

CITY OF MIDLAND, MICHIGAN
Engineering Department
December 8, 1980

HANDLING PROCEDURES
Troxler 3411B
Surface Moisture Density Gauge

The following rules are established to ensure the safety of operating personnel, City employees, and the general public in regard to the use, transporting or storage of the Surface Moisture Density Gauge.

1. The "Radiation Safety Officer" shall be the City Engineer or someone expressly designed by the City Engineer.
2. The "Radiation Safety Officer" shall designate a "key Operator" who shall have the primary responsibility for the security of the gauge.
3. Only those employees who have received formal radiation safety training, have been issued "dose measurement devices" and have been specifically authorized by the "Radiation Safety Officer" shall be allowed to use, transport or handle the gauge.
4. No one shall be allowed to use, transport or store the gauge unless they are wearing a "dose measurement device".
5. The Radiation "Source" shall be kept in the "safe" or stored position of the gauge at all times when the gauge is not in use.
6. No one shall expose themselves to the bare "Source" without specific authorization from the "Radiation Safety Officer".
7. The operator of the gauge shall cause all unauthorized persons to be kept at least fifteen (15) feet distant from the gauge at such times as the gauge is being operated.
8. The "Key Operator" shall be responsible for storing the gauge each evening in such locked stored area as is provided by the department.
9. All questions related to the safety of the gauge are to be immediately referred to the "Radiation Safety Officer".
10. All incidents bearing upon the safety of the gauge are to be reported immediately to the "Radiation Safety Officer".

8108280 675

FEB 06 1981

HANDLING PROCEDURES

Troxler 3411B

(cont'd)

11. a. In the event of physical damage to a gauge, an exclusion area with a radius of fifteen (15) feet around the gauge shall be maintained until the extent of source damage (if any) is determined. If a vehicle is involved, it must be stopped and remain stopped until the extent of contamination hazard (if any) is determined. If visual examination of the instrument and source indicates damage to the source, including fracture of the weld, the appropriate authorities and Troxler Electronic Laboratories, Inc., should be notified. The instrument may be removed from the site by using a shovel or other long handled instrument and placed in a suitable container such as a metal drum.
- b. In the event of source leakage or separation (real or suspected) of a source from its normal containment, the 15 feet exclusion area shall be maintained until the arrival of the appropriate authorities.
- c. If the rod containing the source becomes separated from the gauge, the rod will be picked up using pliers or tongs and inserted into top of the instrument, thus providing shielding. The rod shall then be secured in place using tape to prevent accidental unshielding of the source.
12. The gauge shall not be transported in a motor vehicle unless it is in the storage container.
13. While being transported the gauge must be kept at least 12" distant from any occupant of the vehicle.
14. The gauge shall not be left unattended by the operator when in field use or away from the authorized storage place. The gauge shall either be under the direct control of the operator or locked in a vehicle.
15. No one shall perform maintenance on gauges that involves the dismantling of the source or removal of the source from the source holder. This type of maintenance shall only be performed by the manufacturer of the gauge or his authorized representative.