

## Technical Bulletin

# Maintaining Compliance by Upgrading Pillows

for site management professionals & consultants

## Why you need pillow replacements:

- End of product lifecycle (12-15 years for normal site conditions)
- Spills and contamination to existing pillows
- Pillows may have rodents and insect damage
- Damage from maintenance including ladders and stepping on pillows
- Moisture and humidity causing pillows to prematurely age
- Over-exposure to UV lighting causing degradation in fabric
- Maintain UL Listing which could be tied to the building occupancy permit
- Comply with passive neutralization regulation which neutralizes to a pH between 5-9 without human intervention
- Reduce cost to dispose of a solid versus liquid
- Reduce hazard level during clean up



New & Improved Highest  
Flammability Standards  
Factory Mutual /FM Global  
Approved Pillow

## Why replace pillows:

- Keep in compliance with local and state requirements.
- Pillows should be replaced when flooded and Large VRLA battery systems are replaced.
- Maintain UL Listing which, in many cases, is tied building occupancy permit.
- New product is new and improved with better tensile strength.
- New product turns purple when in contact with acid to prevent false positives.
- EnviroGuard has a recycling program including testing & documentation.
- You may be eligible for warranty credits (based on a site assessment).

## Who should replace pillows:

- Sites that have legacy products - Orange tag pillows
- Battery rooms that have flooded batteries that are 7+ years old
- Sites that are budgeting or ready to replace flooded batteries
- Facilities insured by Factory Mutual (FM Global) Insurance Company
- Sites that wish to maintain UL Listing in their critical site  
(sites with removed pillows are no longer UL Listed)



*Note: If the site was designed with pillows, it is a requirement of the AHJ*

## Project Management for Large Replacements:

- Reduce the risk of project problems.
- Ensure the level of quality that results in meeting requirements and expectations.
- Reduce staff member involvement and increase efficiency on the project within the business.
- Make it easier for staff with a single point of contact running the overall project.
- Maintain consistent communications amongst staff and suppliers.
- Keep costs, timeframes and resources to the allotted budget.

**EnviroGuard | 800-206-9884**

**5534 Olive St. Montclair, CA 91763-1649**



# What You Need to Know About EnviroGuard Pillows:



## Deluxe Pillow (green label)

*Satisfies requirements for the insurance company, UL Certification and AHJ*

- Dual certified FM Approved & UL Recognized.
- Meets Factory Mutual (FM Global) insurance company fire ratings.
- UL recognized pillow is required for the overall UL Listing of the containmnet system.
- The UL listing is often times tied to the building occupancy permit.
- Neutralizes without toxic outgassing & PH reactive (turns purple when in contact with acid).
- Each pillow contains a date code and serial number.
- Warranty is 5 full + 15 prorated
- Life expectancy is 12-15 years - parallels the life of the battery.
- *Made in the USA*



## Standard Pillow (blue label)

*Satisfies requirements for UL Certification and AHJ*

- Single certified UL Recognized.
- UL Recognized pillow is required for the overall UL Listing of the containment system.
- The UL listing is often times tied to the building occupancy permit.
- Neutralizes without toxic outgassing & PH reactive (turns pink when in contact with acid).
- Each pillow contains a date code and serial number.
- Life expectancy is 12-15 years.
- *Made in the USA*



## VRLA Pads (green or blue label)

*Available in dual FM/UL (green) and single UL (blue) certifications*

- Designed for VRLA systems at a lower cost (spill containment or pans).
- Satisfies FM, UL and AHJ requirements depending on the pillow model selected.
- The UL Listing is often times tied to the building occupancy permit.
- Neutralizes without toxic outgassing & PH reactive (turns pink when in contact with acid).
- Each VRLA pad contains a date code and serial number.
- Life expectancy is 12-15 years.
- *Made in the USA*

## Other product considerations:

- Terminal covers
- Battery room shower
- Spare pillows
- Eyewash station
- Safety Signs
- Hydrogen detection
- Isle mats
- Water cart / Gun / Deionizer
- Battery racks - Flooded and Front Access
- Made in the USA*



## Battery Safety Products



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# EnviroGuard Product FAQs

## Product FAQs

### **Are pillows required for the spill containment system?**

Yes. Pillows are required to comply with passive neutralization and the UL Listing of the system. If you have containment, it has already been determined that this is a requirement for your site.

### **How long should pillows last?**

Pillows will last 10-15 years depending on site conditions. This typically follows the lifecycle of the battery string depending on site conditions.

### **What is the manufacturer's warranty for my pillows?**

Pillows have a 5-year full + 10 year prorated warranty. Factory authorized inspections will verify the aging and condition of the pillow material.

### **What are the chemicals in EnviroGuard's Neutralization and Absorption Pillows?**

EnviroGuard pillow incorporate a specially developed and proprietary Neutrasorb compound consisting of a Neutralizer Chemical, Absorbent and Color Agent.

