



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
WASTE AND HAZARDOUS MATERIALS DIVISION

## RADIATION PROTECTION FOR LEAD PAINT ANALYZERS

The use of lead paint analyzers containing cobalt-57 or other naturally occurring or accelerator produced radioactive materials (NARM) is subject to the requirements of Michigan's ***Ionizing Radiation Rules*** enforced by this Division. Persons or companies using such analyzers in this State should review and comply with the following items to ensure compliance with the Rules:

### Regulatory Requirements

1. The Division shall be notified within 10 days of the initial receipt of radioactive material. Prior to use, lead paint analyzers shall be registered on a Radioactive Material Registration Form, EQP 1614, available by telephone at 517-335-2690 [Ref. Rule 85(2)(h) and Section 13505, 1978 PA 368].
2. For proper registration, a Radiation Protection Supervisor (RPS) shall be appointed and given responsibility for the analyzers and the safety of those who use them [Ref. Rule 14(6) and Section 13505, 1978 PA 368].
3. Tests shall be done to detect radioactive material leaking from analyzers and to assure proper functioning of on/off mechanisms. These tests shall be done every 6 months [Ref. Rule 85(2)(c)].
4. The Division shall be contacted if an analyzer is lost or stolen, if the leak test reports 5 nanocuries or more of removable radioactive material, if damage to the shielding has occurred, or upon failure of the on/off mechanism. The instrument shall not be used until the problem has been repaired by an authorized person [Ref. Rules 85(2)(e) and (f) and Rule 246].
5. Analyzers shall be transported in accordance with federal Department of Transportation requirements [Ref. Rule 255].

The manufacturer should be able to supply information on current transportation requirements.

6. Analyzers shall not be transferred, abandoned, or disposed of except to an authorized person. A notice shall be submitted to this Division within 30 days after transfer indicating the name and address of the person receiving an analyzer and the manufacturer, model, and serial number [Ref. Rules 85(2)(a) and 123].
7. Records showing receipt, transfer (including the authorized user having custody of an analyzer), and disposal shall be kept on file [Ref. Rule 41].

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability or political beliefs. Questions or concerns should be directed to the MDEQ Office of Personnel Services, P.O. Box 30473, Lansing, MI 48909.

### Additional Recommendations

In addition to complying with the above requirements, the radiation safety recommendations listed below are also expected to be met:

1. Personnel should wear radiation dosimetry badges when using lead paint analyzers. The badges, which indicate accumulated exposure to radiation, should be exchanged at monthly intervals, with used badges promptly returned to the supplier for analysis.
2. The RPS should be knowledgeable about the hazards and appropriate precautions in handling analyzers. The RPS should permit their operation only by individuals who have received proper instructions in their safe use.
3. All authorized users should be trained in the use of the equipment, radiation safety, and emergency procedures. The attendance at training sessions should be documented and the records kept on file.
4. A log should be maintained by the RPS detailing the locations of use or storage.
5. Whenever an analyzer is to be brought into the state for use, the Department should be given a written notice at least 2 days before the analyzer enters the state. The notice should include the user's name and address and duration and location of use. Forms for submitting this information are available upon request.
6. Analyzers should be stored in appropriate instrument cases and in an unoccupied, locked area.
7. Each instrument case used in Michigan should contain the following telephone numbers for notification in the event of an accident which damages an analyzer:
  - The owner of the analyzer
    - work telephone number
    - off-hours telephone number
  - Michigan Department of Environmental Quality  
Waste and Hazardous Materials Division  
517-335-2690 (8:00 a.m.-5:00 p.m., Monday-Friday)
  - Michigan Department of Environmental Quality  
Pollution Emergency Alerting System  
1-800-292-4706 (off-hours)
8. An owner's manual should be kept in each instrument case for reference by users.