

What's the Risk?

Lead-Acid Battery Safety



THE ISSUE

Lead-acid batteries can produce hydrogen gas during charging. If the hydrogen accumulates in an enclosed space and is exposed to a spark or flame, it could ignite or cause an explosion. Additionally, short circuits or overheating due to overcharging can lead to thermal runaway, causing the battery to catch fire. If you use lead-acid batteries on your farm, commercial operation, or for electricity storage in your home, it is important to handle them carefully and in compliance with safety guidelines to minimize the potential for fire hazards.



WHAT'S THE RISK?

Lead-acid batteries pose multiple risks, including corrosive sulfuric acid leaks that can cause severe burns, the discharge of flammable hydrogen gas during charging, and overcharging that can lead to fire or explosion. As well, improper disposal of batteries threatens environmental contamination. Adherence to safety protocols is crucial to minimize these dangers when handling or using these batteries.



WHAT CAN BE DONE?

Follow these best practices to minimize the risks associated with lead-acid batteries:

- Use appropriate personal protective equipment such as gloves, goggles, and aprons when handling batteries.
- Charge batteries in a well-ventilated area or use a fume hood to disperse hydrogen gas. Ensure the charging space has good airflow to prevent gas accumulation.
- Perform routine checks on charging equipment to ensure it's in good working condition and set up properly to avoid overcharging.
- Follow manufacturer guidelines for charging, use appropriate charging equipment, and avoid leaving batteries charging for extended periods.
- Utilize authorized recycling facilities or disposal services for old or damaged batteries to ensure proper disposal that prevents environmental contamination.
- Ensure all individuals handling batteries are well-versed in safety measures.