### **Is my containment system UL Listed?**

If you have an Eagle, CondorPlus or Hawk system, it is UL listed as long as the UL Recognized pillows are in place. The pillows and SOC's are UL Recognized components of the overall UL System.

### **What are the differences between the blue labeled UL pillow and the green labeled UL/FM Pillow?**

The blue labeled UL pillow carries the UL recognition whereas the green labeled UL/FM pillow carries both UL Recognition and is FM Approved. If you are insured by Factory Mutual Insurance Company or other commercial insurer that support the FM standard, you should always use the green labeled pillow.

### **What is the fire rating of pillows?**

Both UL Recognized and UL/FM Approved pillows meet Class I Fire Rating per NFPA 101. The dual certified UL/FM Approved pillows are the most stringently fire tested and rated pillows.

### **I see cheaper products on the internet. Are these approved to use in the containment system?**

No. The system is UL certified and using non-approved compounds will not only void the warranty, but will also decommission the site with the UL Listing. For example, other products such as emergency lighting and sprinkler systems also require approved replacement components. Non approved compounds will not meet codes requirements and could possibly put the end-user at risk for citation by the Authority Having Jurisdiction (AHJ).

### **Should old non-contaminated pillows be thrown in the trash?**

No, pillows MUST be disposed of in accordance with Federal, State and Local regulations. Contact EnviroGuard for assistance.

### **Should I recycle my pillows?**

You should recycle your pillows, providing they are not contaminated and to meet the site environmental recycling objectives. I already purchased replacement pillows from the EnviroGuard. Can I still participate in the recycling program?  
Yes, in most cases, as long as the old pillows are not contaminated. Please contact EnviroGuard for more details.

### **How do I test for contamination?**

EnviroGuard's pillows incorporate a color indicator that will change the pillow case color when exposed to possible contamination. Prior to recycling, EnviroGuard will provide a Pillow Test Kit for detail analysis of pillows required to meet EPA and DOT requirements for recycling.

### **What action should be taken if a pillow or SOC has been contaminated?**

Pillows that come in contact with sulfuric acid may also be contaminated with lead particulates. They must be treated as a hazardous material and must be properly disposed in accordance with state and federal laws. Replace the pillow or SOC immediately to ensure complete functionality of the spill containment system.

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### Are recycling services offered by EnviroGuard?

Yes. A stringent process for recycling is followed to ensure the product is not contaminated before shipping. Laboratory sample container kits are sent to the site for samples to be collected by the service partner or end-user. Instructions are included with the kit that provide a procedure on how collect the and send samples to an independent laboratory for analysis. Once the product has been proven to be non-contaminated, an RMA will be issued and approved shipping containers are sent to the site for the old pillows to be sent to EnviroGuard's recycling location.

Please note: By law, material that has not been tested and approved cannot be accepted by EnviroGuard. Unauthorized shipments will be rejected.

### How do I claim warranty for pillows?

Contact your EnviroGuard representative.

### What happens if the sample comes back contaminated?

EnviroGuard will assist the end-user in choosing an approved hazardous materials handling company to dispose of the product at the cost of the end-user.

### Is financing available for my end user?

Yes. EnviroGuard provides end user financing designed to help qualifying companies meet thier budget requirements.

Contact your EnviroGuard representative for details.

## Glossary of Terms

**Spill Containment Pillows:** A component of the overall passive spill containment system that is placed inside of the containment walls that absorbs and neutralizes electrolyte.

**Passive Spill Containment:** A spill containment system or fixture that includes a barrier, liner and neutralizing absorbing pillows that is placed underneath a product that has potential to spill or leak. Passive spill containment systems do not require trained personnel to neutralize and contain a spill.

**Site Conditions:** Generally refers to as the cleanliness, temperature and humidity of a site.

**Neutrasorb:** The compound in EnviroGuard Pillows and SOC's consisting of a Neutralizer Chemical, Absorbent and Color Agent.

**UL Listed:** UL has tested representative samples of the product and determined that it meets UL's requirements. These requirements are based primarily on UL's published and nationally recognized Standards for Safety.

**Factory Mutual Insurance Company / FM Global:** FM Global is a Johnston, Rhode Island-based mutual insurance company, with offices worldwide, that specializes in loss prevention services primarily to large corporations throughout the world in the Highly Protected Risk (HPR) property insurance market sector. "FM Global" is the communicative name of the company, whereas the legal name is "Factory Mutual Insurance Company".

**FM Approved:** FM approvals is the independent testing arm of international insurance carrier, FM Global. FM approvals uses scientific research and testing to make sure products conform to the highest standards for safety and property loss prevention.

**Class 1, or Class A, fire rating:** A Class 1, or Class A, fire rating means that the building material is highly resistant to fire and does not spread flames quickly. In the flame-spread rating test, a score of 0 to 25 constitutes a Class 1 rating. The score is relative and balanced between asbestos cement sheet, with a score of 0, and pure red oak, with a score of 100.

**Authority Having Jurisdiction:** According to the National Electric Code, An Authority Having Jurisdiction or AHJ is an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

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