the manufacturer - Campbell Pacific Nuclear. All other people using the probes will have the same training. Leak tests will be done as the manufacturer recommends and with Campbell Pacific Nuclear Kits.