





RESPONSIBLE PRACTICES FOR COLLECTORS, RESEARCHERS & EDUCATORS


At U-ROCKS, we are committed to promoting safe, responsible collecting and ownership of naturally occurring radioactive mineral specimens. This protocol provides recommended practices to minimize risk, preserve specimen integrity, and support the scientific and historical value of these unique materials.

1  **RADIATION SAFETY PRINCIPLES**


- Uranium minerals emit low levels of ionizing radiation.
- Follow the principle of ALARA: *As Low As Reasonably Achievable.*
- Minimize time, maximize distance, and utilize shielding where practical.

2  **HANDLING PROCEDURES**


- Handle specimens with clean, dry hands or use nitrile gloves.
- Avoid dust generation. Do not sand, grind, or polish specimens.
- Do not ingest. Wash hands after handling.
- Keep specimens away from food, drink, and smoking materials.

3  **PERSONAL PROTECTIVE EQUIPMENT (PPE)**


- Use nitrile gloves when handling specimens.
- Use eye protection when cleaning dust from displays or containers.
- Use a NIOSH-approved P100 respirator if handling dusty materials or during cleaning.

4  **STORAGE STABILITY**

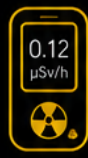
- Store in a cool, dry, and low-humidity environment.
- Maintain stable conditions (Humidity < 60% RH, Temperature 15–25 °C / 59–77 °F).
- Avoid prolonged exposure to direct sunlight and moisture.
- Keep specimens in closed display cases or containers.

5  **RADON CONSIDERATIONS**


- Some uranium minerals may emit trace amounts of radon gas.
- Store specimens in well-ventilated areas.
- Avoid airtight, small, unventilated containers for long-term storage.
- Display cases should not be hermetically sealed.

6  **SHIELDING & DISTANCE**


- Uranium minerals are low-activity, but shielding can further reduce exposure.
- Keep distance where practical (recommended > 30 cm / 12 in).
- Use lead-lined boxes or acrylic containers for display and storage.

7  **MONITORING & INSPECTION**

- Periodically monitor specimens using a Geiger counter or radiation detector.
- Typical background-safe specimens sold by U-ROCKS range from 0.05 – 1.0 µSv/h at surface.
- Inspect containers and displays regularly for damage or dust.

8  **DOCUMENTATION & PROVENANCE**

- Retain all original labels, locality information, and collection data.
- Record specimen ID, acquisition date, measurement readings, and storage conditions.
- Proper documentation preserves scientific, historical, and collector value.

9  **PACKAGING & TRANSPORT**


- Specimens are packaged in protective, cushioned materials.
- Packages are labeled in accordance with applicable regulations for NORM materials.
- Do not repackage unless necessary.
- Keep packages upright and secure during transit.

10  **RESPONSIBLE OWNERSHIP**


- For adult collectors, researchers, and educators only. Keep out of reach of children.
- Do not modify, break, or alter specimens.
- Dispose of any waste material (e.g., fragments, dust) in accordance with local regulations.
- Share knowledge and promote responsible collecting within the community.

11  **COMPLIANCE & ETHICS**

- U-ROCKS follows all applicable national and international laws.
- We support ethical collecting and responsible stewardship of mineral resources.
- When in doubt, seek guidance from a qualified radiation safety professional.

 **PROFESSIONAL DISCLAIMER**

The information provided in this protocol is for educational and informational purposes only. It does not constitute professional radiation safety advice. Collectors are responsible for ensuring their own safety and compliance with applicable laws and regulations.

 **OUR COMMITMENT**

We are dedicated to safety, science, and responsible stewardship. Thank you for collecting responsibly and helping preserve the natural and historical legacy of uranium minerals for future generations.