

# U.S. CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD

## Urgent Recommendation

### Whereas:

1. On October 5, 2006, a fire engulfed and destroyed the EQ Industrial Services (EQ) hazardous waste treatment, storage, and disposal facility in Apex, North Carolina.
2. The fire and smoke plume led to the precautionary evacuation of thousands of Apex residents.
3. The origin of the fire was at or near the location of a fiberboard container of unspent aircraft chemical oxygen generators awaiting final disposal.
4. The unspent oxygen generators most likely contributed to the rapid spread of the fire to the area where flammable hazardous wastes were stored.
5. The unspent oxygen generators found at the EQ facility originally came from Mobile Aerospace Engineering, Inc. (MAE) in Mobile, Alabama.
6. MAE removed the oxygen generators from aircraft at its facility in Mobile, Alabama because their useful service life had expired.
7. MAE did not actuate and expend the oxygen generators prior to shipment.
8. The shipping manifest prepared for MAE by the receiving hazardous waste facility incorrectly characterized the generators as general oxidizer waste and did not use the more accurate characterization of "oxygen generator" which has more restrictive transportation requirements.
9. The National Transportation Safety Board (NTSB), in its findings from the investigation of the crash of ValuJet flight 592 in 1996, stated, "Given the potential hazard of transporting oxygen generators and because oxygen generators that have exceeded their service life are not reusable, they should be actuated before they are transported."
10. Manufacturers of oxygen generators and passenger aircraft recommend actuating oxygen generators that have been removed from aircraft prior to shipment and disposal.
11. Under 42 U.S.C. §7412(r)(6)(C) (ii), the Board is charged with "recommending measures to reduce the likelihood or the consequences of accidental releases and proposing corrective steps to make chemical production, processing, handling and storage as safe and free from risk of injury as is possible ...."
12. Board procedures authorize the issuance of an urgent safety recommendation before a final investigation report is completed where there is a safety issue considered an imminent hazard that has the potential to cause serious harm unless it is rectified in a short timeframe.

## **Accordingly:**

Pursuant to its authority under 42 U.S.C. §7412(r)(6)(C)(i) and (ii), and in the interest of promoting safer operations at U.S. facilities handling chemicals and protecting workers and communities from future accidents, the Board makes the following urgent safety recommendations:

### **To Mobile Aerospace Engineering, Inc.**

#### **2007-01-I-NC-UR1**

Revise and or develop company procedures and policies to require and ensure that unspent chemical oxygen generators that have exceeded their service life be actuated so that the chemical core is expended before shipping by any transport mode.

#### **2007-01-I-NC-UR2**

Review and revise as necessary company procedures and policies for transporting hazardous waste to ensure that hazardous waste is correctly characterized on the shipping manifest.

#### **2007-01-I-NC-UR3**

Communicate to all of your waste brokers and treatment, storage, and disposal facilities to which unspent oxygen generators were shipped:

- the hazards associated with unspent chemical oxygen generators and
- that the incorrect shipping name and UN code was, or might have been used, for unspent chemical oxygen generators shipped from your facility.