



Lithium Battery Recycling & Lifecycle Management WORKSHOP VIII



Post Disaster Cleanups
What the Industry Needs to Know

ENERGY SECURITY AGENCY

Global Leaders in Electric Vehicle and Stationary Energy Storage Safety through testing and research, training, consulting, and real time guidance and high hazard response.

The ESA brings real world experience to the forefront of all of their operations to passionately impact the safety, risk management, and investment protection of our clients and the communities that they serve.

Dalan Zartman – Chief Executive Officer ESA



WHO WE ARE

- Foundationally rooted in battery-based destructive testing and research
- Highly experienced and qualified team members with Lithium-ion specialization
- Industry leaders in battery safety, compliance, and risk mitigation
- Field-tested processes and protocols
- Deep integration with local emergency response and battery resource networks



WHAT WE DO

Comprehensive Lithium-Ion Risk Management

- **Testing:** Collaborative fixed and mobile destructive battery testing for research and safety standards
- **Education:** xEV and Li-Ion Battery virtual and hands-on courses with educational partners
- **Compliance:** stakeholders and contributors in industry standards and interpretation
- **Incident Management:** 24/7 resource center for real time risk assessment, response, and decommissioning.

ESA provides start-to-finish support — from proactive planning to post-incident response.





Incident Environments and Types

Roadway

BESS Transport
Battery Transport
EV

Fleets

Parking Garages
OEM's
Service Centers
Depots

F1

BESS
Manufacturing
Recycling
Repurposing
Storage

BESS

Enclosure
PV

Airports

Consumer
GSE
EV
BESS

Maritime

Consumer
BESS
EV



These environments are complex ecosystems with numerous lithium-ion touchpoints — each requiring a proactive safety planning.

PRE INCIDENT



- SME SUPPORT
 - ERP and AHJ Integration
 - Design and Safety Systems
 - Full Mitigation Plan



ACTIVE INCIDENT

- SME SUPPORT
 - AHJ Guidance
 - Real Time Technical Support
 - Specialized Operational Support



POST INCIDENT

- SME SUPPORT
 - Transition
 - FIREWATCH
 - Decommissioning





TRANSITION

- AHJ Transfer
- Regulatory Bodies
- Chain of Custody
- Continuity of Care
- Maintain Scene Stability
- Identify Investigative Needs
- Dehazard Investigative Objectives
- **FIREWATCH**



FIREWATCH

- Fire and Hazmat Specialists
- Battery Specialists
- Mitigation Capable
- Special Resources
- Environmentally Adaptive and Certified
- Vetting with Operational Clarity



DECOMMISSIONING

- Risk Management Assessment
- Strategic Plan
 - Time, Cost, Risk
 - Dispositioning – Testing Data and Inspection
 - Regulatory Compliance – Validation Reporting
 - Packaging
 - Recycling
 - Transport
- Site Restoration
- FIREWATCH



CASE STUDY

- Pre Incident
 - Established Response Capability with SME.s
- Incident
 - Challenges
- Transition
 - A – B, B – C Transport Requirements
 - Dispositioning – Testing Data and Inspection
 - Packaging
 - Recycling
 - Transport
- FIREWATCH



CASE STUDY B



- B – C Requirements
- Operational Locations
- Resource Development
- FIREWATCH

ENERGY SECURITY AGENCY

- More Information Can be found at www.energysecurityagency.com
- Call the ESA Reponse Center Anytime to Reach a Response Specialist at 855-ESA-SAFE
- Email the ESA at info@energysecurityagency.com

