



City Engineering Department
Ninth Floor Cadillac Tower
Detroit, Michigan 48226

Freeway Construction Office (Field)
8221 W. Davison
Detroit, MI 48238

United States Nuclear Regulatory Commission, Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Attention: Dr. L. Mallett. (312-790-5500)

Dear Doctor Mallett:

On May 17, 1985, we received our Materials License #21-24406-1, from your agency.

We currently own a Troxler Series 3400 Moisture/Density Gauge covered under our license.

We have purchased two additional moisture/density gauges from a different manufacturer and shipment is being withheld until we have an amended license to cover these two CPN Model MC-2-82 gauges.

The attached CPN Tech Data Sheet #11 appears to have the same source, form and amounts of our Troxler.

Please review our license with CPN's Tech Data Sheet #11 and amend our Present License to include this additional equipment.

We are a City/State Agency, therefore no additional fee is required for filing of an amended License request.

Thank you very much.

EX 170.11(a)(a)
3P FEE EXEMPT

Sincerely yours,

J. F. Crane
James F. Crane, Field Engineer
313-935-3355

RECEIVED

AUG 5 1985

REGION III

ENCL(2): NRC License #21-24406-01.
CPN Corp. Tech Data Sheet #11.

JFC:mk

8509120044 850827
REG3 LIC30
21-24406-01 PDR

CONTROL NO. 7 9499

AUG 5 1985

RECEIVED BY LFMB	
Date	8/13/85
Log	Aug 13
By	[Signature]
Orig To	[Signature]
JULY 31, 1985	

MATERIALS LICENSE

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 I, Parts 30, 31, 32, 33, 34, 35, 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). 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. City of Detroit
City Engineering Department
Freeway Construction Office
2. 8221 W. Davison
Detroit, MI 48238

3. License number 21-24406-01

4. Expiration date June 30, 1990

5. Docket or
Reference No. 030-18607

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. Cesium-137

A. Sealed source
(Troxler Dwg.
No. 102112)A. No single source
to exceed 10
millicuries each

B. Americium-241

B. Sealed source
(Troxler Dwg.
No. 102451)B. No single source
to exceed 50
millicuries each

9. Authorized Use

- A. and B. To be used in Troxler Series 3400 moisture/density gauge to measure
-
- moisture/density of construction materials.

CONDITIONS

10. Licensed material may be used at the licensee's facilities located at 12255 Southfield Road, Detroit, Michigan and at temporary job sites of the licensee located within the city limits of Detroit, Michigan.
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 and in the physical presence of, individuals who have satisfactorily completed the device manufacturer's training program for gauge users and have been designated by the licensee's Radiation Protection Officer. The licensee shall maintain records of the individuals who have been designated as authorized users.
13. The Radiation Protection Officer for the activities authorized by this license is Daniel Tumidanski.

~~8506100698~~

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

21-24406-01

Docket or Reference number

030-18607

14. A. 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.
- 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 III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
- D. The licensee is authorized to collect leak test samples in accordance with the procedures described in the licensee's letter dated April 15, 1985 for analysis by Troxler Electronics. Alternatively, leak test samples may be collected and/or analyzed by other persons specifically authorized by the Commission or an Agreement State to perform such services.
15. Sealed sources containing licensed material shall not be opened or removed from the moisture/density gauge by the licensee.
16. When performing tests at temporary job sites, the authorized user shall not leave the moisture/density gauge unattended. Upon completion of tests the device shall be locked in the licensee's vehicle or a secure building to prevent unauthorized use, loss or theft.
17. The licensee shall conduct a physical inventory every six (6) months to account for all gauges 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 quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the gauges and the date of the inventory.
18. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

21-24406-01

Docket or Reference number

030-18607

19. The licensee shall use whole body film badges to measure the radiation dose to personnel. Film badges shall be exchanged and evaluated monthly.
20. The source shall be in the "safe" or "shielded" position when the gauge is in storage.
21. 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 October 9, 1984, and letters dated March 11, 1985, March 29, 1985, and April 15, 1985. 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 MAY 17 1985

By

William P. Reichhold

Materials Licensing Section, Region III

CONTROL NO. 7 9499



CPN CORP
130 SO. BUCHANAN CIRCLE
PACHECO, CA. 94553
415-687-5472

TECH DATA SHEET # 11

UNIVERSAL RADIATION LICENSE APPLICATION INSTRUCTIONS

GENERAL

A radioactive materials license is required for the possession and use of reactor produced isotopes used in CPN gauges. This universal instruction sheet will assist you in properly completing your application for expeditious handling.

Federal Nuclear Regulatory Commission regulations are the basic law of the land regarding licensing of radioisotopes and an NRC license is required in all federally controlled areas.

Twentyfive states (as of this printing) have elected to control their own licensing as "Agreement States", following NRC regulations, but including control of Radium and XRAY machines as well as the reactor produced isotopes. An appropriate STATE license is required in these states.

CPN Tech Data Sheet 5 lists these states.

We are enclosing an appropriate application for your completion for your immediate jurisdiction. If you contemplate using your CPN device in another jurisdiction for more than 180 days, you must obtain a license in that jurisdiction.

Please contact us for an application form for the new jurisdiction. You may have more than one license and may be licensed for more units than you actually own. We recommend licensing yourself for at least one more unit than you are going to use in normal operation.

The attached application is typical of all forms and follows the general NRC format. Fill in the obvious blanks as required. Some blanks require technical information or nomenclature which you would not know. The following instructions will provide that information in correct form. Terms and nomenclature will vary somewhat between licensing agencies. Adapt the instructions as appropriate for your application form.

We suggest that a copy of the application be forwarded to our offices for file and possible further assistance.

LICENSE BEFORE SHIPMENT

CPN must have proof of license before we can ship. Please forward a copy of your returned license to us for file. In turn, should you ship to others, you must have a copy of their license!

SPECIFIC INSTRUCTIONS FOR: "RADIOISOTOPE" - "FORM" - "QUANTITY" - "INTENDED USE"

Each application form contains blanks requesting the following information. (Headings may vary depending upon the licensing agency.)

RADIOISOTOPE = Cesium 137 and/or Americium 241 or other material.

FORM = Sealed Source CPN-131

QUANTITY = 10 millicuries CS 137 and/or
= 50 millicuries AM 241

INTENDED USE = Why you are going to use the material and in which device.

From the following descriptive groupings, select the one(s) which fit the device(s) you wish to have licensed. Enter the descriptions in the blanks as required on the application. (Note the description allows an unlimited number of gauges. Some license agencies may require a definite quantity to be listed. It is a good idea to plan for future expansion.)

FOR MODEL A, BRC, & MC SURFACE AND 501 DEPTH GAUGES

(RADIOISOTOPE)	(FORM)	(QUANTITY)
Cesium 137 Americium 241/Be	CPN-131 Sealed Source CPN-131 Sealed Source	Not to exceed 10 millicuries Cesium 137 and 50 millicuries Americium 241 in each source pair, one source pair in each device.
(INTENDED USE)		
To be used in CPN CORP Model A, BRC, MC, or 501 Density/Moisture Gauges for the measurement of density and moisture of construction materials at various jobsites.		

CONTROL NO. 7 949 A