



West Bay Sanitary District Code of Safe Practice

FOR IMMEDIATE RELEASE
Initial: June 01, 2012

Questions or comments regarding this
Code of Safe Practice should be directed
to the Regulatory Compliance Coordinator.

Battery Changing and Testing

SAFE WORK PROCEDURES

- Review safe practice rules for applicable equipment (including rental equipment) and perform pre-operational checks.
- Battery-charging installations shall be located in areas designated for that purpose.
- Employees assigned to work with storage batteries shall be instructed in emergency procedures such as dealing with accidental acid spills.
- The area shall be adequately ventilated to prevent concentrations of flammable gases.
- Adequate means shall be provided to neutralize or dispose of corrosive liquid spills and overflows promptly and safely.
- Appropriate lifting and handling devices or equipment shall be provided for handling batteries.
- Smoking and open flame shall be prohibited in battery-charging area, and signs stating that prohibition shall be posted in the area.
- Precautions shall be taken to prevent open flames, sparks, or electric arcs in battery charging areas.
- Tools and other metallic objects shall be kept away from the top of batteries.
- When charging batteries, the vent caps shall be kept firmly in place to avoid electrolyte spray. Care shall be taken to assure that vent caps are functioning.
- Fire-extinguishing equipment adequate to cope with the hazards, which may be encountered, shall be provided and maintained close at hand.
- Face shields shall be worn when measuring storage battery, specific gravity or handling electrolyte. The supervisor shall ensure that the employees use such devices.

- The supervisor shall also ensure that acid resistant gloves and aprons are worn for protection against acid spattering.
- Approved personal protective equipment including face, eye and hand protection is provided and employees are required to use them. Such protective items shall be maintained in sanitary condition and stored in a dust-free container readily available.
- Facilities for quick drenching or flushing of the eyes and body shall be provided.
- When taking specific gravity readings, the open end of the hydrometer shall be covered with an acid resistant material while moving it from battery to battery to avoid splashing or throwing the electrolyte.
- Check batteries for proper fluid level and corrosion on terminals.
- Add water only to a used battery. Electrolyte should be added to a new battery only.
- Connect positive-to-positive terminals and negative-to-negative terminals before charging batteries.
- Allow ample time for fumes to dissipate before connecting or disconnecting batteries to or from battery charger. A spark could cause an explosion.
- Clean top of battery, removing all dirt and corrosion, before charging battery.
- Battery charger must be turned off before connecting or disconnecting batteries.
- Keep tops of batteries clean; moisture and dirt allows batteries to discharge.
- If battery acid is spilled on skin, neutralize with cool; clean water for five minutes or more. If spilled on clothing or other surfaces, neutralize with baking soda and water. This solution should also be used periodically to keep battery holders, terminals and tools clean.

Personal Protective Equipment

Protection Area	PPE Required
Eye	Safety glasses or goggles meeting the ANSI Z87.1 Standard.
Face	Face shield to protect face from sulfuric acid splash and flying objects.
Hand	Chemical gloves compatible with sulfuric acid.
Head	
Foot	Leather steel toe boots.
Body	
Respiratory	Charge batteries in a well ventilated area.
Hearing	Ear plugs or muffs to protect hearing from noise of a possible explosion.