

1. Uranium tailings from mining operations are typically left in piles to _____.
 - a. decay
 - b. dry
 - c. be re-absorbed
 - d. be shipped to a disposal site

2. _____ is the most important radioactive component from uranium tailings.
 - a. U-238
 - b. Co-60
 - c. Iodine
 - d. Radon

3. What percentage of radioactive waste is comprised of low-level radioactive waste?
 - a. 90%
 - b. 75%
 - c. 50%
 - d. 25%

4. What type of materials are typically found in low-level radioactive waste?
 - a. Unused medical isotopes
 - b. Clothing and cleaning rags
 - c. Expired radioactive liquids
 - d. Unexposed reactor fuel

5. The half-lives of Class A low-level radioactive waste are less than _____ year(s).
 - a. 1
 - b. 15
 - c. 30
 - d. 100

6. Class A low-level radioactive waste generally comes from what type of facility?
 - a. Medical
 - b. Reactor site
 - c. Waste processing
 - d. Industrial shipping

7. Class B low-level radioactive waste is typical from what type of facility?
 - a. Medical
 - b. Industrial shipping
 - c. Waste processing
 - d. Reactor Site

8. Intermediate-level radioactive wastes usually require special _____?
 - a. permits
 - b. ventilation
 - c. shielding
 - d. regulations

9. Which government agency is responsible for radioactive waste management guidelines?
 - a. Department of Transportation
 - b. U.S. Atomic Energy Commission
 - c. Department of Homeland Security
 - d. Department of Energy

10. _____ is a common contributor to transuranic waste.
 - a. N-17
 - b. Cobalt-60
 - c. Plutonium-239
 - d. Technetium-99

11. High-level radioactive waste in the form of spent reactor fuel is stored on-site in _____
- heat sinks
 - fuel pools
 - concrete bunkers
 - unused reactor cores
12. Reactor fuel was reprocessed to extract _____.
- Plutonium and Uranium
 - Cobalt and Cesium
 - Technetium and Iridium
 - Iodine and Barium
13. The reprocessing of reactor fuel left behind highly radioactive _____.
- equipment
 - tools
 - sludge
 - packages
14. The best method for disposal of fuel reprocessing waste is _____.
- storage until decayed
 - incineration
 - vitrification
 - chelation therapy
15. What is the major contributing radiation from transuranic waste?
- Gamma radiation
 - Beta radiation
 - Neutron radiation
 - Alpha radiation

16. What of the following is designed to establish a facility's overall culture?
- Safety Management System
 - Conduct of Operations
 - Business Management Program
 - Ethics and Standards Policy
17. Which of the following is **NOT** a chapter of Conduct of Operations?
- Communication
 - Lockouts and Tagouts
 - Control Area Activities
 - Radiation Protection
18. Which of the following radioactive isotopes are capable of undergoing fission?
- U-235
 - Pu-242
 - Th-232
 - Cs-137
19. What does the term criticality mean in radioactive waste management?
- Improper location of fissionable materials
 - Sustained high radioactivity
 - Lethal dose limits
 - Uncontrolled chain reaction
20. Emergency management at radioactive waste facilities includes all the following, **EXCEPT** _____.
- training and drills for on-site workers
 - recovery planning and emergency termination procedures
 - funding for off-site emergency resources
 - identification of hazard and threats

21. T or F - Fissionable Material Handlers are qualified as Radiation Protection Technicians.
- True
 - False
22. According to the guiding principles of Integrated Safety Management, _____ is commensurate with responsibilities.
- competence
 - qualification
 - training
 - skill
23. In an Integrated Safety Management System, who is accountable for protection of the public, workers, and the environment?
- The company president
 - Safety hygienists
 - Line management
 - Competent workers
24. On the Integrated safety management wheel, what is the first step?
- Analyze the hazards
 - Perform work within controls
 - Implement hazards controls
 - Define scope of work
25. What is the first line of defense for radioactive waste transportation?
- Packaging
 - Proper classification
 - Training
 - Radiation protection

26. Which of the following may be shipped in excepted packaging?
- a. Medical isotopes
 - b. Smoke detectors
 - c. Contaminated soil
 - d. Decontaminated tools
27. Which type of radioactive packaging is the most secure?
- a. Type A
 - b. Industrial
 - c. Excepted
 - d. Type B
28. This type of packaging, along with its radioactive contents, must meet standard testing requirements designed to ensure that the package retains its containment integrity and shielding under normal transport.
- a. Type A
 - b. Type B
 - c. Industrial
 - d. Excepted
29. Which of the following is a duty of an operator at a nuclear facility?
- a. Ordering supplies
 - b. Monitoring parameters
 - c. analyzing radioactive samples
 - d. reviewing changes to design
30. Fissionable materials handlers are required to be _____.
- a. Qualified
 - b. Knowledgeable
 - c. Certified
 - d. Competent

31. Training for a fissionable materials handler includes classroom and _____ training.
- a. on-the-job
 - b. virtual reality
 - c. self-study
 - d. laboratory