# **Emergency Water Containment and Removal System**

#### **Background**

The accidental release of water or water intrusion during construction or demolition operations can result in significant losses. Costs associated with repairs, construction time, damage to furniture and fixtures and the physical structure, and loss of merchandise inventories and revenue due to disruption can escalate to serious levels. It is therefore necessary and prudent to develop an emergency plan of action that can effectively minimize losses.

## **Purpose**

To establish The Emergency Action Plan (Water) for the containment and removal of water accidentally released and/or water intrusion. Water source examples: fire protection sprinkler system, domestic water pipe and wind driven rain/flood.

### Requirements

- The Project Superintendent will designate members of a water emergency response team (Water ERT) for each floor or as he/she sees fit. The Water ERT will receive training in the various methods of response to accidental water releases, e.g.: fire sprinkler incidents, ruptured plumbing, etc.
- Winter Superintendent(s), members of the Water ERT, demolition superintendent(s) and foremen on each floor, and all subcontractor site supervisors are required to know the location of domestic and fire water cutoff valves and drain lines of fire protection sprinklers. (To assist in training, the Project Superintendent should prepare appropriate sheets of the building's plans clearly identifying emergency shut off points.)
- This information is to be reviewed frequently and during safety meetings. (*Note: Only Winter's superintendent and the boiler plumbers are required to know the location of steam/boiler cutoff valves.*)
- All workers on the jobsite will be reminded regularly of the location of all pipes most likely to contain water under pressure.
- Pipes scheduled to be demolished or pipes adjacent to demolition work will be afforded special handling to prevent leaks or spills.

### **Emergency Action Plan (Water)**

If an accidental release of water occurs, the worker involved will immediately inform his supervisor who will call out the Water ERT. The worker will simultaneously begin collecting water from the broken pipe and continue until relieved by the Water ERT. If the leak is small and close to the floor, the worker should collect water in a 5-gallon

bucket or 15-gallon washtub. Water on the floor can be corralled using squeegees and absorbent socks from the Quick Response Box.

If the leak is major or near the ceiling, then a 55-gallon drum should be used to collect water. Lay-flat ducting from the Quick Response Box can be used to drain sprinkler pipes or heads into 55-gallon drums or to the closest point of exit, e.g.: stairwell, toilet, window.

While the water is being collected / diverted, the supervisor will turn off the main water supply. If a fire protection sprinkler is damaged, the supervisor will close the zone valve and start the drain down for the system. The Quick Response Box also holds a supply of plugs for temporary pipe repair if a sprinkler head has been broken off.

The supervisor will inform the on-duty Winter superintendent without delay. Winter's Superintendent will inform Safety/Risk Management (Tim Thomas or Jeff Barber) without delay.

Once the water stops leaking, the area will be mopped and dried. The on-duty Winter Superintendent will help move any furniture, merchandise or other materials out of the wet area. He will check for damage to the building structure, electrical systems, and interior finishes. Prior to refilling any affected system, the Winter superintendent and any appropriate subs will convene for the purpose of developing a plan for repairs and refilling. Winter's VP of Risk Management, general superintendent, and project manager will be notified immediately of the situation. Winter's onsite team will document and photograph any damage to either the building and/or its contents. This information will be incorporated in an Incident Report that will be submitted, without delay, to the VP of Risk Management.

## **Quick Response Box** (*List box location(s)*)

Standard Kit:

- (2) Rolls of 3M high capacity folded maintenance socks
- (1) Hammer
- (1) Kit of 8 dowel rods of carious sizes
- (1) Ultra Leak Diverter
- (1) Roll of 6 mil 20' X 500' Lay Flat ducting
- (10) Sprinkler head guards
- (2) 18" foam rolled squeegees
- (1) Rolling box with tamper seal closure

## Other Equipment

The Project Superintendent may, at his/her discretion, provide any additional equipment or supplies deemed necessary to maintain a safe jobsite, e.g.: pumps, additional Quick Response Boxes, hose lines, etc.