# **HAZARDOUS INCIDENT RESPONSE TEAM**

## **HOT TOPIC: Lithium-ion Battery Safety**



Lithium-ion batteries are used in many electronic devices due to the high amount of power they can provide and their long battery life. They are commonly found in smartphones and tablets, fitness trackers, portable chargers, laptops, power tools, drones, e-bikes, personal mobility devices, and electric vehicles, among other devices. While they bring many benefits, they also require proper handling, storage and disposal for safe use.

#### **GENERAL SAFETY TIPS:**

- **Store Properly**: Store batteries in a cool, dry place away from direct sunlight and heat or high-temperature environments.
- Prevent Damage: Do not crush, puncture or drop. Physical damage can cause them to short circuit, overheat and potentially burn.
- Avoid Water: Keep batteries away from water and moisture. This may lead to short circuiting and damage to the battery.
- Monitor Charging: Do not leave batteries unattended. Prevent overcharging by removing devices from their chargers once the battery is at capacity.
- **Use Approved Devices**: Always use chargers that are specifically designed for lithium-ion batteries. Incompatible chargers can lead to overcharging an overheating.

#### **DISPOSAL:**

Adhere to local regulations and guidelines for battery disposal. Requirements may vary by region.

- 1. Avoid Trash Disposal: Do not throw lithium-ion batteries in the trash. They can pose environmental hazards and may cause fires at waste management facilities.
- 2. **Recycling Centers:** Dispose of lithium-ion batteries at designated recycling centers. These facilities are equipped to handle and recycle batteries safely. Visit WasteFreeSD.org or Call2Recycle.org to learn more.
- 3. Battery Collection Programs: Participate in battery collection programs offered by local retailers and government offices. Experts will be able to handle, store and deliver your batteries to the appropriate location. Household Hazardous Waste programs may be able to assist residents and small businesses by calling 800-713-2784.

Before disposing of a lithium-ion battery, cover the terminals with non-conductive tape to prevent short circuits. Place the battery in a plastic bag to contain any potential leakage.

#### HAZARDOUS INCIDENT RESPONSE TEAM

The San Diego County Department of Environmental Health and Quality (DEHQ) Hazardous Incident Response Team (HIRT) is a joint effort with the San Diego Fire Department and provides emergency service throughout San Diego County upon request of incident command first responders.

#### **ENVIRONMENTAL IMPACTS IMPROPER DISPOSAL:**

Improper disposal of lithium-ion batteries can have significant impacts. When these batteries are thrown in the trash or disposed of improperly, they are often compacted, causing a reaction that can release harmful chemicals into the environment. These chemicals can contaminate soil and water, posing risks to wildlife and human health. Additionally, lithiumion batteries can cause fires in waste management facilities, leading to further environmental damage. By following proper disposal practices, you can help minimize these environmental risks and contribute to a healthier planet.

### IS YOUR BATTERY SAFE? Look for these warning signs:

- 1. Swelling or Bulging: If a battery appears swollen or bulging, it may be damaged and should not be used.
- 2. Overheating: If a battery becomes excessively hot during use or charging, discontinue use immediately.
- 3. Leaking: If you notice any leakage from a battery, handle it with care and dispose of it properly.

#### GENERAL EMERGENCY PROCEDURES:

Fire: In case of a battery fire, avoid vapors and burn injuries. Water can be used for cooling, but will not extinguish the fire. For larger, serious situations, call 911.

**Exposure:** If battery chemicals come into contact with skin or eyes, rinse immediately with plenty of water and seek medical attention. In emergency or life-threatening situations, always call 911.

#### **WILDFIRES:**

In the event of a wildfire, lithium-ion batteries pose additional risks and should be considered hazardous. They could spontaneously ignite, explode and/or emit toxic gases even after the wildfire has been extinguished. **Never attempt to** remove lithium-ion battery-powered devices from the scene of a wildfire.

### For More Information on Waste **Disposal in San Diego County Contact:**

County of San Diego Recycling and Household **Hazardous Waste (Unincorporated Areas)** 

(a) 1-877-713-2784 (b) sdhhw.org



I Love a Clean San Diego (Incorporated Areas)

(a) 1-800-237-2583 (b) cleansd.org

