





Battery Room Survey

Dealer/Customer: _____

Survey Performed By: _____

Project: _____

Date: _____

Safety Product Requirements	Recommended BHS Products	Sample Illustrations	Regulations
<p>Drip Pans Approved method and materials for control of electrolyte spill</p> <ul style="list-style-type: none"> <input type="checkbox"/> Is spill control present? <input type="checkbox"/> Are acid absorbent mats present in drip pans? 	<p>DK-SS DP-SS ASP UP-424</p>		<p>IFC 608.5 OSHA 29 CFR 1926.441(a)(4) NFPA 1 Chapter 52.3.4.1-2</p>
<p>Spill Kits Spill Kits are required for use by first responders. Kits should contain Personal Protective Equipment (PPE) for corrosive chemical protection, neutralizers and items to facilitate clean-up. Approved method to neutralize spilled electrolyte to a level of pH 7.0 to pH 9.0.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Is a Spill Kit present? <input type="checkbox"/> Is Spill Kit complete (if not, indicate contents below)? <input type="checkbox"/> Apron <input type="checkbox"/> Gloves <input type="checkbox"/> Face Shield <input type="checkbox"/> Goggles <input type="checkbox"/> Tyvex Coveralls <input type="checkbox"/> Acid Resistant Boots <input type="checkbox"/> Neutrasorb <input type="checkbox"/> Chemical Socks or Pillows <input type="checkbox"/> Broom & Dustpan <input type="checkbox"/> pH Test Kit <input type="checkbox"/> Other: _____ 	<p>SK-6 SK-20 SK-55 SK-CAB SK-WM</p>		<p>IFC 608.5 OSHA 29 CFR 1910.178(g)(2) NFPA 1 Chapter 52.3.5.1-3</p>
<p>Safety Protection Gear PPE is required when entering battery rooms and working on battery systems.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Eye protection (goggles) <input type="checkbox"/> Corrosive Resistant Gloves <input type="checkbox"/> HV Insulated Gloves <input type="checkbox"/> Corrosive Resistant Apron 	<p>PK-1200</p>		<p>OSHA 29 CFR 1910.132(a,c) OSHA 29 CFR 1910.133(a)(1-3) OSHA 29 CFR 1926.28(a) OSHA 29 CFR 1926.441(a)(5) NFPA 70E Article 130.7(a) NFPA 505 9.3.7.3</p>
<p>Eye Wash / Shower Station Suitable facilities for quick drenching or flushing of the eyes and body. Note condition.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Eyewash present? <input type="checkbox"/> Type: (Portable, Plumbed, Qt. Bottles, Personal, Other) _____ <input type="checkbox"/> Shower present? <input type="checkbox"/> Capacity (Portable): _____ <input type="checkbox"/> Does eyewash need maintenance? 	<p>PEW-700 EW-300 MEW-300 SEW-500 BES-1</p>		<p>OSHA 29 CFR 1910.151(c) OSHA 29 CFR 1926.441(a)(6) NFPA 70E Article 240.2 NFPA 505 9.3.3</p>

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Battery & Safety Signage

Doors have approved signs and emergency equipment adequately identified.

- Battery Spill Response Kit
- Personal Protective Kit
- Watch for Lift Trucks
- Battery Changing Area
- Do Not Use – Broken Needs Repair
- No Smoking
- Electrical Hazard
- Room Contains Energized Batteries and Corrosive Liquids
- Emergency Eye Wash

SP-1
PST



IFC 608.7.1-2
OSHA 29 CFR 1910.145(c)(2-3)
NFPA 70E Article 205.11
NFPA 1 Chapter 52.3.8.1-3

Hydrogen Gas Monitors

Ventilation is required to ensure that the hydrogen gas level does not exceed 1% by volume. Monitoring is used to confirm hydrogen gas levels remain within compliance levels.

- Is a hydrogen gas monitor present?
- Approximate date installed: _____
- Number of sensors: _____
- Size of room (approximate ft³): _____

HGD-1
HGD-1-DC
HGD-DR
HGD-DR-DC



Ventilation

Ventilation shall be provided to ensure diffusion of the gases from the battery room and to prevent the accumulation of explosive gases. Hydrogen gas shall be maintained below 1% concentration. Note: Visit bhs1.com/batteryroom/ ventilation for help determining ventilation needs.

- Is the battery room closed in or open to outside air? _____
- Are there areas in the ceiling where hydrogen gas can accumulate?

BRVS
HEF-KIT



IFC 608.6.1-2
OSHA 29 CFR 1910.178(g)(2)
OSHA 29 CFR 1910.305(j)(7)
OSHA 29 CFR 1926.441(a)(2)
NFPA 1 Chapter 52.3.6
NFPA 2
NFPA 70 Article 480.10(A)
NFPA 70E Article 240.1
NFPA 505 9.3.2.1

Carbon Monoxide & Smoke Detectors

An approved carbon monoxide detection system shall be installed and an approved smoke detector shall be installed.

- Carbon monoxide detectors present?
- Date last checked: _____
- Smoke detector present?
- Date last checked: _____

CO-S-D



IFC 608.9
NFPA 1 Chapter 52.3.10

Fire Extinguishers

Approved fire extinguishers shall be mounted and accessible.

- Fire extinguishers present?
- Type: Class “C” or “CO2” Dry Chem: _____
- Date last checked: _____

FE-20



OSHA 29 CFR 1910.157(c)(1)
OSHA 29 CFR 1910.178(g)
NFPA 505 9.3.2.1

Battery Maintenance

Proper battery maintenance items provide added safety.

- Hydrometer
- Water De-ionizer (WDS-1)
- Water Cart (WC-HYDRO-KIT)
- Equipment Cleaning Kit (ECK-4)
- Water Gun (WG-X)

WDS-1
WC-HYDRO-KIT
ECK-4
WG-X



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Training Program

Training shall be provided regarding the hazards of the equipment in their work area for ALL persons entering the battery room.

- Training program in place?
- Are training records documented?
- Is a training standard documented for personnel?
- Are all personnel who access battery room trained on hazards?
- Have product manuals and operator training DVD been provided?
- Comments: _____

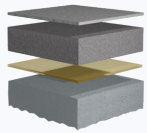


NFPA 70E Article 110.2(A)

Battery Room Floors

Floors shall be of acid resistant construction unless protected from acid accumulations.

- Does battery room floor currently have an epoxy applied to the concrete floor?
- Is there damage to existing epoxy or concrete?
If yes, take photos.
- (Operator Aboard Battery Extractor application) Has defined travel path been profiled to verify the FMIN rating?



OSHA 29 CFR 1926.441(a)(4)

Cable Management

Charging apparatus shall be protected from damage by trucks.

- Is there any damage to the charger cables or connectors?
- Are the charger cables and connectors supported from resting on the battery stand or floor?

CWB
CR-MT
CR-1
CR-M
CCR-12HD



OSHA 29 CFR 1926.441(b)(2)

Lifting Beam Staging Stand

Battery lifting devices shall be stored when not in use.

- Is there any damage to existing lifting beam?
- Is there a secure storage device for lifting beam while not in use?

CS-BLB



ASME B30.20-2010

The items referenced above are intended to assist in meeting the regulations referenced therein. Government regulations applicable to the use of BHS products vary from jurisdiction to jurisdiction. This survey should not be considered an exhaustive list of applicable regulations in your area. It is the responsibility of the end user to verify and maintain full compliance with all applicable regulations. Please consult legal counsel to determine the regulations applicable to your facility.

Comments:

