OBJECTIVE

To provide information and procedures utilized to respond to and control situations involving flood water to include recovery and restoration of related damages to facilities.

PROCEDURES/INSTRUCTIONS

Facilities Management subordinate units identified in the succeeding paragraphs shall apply the following procedures/actions responding to water flooding. The Assistant Vice President or Associate Director will initiate outside vendor support and work with State Risk Management to cover insurance loss and reimbursement.

Damage documentation is critical to support the claim to State Risk Management. Documentation may include but is not limited to:

<table>
<thead>
<tr>
<th>Photography</th>
<th>Video:</th>
<th>Written Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>Overall</td>
<td>Sketches</td>
</tr>
<tr>
<td>Room by room - before clean up</td>
<td>Room by room before clean up</td>
<td>Notes</td>
</tr>
<tr>
<td>Room by room during clean up</td>
<td>Room by room during clean up</td>
<td></td>
</tr>
</tbody>
</table>

In the event of a Level 1 or Level 2 incident, or as a result of a State or National Emergency Declaration, a specific directive will be implemented to ensure proper documentation.

Normal Business Hours Procedures

During normal working hours floods are reported to the work control desk (621-3000 or 626-3000) and UMC (694-4400) from a wide variety of sources such as building managers, building occupants, and other FM workers.

The work control desk will gather as much information about the flood as possible to determine which shops should be notified.
<table>
<thead>
<tr>
<th>Facilities Management Shop</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumbing</td>
<td>Broken water lines</td>
</tr>
<tr>
<td></td>
<td>Broken sewer lines</td>
</tr>
<tr>
<td></td>
<td>Plugged drains</td>
</tr>
<tr>
<td></td>
<td>Overflow from a storage vessel</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Sump pumps (sewage or rainwater) failure</td>
</tr>
<tr>
<td>Custodial</td>
<td>Clean up and assistance</td>
</tr>
</tbody>
</table>

The Mechanical Shop will provide either an engine-driven pump or an electric submersible pump to pump out water or sewage. Only trained personnel can operate these machines.

**Response Procedure**

1. **Determine cause**
2. **Stop the flow**
3. **Assess Damage**
4. **Initiate clean-up**
5. **Initiate repairs**
6. **Restore service**

**Flooding Cause**

- **Determine cause**: Where is the water originating from?
- **Stop the flow**: What must be done to stop the flow?
- **Initiate clean-up**: What must be done to prevent further flooding?

**Stop the Flow**

This may be as simple as closing an isolation valve or shutting down a pump. This could mean major interruption of service to a building or buildings, or the need to divert or transfer the flow to another area to minimize facility damage or injury to person(s).

Exercise good judgment before shutting off the building water. *Authority is granted if the situation warrants it following assessment.*

**Initiate Clean Up**

In situations where it may be necessary to transfer large amounts of liquids, several pumps are available from the Plumbing and Mechanical shops. These pumps range in size and are located at the following locations:
### Damage Assessment

In less serious situations, Level 3, 4, and 5 events, this is typically the duty of the responsible Facilities Manager supervisor. The following notifications are required:

- UAPD – 621.8273 or 9-1-1 for emergencies
- Risk Management 621.1790

Following the notification process, and when safe to do so:

- Take photos of damaged area and/or equipment
- Submit incident report
- Submit the full report to the responsible supervisor

### Initiate Repairs/Restore Service

Repairs and restoration of service must be accomplished as soon as possible. In Level 3, 4 and 5 situations the authority to call upon any available resource that may be required to assist with restoration is authorized.

For Level 1 and 2 situations, the authorization will come from the Incident Commander/UACERT.

In all cases a well organized and coordinated response is required, keeping in mind the three incident priorities:

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<table>
<thead>
<tr>
<th>Pump Size</th>
<th>Gas or Electric Pump</th>
<th>Storage Location</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>4” – Trailer mount Gas</td>
<td>Gas</td>
<td>Removed for Security Reasons</td>
<td></td>
</tr>
<tr>
<td>1.5” Electric</td>
<td>Electric</td>
<td>Removed for Security Reasons</td>
<td></td>
</tr>
<tr>
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<td>Electric</td>
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<td>1.5” Electric</td>
<td>Electric</td>
<td>Removed for Security Reasons</td>
<td></td>
</tr>
</tbody>
</table>
Custodial Services

Custodial Services due to being in buildings have the greatest opportunity to discover flooding situations. Custodial personnel are required to immediately report flooding issues.

- Main campus buildings – 626.3000
- AHSC – 694.4400

For insurance purposes, Risk Management and Safety (621.1790) is to be called for support with any major flood situation.

Custodial Services Pre-Recovery Procedures

- Determine, if possible the nature of the flood
- Determine, if possible if there has been hazardous material contact (labs, exam rooms, etc.)
- Determine, if possible if the flood is fresh water or sewage.
  - Determine depth of flood
- Inspect for potential electrical hazards – Use extreme caution
- Verify the source of the flood has been contained
  - If not, immediately call the work desk at 621.3000
  - Request support from the Plumbing Shop before cleaning up the spill
- Place wet floor signs in all directions as a warning of a slip and fall hazard

For deeper floods and greater volumes of water, additional precautions must be taken.

