

FM SAFETY ALERT

Battery Maintenance

Incident

Recently, a Facilities Management custodial walk behind sweeper battery exploded during charging. Prior to charging the battery, the fluid level in the battery was not checked. Since the fluid level was low, the battery overheated during the charging process which caused it to explode from the gases built up within the battery. When the battery exploded, a Building & Grounds employee near the equipment heard a loud blast and was splashed with sulfuric acid to the hands and face.

Issue

Before charging a lead acid wet cell battery, regular maintenance needs to be performed. Regular battery maintenance includes: Checking fluid levels in the battery and adding distilled water as needed; and Only charging the battery with the battery compartment lid in the open position. While completing battery maintenance, personal protective equipment (PPE), including goggles, full face shield and protective gloves must be worn at all times.

Corrective Actions

- 1.) Perform regular maintenance – Battery fluid levels must be checked regularly and distilled water must be added as needed. Due to the potential exposure to sulfuric acid, PPE must be worn and an emergency eyewash/shower must be close by.
- 2.) Battery replacement – As lead acid wet cell batteries for the equipment need to be replaced at the end of their useful life, they will be replaced with sealed maintenance free batteries.
- 3.) Communication – All Building and Grounds supervisors should review this topic with their crews.

