Recycled Materials Association

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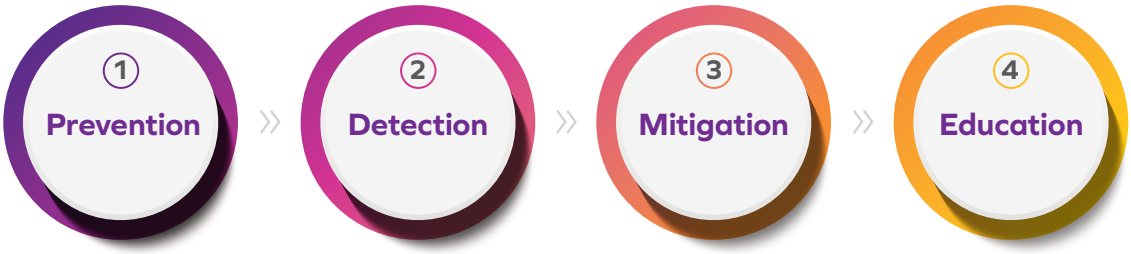
ReMA Guidance on Addressing Fire Risks at Recycling Operations

To address fire risks from batteries and other potential sources at recycling operations, especially metal shredding operations, ReMA recommends members develop a plan that contains the following principles: Prevention, Detection, Mitigation and Education. A framework is provided below for developing such a plan in concert with other positions and recommendations by ReMA.[1]



1. Prevention

a. Create, update, and publish material acceptance policy and/or prohibited material list on-site, online, and via supplier notices.

b. Develop inventory contingency plans for unexpected operational/equipment issues.

c. Inspect inbound materials (such as sheet iron, vehicles), with identified nonconforming material (such as batteries, gas cylinders) segregated by type into appropriate areas for further handling.

2. Detection

a. Train employees to identify batteries, materials likely to contain batteries, and materials that could contain ignition or fuel sources for potential retrieval, segregation, and subsequent handling.

b. Establish a process and/or equipment for detecting heat signatures and incipient fires in unprocessed and semi-processed (e.g., feedstock and ASR piles) that alerts appropriate facility personnel and potentially local fire departments (see 4.c).

c. Maintain fire surveillance on staged materials during operating hours and non-operating hours, including weekends, holidays, and downtime for maintenance or repairs.

[1] These include ReMA Position on Non-Embedded Small and Medium Format End-of-Life Battery Management, ReMA Position on Propulsion Battery End-of-Life Management, ReMA's Recommended Safety Practices, ReMA's Fire Safety & Prevention Resources, and ReMA's Fire Prevention and Management Plan among ReMA's Hazard Recognition in Recycling resources.

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3. Mitigation

a. Stage inspected materials separately by type (e.g., separate piles of sheet iron and vehicles).

b. Create and maintain manageably sized material piles (e.g., feed material and ASR) with adequate fire breaks to facilitate fire suppression.

c. Minimize materials staged from day to day or eliminate them (e.g., shred to the ground).

d. Install and maintain fire-suppression equipment (e.g., independent pressurized-water source, "water bombs") in areas where material is staged (see 4.a).

4. Education

a. Create, update, and regularly conduct employee training on and practice drills with fire-suppression equipment.

b. Create, update, use an emergency response plan, with regular employee training and drills.

c. Establish and maintain relationships with local fire departments and their weekday and weekend crews, including on-site visits and fire-suppression training.

d. Establish and maintain relationships with local elected officials, regulators, and community/neighborhood groups.

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"The most effective fire response is preventing the fire from occurring in the first place. By focusing on prevention, detection, mitigation, and education, recycling operations can better protect their employees, facilities, communities, and the environment."