- Equipment rooms, elevator shafts and other extremely hazardous areas will be flooded.
- Do not proceed without clearance from Risk Management, the Electric Shop or your supervisor.
Use of Personal Protective Equipment (PPE)

Protective and flood clean-up equipment is located in the Facilities Management Emergency Room, located at (Removed for Security Reasons)

Prior to use ensure equipment is in good operating condition

**Power Cords**
- Must not be cracked, torn or frayed
- Must have a ground plug
- Keep cords out of water

**Outlets**
- All outlets must be grounded

**Contact with Water**
- Ground fault interrupter must be used and tested before it is handled
- Instructions for testing are on the back of the interrupter
- Connector and interrupters must never be immersed in water

**Vacuums**
- Floats in tank vacuums must be operational
- Consider using an auto scrubber to pick up flood water when appropriate
- No raw sewage

- Goggles and Nitrile gloves are to be worn and disposable boots are recommended (required for water over ½ inch deep)
- Wear a dust mask when dumping tank vacuums, bailing or in any situation where there is a potential for splashing.

Post flood clean-up will include standard disinfecting procedures.
Elevator Shop Responsibilities

In the event of a flood where water has entered the elevator shaft, the following procedures must be followed:

**Occupied Elevator**

1. Secure the elevator
2. Shut off the power immediately
3. Do not attempt to recycle power

**Unoccupied Elevator**

1. Stop the elevator
2. Any floor
3. Secure the elevator
4. Shut the stop switch off or keyed switch
5. When Secured
6. Shut off power
7. Shut off disconnect in the Machine Room
8. Lock out and tag the disconnect out of service
9. After power shut off
10. Make sure elevator doors are closed
11. Tag all floors with "Out of Service" sign
12. Elevator Shop assess damage

**After Hours Procedures**

Plumbing Shop

- Call 621-3000 or 626-3000
- The General Maintenance Mechanic (GMM) on duty will be the first to respond to a flood.

The response procedure remains basically the same. If however, the flood and the potential for damage or personal injury are beyond the capacity of the GMM to handle alone, he shall immediately contact the on-call supervisor for assistance (name and number can be found in the Emergency Contact List).

- The GMM should then turn his attention toward trying to control the flood.
- It shall be the responsibility of the on-call supervisor to call in additional personnel.
• The on-call supervisor shall report to the problem area to direct operations, advise and apprise management of the situation.
  ○ There is no GMM on site for the third shift on Saturday.

CONTACT NUMBERS

Plumbing Shop

<table>
<thead>
<tr>
<th>Name</th>
<th>Cell Phone</th>
<th>Home Phone</th>
<th>Pager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Lower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James Wooten</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leo Taylor, Sprinkler Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mechanic Shop (GMM)

<table>
<thead>
<tr>
<th>Name</th>
<th>Cell Phone</th>
<th>Home Phone</th>
<th>Pager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill Boyd, Supervisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bill Felix, Lead</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Miscellaneous

<table>
<thead>
<tr>
<th>Name</th>
<th>621.8273 non-emergency</th>
<th>9-1-1 Emergency</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Management and Safety</td>
<td>621.1790</td>
<td>UAPD will contact RMS in an emergency</td>
</tr>
<tr>
<td>Chris Kopach, Director– Facilities Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mechanical Shop

After normal business hours the calls to the GMM would be called from the answering service relaying calls from building occupants or custodians working in the building.

GMM Responds

- Attempt to determine cause
- Attempt to repair or isolate

Additional Support

- GMM calls for support
- Shop personnel from Emergency Contact List
- Contacts on-call supervisor if contact can’t be made above
• If needed the GMM will pick up the engine-driven pump from the Vine warehouse lot or the electric submersible pump from AHSC, 1501 N. Campbell, Building 201, room 0100 to pump out water or sewage from the flooded area.
  o If sewage needs to be pumped out of a pit it will be necessary to locate a clean-out or sewer line above the main sewer line to connect to.
  o If a location cannot be found it may be necessary to call Old Pueblo Company (520-744-1100) to pump out the pit onto their large truck.
• The GMM will contact custodial personnel (XXX-XXXX) to assist in clean up.

Personal Protective Gear
• Each mechanic is issued rubber boots and rain gear.

Electrical Shock Exposure – GFI – Extension Cords

Extension cords must be inspected prior to use to assure that the cord is properly grounded and there are no cracks in the plug or wire.

Custodial Services
Pre Recovery Procedures

Treat all floodwater as potentially CONTAMINATED. Even a domestic water main break will be contaminated by the surfaces it contacts before it is recovered.

Before Staring Recovery Procedures Custodial personnel are required to immediately report flooding issues.

• Main campus buildings – 626.3000
• AHSC – 694.4400

For insurance purposes, Risk Management and Safety (621.1790) is to be called for support with any major flood situation.

• Determine, if possible the nature of the flood
• Determine, if possible if there has been hazardous material contact (labs, exam rooms, etc.)
• Determine, if possible if the flood is fresh water or sewage.
  o Determine depth of flood
• Inspect for potential electrical hazards – Use extreme caution
• Verify the source of the flood has been contained
  o If not, immediately call the work desk at 621.3000
  o Request support from the Plumbing Shop before cleaning up the spill
• Place wet floor signs in all directions as a warning of a slip and fall hazard
• Use submersible pumps; do not attempt to clean up large volumes of water with wet vacuums and mops.

MASS FLOODING OF CAMPUS

In the event of massive flooding to the university campus the university will coordinate efforts with the Pima County Office of Emergency Management for through the Pima County Multi-Jurisdiction Hazard Mitigation.

UACERT will be activated and will coordinate efforts of the event. A representative from the University will be assigned to the Pima County Emergency Operations Center, as the UA liaison. This individual must possess the authority to make decisions on behalf of the University for the coordination of efforts.

Resources available on campus:

• Rafts and canoes – Campus Recreation Center
• Heavy equipment for debris removal – Facilities Management
• UAlert – mass notification system