Safe Handling of Pool Chemicals

With summer rapidly approaching, many people start hopping into pools, but don't jump in just yet.

Please take a moment to make a pool chemical safety plan and share it with family members.

Pool chemicals may become a hazard when they get damp or wet with a small quantity of water or when they are improperly mixed with each other, other chemicals or reactive materials. It is important to keep pool chemicals dry. Store them in separate containers, with lids, in a locked shed away from the house and pool.

Every year more than 5,000 people nationwide are sent to the hospital with pool chemical related injuries.

Residents should take care and follow these safety tips:

- Read and follow the manufacturer's instructions very carefully. Make sure when you dispose of chemicals that you follow the directions provided.
- Children should never handle pool chemicals, and even teenagers should not be allowed to do so without constant adult supervision.
- Put a lid on chemical containers every time. When containers are left open, water can get in and react with the chemicals. **Remember: powder in the water, not water in the powder.**
- Clean tools and equipment used to handle one chemical properly before using them with a different chemical.
- Spilled substances (e.g., from damaged containers or from sloppy handling) must be cleaned up and disposed of properly to avoid creating an inadvertent mixing or chemical reaction.

Liquid chemicals, such as sodium hypochlorite (bleach), if spilled, can leak into other containers or seep into cracks in the floor. Liquids, because of their properties, can create hazards not associated with solid or granular products and must be carefully handled.

Mixing chemicals can lead to a chemical reaction that may generate temperatures high enough to ignite nearby combustible materials. Mixing can also lead to the release of highly toxic and corrosive chlorine gas.

Proper pool chemical storage is a must; make sure to take all of the necessary precautions. Pool owners should conduct a review of how they store their pool chemicals and especially look for and correct situations where chemicals could be intentionally or accidentally mixed. Make sure to:

- Separate incompatible substances; avoid storing containers of liquids above containers of other incompatible substances. The most common pool chemicals are inherently incompatible with each other, so be sure to keep them apart.
- Avoid mixing old chemicals with fresh chemicals, even if they are the same type.
- Use separate, designated scoops for each chemical. Handle only one chemical at a time and make sure that tools used with one substance are not used with another unless all residues are removed.
- Use separate, designated containers for cleanup of spilled materials to avoid inadvertent mixing of spilled substances. Consult your local hazardous waste disposal facility for more detailed information on proper waste disposal.
- Lock your storage area to keep children, pets and unauthorized users out.
- Keep your storage area free of rags, trash, debris, or other materials that could clutter the hazardous material area. Keep combustible and flammable substance away from the area.

Local fire departments and hazardous materials teams often respond to emergencies involving swimming pool and hot tub/whirlpool chemicals. The costs incurred by the pool owner for emergency measures can be extremely expensive. Take the necessary measures to prevent or address any injury to people or harm to the environment.

Also, do not dispose of old pool chemicals in the trash or down the drain. Take old chemicals to a household hazardous waste collection day in your community or to a commercial hazardous waste facility. Since sodium hypochlorite (bleach) is the same chemical used in most water treatment facilities, check to see if your local plant will accept the chemical.

For more information about how to store and use pool chemicals safely, turn to: the MassDEP web site (www.mass.gov/dep/recycle/hazardous/hhwhome.htm) or the U.S. Environmental Protection Agency (http://www.epa.gov/oem/docs/chem/spalert.pdf). Pool chemical manufacturers' websites would also be helpful.