

# WEATHER THE STORM—SAVE YOUR BUSINESS

## PREVENT CHEMICAL RELEASES DURING FLOODS AND STORM SURGES



### Did You Know?

New Jersey Enacted the Mercury Switch Removal Act of 2005 that requires the removal of mercury switches from end-of-life vehicles. Learn more about the statute on removal of mercury switches at N.J.S.A 13:1E-99.87.

## SCRAP METAL SECTOR

### SAVE MONEY—SAVE YOUR BUSINESS

New Jersey's more than 250 scrap metal facilities play an important role recycling heavy metals and keeping toxic chemicals out of landfills, but this sector uses some hazardous materials that can endanger people and the environment during floods and storm surges. These include:

- Toxic metals: arsenic, beryllium, cadmium, chromium, lead and mercury.
- Chemicals: acid, asbestos, gasoline, brake-fluid, transmission fluid, anti-freeze, refrigerant, oil, paint on used beverage cans, metalworking fluids used to process metals, solvents for degreasing, and tanks of oxygen and acetylene gas used for cutting metal.

Here's how:

- Get your business up and running again sooner.
- Prevent expensive chemicals from being washed away.
- Prevent spills instead of paying clean-up costs.
- Lower clean-up costs by switching to safer chemicals.
- Reduce or eliminate monitoring, tracking, and reporting costs.
- Reduce permitting and disposal costs with safer chemicals.<sup>1</sup>
- Retain property value by not contaminating it with toxic chemicals.
- Potentially lower workers' comp and liability insurance costs.
- Marketing advantage of being a green business.

<sup>1</sup> Air Permits cost for scrap metal facilities: Crusher + Shredder Air Permit \$3117 (5 year); Hazardous Waste Fee \$835–\$970 annually; Stormwater permit \$2300/annually.

## AS EASY AS 1, 2, 3...

Three steps to reduce toxic exposures during a flood or storm surge.

### 1. SUBSTITUTE



Switch to safer chemicals or processes when feasible.

### 2. REDUCE



Keep chemical inventory to a minimum.

### 3. SECURE



Store chemicals properly and securely above the base flood elevation.

# PREVENTION STRATEGIES

By using EPA's Best Management Practices (BMPs) guide together with energy, water and solid waste management strategies, businesses can prevent pollution and save money on chemical and compliance costs. Elements of a comprehensive strategy include: Safe storage, spill preparedness, safer chemicals, smart handling, proper disposal, record keeping and training.

## 1. Substitute and Reduce the Hazard of a Chemical Spill

The most effective way to eliminate a toxic release is to eliminate the hazard. This can be done by switching to safer chemicals and processes. If possible, the most hazardous chemicals should be replaced with alternatives that pose significantly less risk to workers, the community and the environment.

- Switch from solvent based to water-based cleaning products.
- Use a HEPA filter vacuum cleaner, and use proper protocols for using a HEPA filter to clean brakes and clutch assemblies instead of solvents or water.
- Remove mercury switches from automobiles prior to crushing.

## 2. Reduce Your Chemical Inventory

- Review your chemical inventory and ordering practices to ensure it is appropriate with your business needs.
- Minimize the amount of time hazardous waste is on-site by scheduling regular pick-ups.
- Reduce or eliminate, when feasible, outdoor storage of lightweight materials.

## 3. Safe Chemical Storage

- Remove chemicals from lower levels and floors to higher areas likely to stay dry.
- Anchor shelving to the building to prevent from being tipped over by floodwater.
- Select appropriate containers in which to store liquids. Solvents should be placed in metal drums; acids and bases should be placed inside polyethylene drums.
- Store waste-containing solvents in closed containers and dispose as hazardous waste.
- Make sure all chemical containers are labeled properly, and are sturdy and leak proof.
- Secure fluff and other floatable material from potential flood water.

### Housekeeping Tips

- Install paved surfaces to prevent contaminants from infiltrating the soil.
- Remove batteries from vehicles as soon as possible so that they do not get crushed along with the vehicle.
- At the end of each work shift, be sure chemical containers are tightly closed and returned to their designated storage area.
- Keep chemicals in elevated locations to avoid potential flood waters.



### KNOW YOUR FLOOD RISK

It's critical to develop a flood plan to minimize releases of these materials that can lead to both property loss and chemical exposures for humans and the environment.

Determine the flood risk of your building and develop a flood management preparedness plan. See the factsheet, *Weather the Storm—Save Your Business: Flood-Proof Your Business*, for more information on how to determine your flood risk and develop an emergency flood plan.

### Resources

- EPA's Safer Choice: [www.epa.gov/saferchoice](http://www.epa.gov/saferchoice)
- EPA P2 What You Can Do About Pollution Prevention—Business Resources: [www.epa.gov/p2/p2-resources-business](http://www.epa.gov/p2/p2-resources-business)

This factsheet is not an exhaustive list.

**For additional information and resources, please go to [www.njwec.org/p2resources](http://www.njwec.org/p2resources).**



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