

#5. 1. Cesium 137 and Americium 241/Be

2. Model 503 Moisture depth Hydroprobe. CPN Corp. -134

3. Not to exceed 10 millicuries Cs137 and/or 50 millicuries Am 241/Be
one source per device.

4. CPN Corp. - 134 Model 503 Moisture depth Hydroprobe

#6. The purpose is for measuring moisture in irrigated wheat fields.

#7. Debra Donovan. Safety Training taken on January 20, 1987 in Denver, Co.
by Steve Thompson for Thompson/Quill Assoc.

#8 N/A

#9 The device will be stored in a locked enclosure in an empty building
that is 100 yards from the living quarters of the farm. It can be
viewed from the farm house at all times.

#10. .1 I will wear film badges at all times when working with the
Hydroprobe. They will be sent in to the Landauer Co. for read outs.

.2 Film badges.

.3 I will use a commercial leak-test and take smears myself and send
them in to the CPN Corp. for results. The kit model # is A 401197
The supplier is CPN Corp., 2830 Howe Road, Martinez, CA. 94553.

.4. Maintenance will be totally done by the CPN Corp..

.5 Transporting and packaging of the device will be carried out in
accordance with the applicable DOT Regulations.

.6. Operating and Emergency Procedures

1. The Nuclear Gauge will be securely restrained
in vehicles to prevent theft or loss
while unattended or in an accident. Metal
clamps, chains, or bars will be used.

2. The Nuclear Gauge and its shipping case
will be hidden from view while in an unat-
tended vehicle to minimize attractive nui-
sance value.

3. All users will wear film badges when using
the Nuclear Gauge. Badges will be stored
away from gauges when not in use and will
be protected from external heat.

4. Radiation labels or placards will be remo-
ved from vehicles when not actually trans-
porting the Nuclear Gauge to avoid confu-
sion should an accident occur to the vehi-
cle when it does not contain the Gauge.

5. Gauges will be securely locked in storage
areas when not in use. Keys will be restri-
cted to authorized users only.

6. The Nuclear Gauge will be used only by us-
ers specifically authorized in writing by
the Radiation Safety Officer.

7. The Gauge will be leak tested annually using
Campbell Pacific Nuclear Test Kit TD-11B or
other approved kit. Results will be main-
tained for permanent record and inspection.

8. Disposal of the source or of the device will
not be done by licensee directly.

In the event of emergency disposal, we shall
contact the factory or other authorized dis-
posal facility for instructions.

The unit will be transferred only to autho-
rized licensees for this specific device
and a record of transfer will be retained
in our files, with proof of license authori-
ty by the recipient, in the event of sale,
trade, loan, or other transfer.

420089

10.6 continued.

Emergency Procedure

In the event of emergency with possible damage to the radioactive source:

- Freeze site - Stop any involved vehicles.
- Restrict access to 10' from the gauge, vehicles, or tracks.
- Call for competent, trained assistance:

RSO: 725-3385

PUBLIC HEALTH OFFICE: 228 - 8221 - 61

~~CHINA DEFENSE~~:

CPN FACTORY: 415-687-6472

OTHER: Thompson/Duall Assoc 1-800-624-0996

- #11. If the device is no longer needed I will transfer it back to the CPN Corp. or notify the NRC for instructions.
- #12. My application fee of \$230. has been sent in by check in our previous application for Byproduct Material License. That was sent in on Feb. 6, 1987.

420087