**Revision Date:**

**Organization Name:**

**Site Name:**

**Address, City, Province:**

**Index-Record Number:**

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## Purpose

This Flood Emergency Response Plan (FERP) is an outline of actions to be taken before, during and after a flood. With proper planning, both property damage and business interruption can be minimized. The plan should be reviewed and updated annually to make sure effective action is taken, as needed. Preparation considers the depth of flooding based on predictive probabilities of up to the Moderate Hazard, 0.2% annual chance flood event.

## Site Flood Hazard

Flood hazards are unique and site specific. Understanding the potential scenarios faced by any individual site provides for the development of plan components that will be most appropriate with a higher level of success. Consult your local FM Global engineer or flood specialist for assistance in developing the overall Site Flood Hazard.

Provide a high-level description of the flood hazard(s) and likely scenario(s) including the following:

* Source(s) of flooding
* Likely weather event(s) that will trigger flood
* Likely advanced warning time for each event
* Depth of water if expected to effect site ingress and egress

### Water Entry Points

|  |  |  |
| --- | --- | --- |
| Building / Area | Opening & Elevation | Notes |
| Parking Garage  |  |  |
| Garage |  |  |
| Near the Fire Department Hose Connection |  |  |
|  |  |  |

##

## Authority to Activate Plan

The authority to activate the plan is critical, as business operations may be
temporarily halted and access restricted to reduce the overall damage and potential business interruption.

Describe who has the ultimate authority to activate response actions. Ensure an authorized person, such as a plant or operations manager, is responsible for each shift, and identify an alternate individual, as needed.

|  |  |  |
| --- | --- | --- |
| Authority to Activate Plan | Main Phone | Alternate Phone |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Flood Monitoring

The plan should indicate when monitoring operations are to begin, the preferred method of monitoring, and who has the responsibility for this critical step. A person or position, with alternates, should be assigned to monitor local conditions on each shift.

|  |  |  |
| --- | --- | --- |
| Shift | Person / Position to Monitor | Alternate |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Possible methods to monitor weather conditions leading to potential flood
events include:

* The Weather Network <https://www.theweathernetwork.com/ca>
* Canadian Weather <https://weather.gc.ca/>
* Other weather agencies in your region
* Local emergency management agency
* Local television or radio stations

Possible methods to monitor site-specific water levels, rate-of-rise and
projections include:

* Unique to each facility, according to where the facility is located, preferred methods/websites, and instruments that are available to the Subscriber.
* …
* …

Specific water levels or precautionary predictions should be designated to trigger the action steps listed in the Flood Action Plan below. The trigger point should be based on the amount of time needed to accomplish the response action steps and the amount of advanced warning time available.

## Flood Action Plan

This section must be completed by facility personnel. Items that should be considered and included are listed below. Specific action steps with the flood levels/predictions/local observations that trigger each step should be established and documented, along with required manpower and equipment for completion. This activity will help prioritize the tasks, which may be very important, if time is limited.

If the FERP includes deployment of flood protection equipment (barriers, gates/doors, sump pumps, etc.) and controlled shutdown of critical equipment, ensure each task necessary to implement the plan is documented and flood responders are assigned for all shifts.

### Deployment of Flood Protection and Task

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Building / Equipment | Task | Time Needed | Assigned To | Water or Gauge Level to Begin Action |
| Protected Openings |  |  |  |  |
| Fire Pump |  |  |  |  |
|  |  |  |  |  |

###

### Facility Shutdown

Procedure to shut down/de-energize utilities in an orderly manner to reduce ignition sources and damage:

1. Plan for a safe emergency shutdown of operations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Building / Equipment | Shutdown Activity | Time Needed | Assigned To | Water or Gauge Level to Begin Action |
| Transformers, Electric Panels | Deenergize Equipments |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

### Flood Mitigation

Action Items are best prioritized considering the value of the mitigation action combined with achievability within the advance warning window available. Some typical examples not in any type of prioritized order are provided below:

1. Raise and relocate highly valuable and easily moved equipment, contents and vital records to higher elevations. This may necessitate acquiring or renting special equipment to relocate contents.
2. Ensure that the drains are not clogged and that all sump pumps are functional.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Building / Equipment | Mitigation Activity | Time Needed | Assigned To | Water or Gauge Level to Begin Action |
| Drains and Sump Pumps | Ensure proper operation |  |  |  |
| Equipments or High Valeur Furniture | Elevate |  |  |  |
|  |  |  |  |  |

##

## Recovery Plan

This section must be completed by facility personnel. Contact critical contractors and suppliers in advance of the salvage operations, to assure they will be available when needed. Initial efforts should focus on preventing further loss from complications of the flood. Once the site is secure, efforts should be focused on restoring the facility operations.

### Restoration of Operations

1. Prioritize cleanup actions.
2. Prioritize the rebuilding or replacement of pieces of equipment that are most critical.
3. Establish agreements with vital sub-contractors to respond in the event of flooding.

|  |  |
| --- | --- |
| Building / Equipment | Restoration Activity |
|  |  |
|  |  |
|  |  |