RISK MANAGEMENT

Fish Tanks and Aquariums

June 30, 2022

Over the summer of 2018, MIIA sustained two significant fire losses which originated from fish tanks kept in use in schools over the summer months. The combined damage from the two losses approached $2,000,000. Both losses occurred later in the summer months when high temperatures led to accelerated evaporation of water levels within the tanks and likely contributed to overheating.

These losses included fire, smoke, and water damage requiring extensive clean-up efforts throughout large portions of the affected schools.

Given the variable conditions that can exist in a school over the summer, we strongly recommend disassembly of fish tanks when school is not in session.

When school is in session, the checklist below outlines key items to consider.

Things to check on/ maintain with your fish tank or aquarium:

Water level: maintain the water level in your tank. Check levels periodically. Tanks can easily be overlooked during the summer or vacations when classrooms are not occupied.

Equipment: check manufacturers' guidelines on aquarium equipment. Some pieces of equipment need to be under water to keep cool. Others, like most aquarium heaters, need to be partially under water at all times. Still others, such as lights and all air pumps, need to stay out of the water.

Heaters:

- Water heaters for aquariums are not supposed to be instantly removed from the water after being unplugged from the power strip/wall outlet. They require a "cool down" period inside the tank to protect the heating element and circuit board. If not done, the heater could break and fail within a short period of time.
- The warmer the water temperature for the fish, the faster evaporation of water out of the tank. Most saltwater tanks are between 75deg F (reef tank-Corals) to 82deg F (ocean tank-fish).

Cords and plugs: check to ensure there is no fraying on any cords, that plugs are fully inserted into receptacles and that receptacles near fish tanks or aquariums are ground fault circuit interrupters. (GFCIs)

Drip loops: always set up a "drip loop" on any electrical cord on a piece of aquarium equipment, and on any piece of tubing connecting an electrical component to the fish tank. To set up a drip loop, ensure the cord or tube goes down and then up again between the fish tank and the outlet, or the fish tank and the electrical equipment. This allows water to drip off the bottom of the loop before running into the electrical outlet, extension cord, power strip, or pump.

Salt leaching: check for signs of salt leaching from the bottom of the tank which can corrode electrical cords or components.

Placement: ensure adequate spacing and segregation from flammable materials (drapes, artwork, posters, etc.)

If your school has an active aquarium or fish tank, please take a moment to ensure that it is properly maintained as outlined above. We are likely to face several more weeks of summer weather before school starts back up later this month.

MIIA Risk Management
Work Safe. Be Safe.

