Should an air handling equipment failure occur, specific procedures will be taken to ensure the safety and welfare of all building occupants and to minimize the time needed to restore normal air handling capability to the disrupted areas.

**Purpose**

To provide guidelines for action in the event of an interruption of the normal operation of a piece of air handling equipment which is designed to provide a controlled environment for patients, visitors, students, staff and essential equipment.

**Procedure**

In the event of an air handling equipment failure or malfunction, the following notification system will be implemented:

1. The Central Control Operator shall notify:
   
   A. During the regular working hours; 7:00 a.m. to 3:30 p.m., Monday through Friday, notify the Manager of Maintenance Facilities immediately.
   
   B. Should the failure or malfunction occur before or after regular working hours, notify the appropriate maintenance personnel on duty and inform them of the problem as it was received through the centralized building automation system.

2. The appropriate supervisor or designate, or the maintenance personnel on duty should investigate the malfunctioning or failed equipment report by making an immediate visual inspection of the equipment.

3. If the malfunction has occurred after hours, the responding maintenance personnel on duty shall report back to Central Control any unusual conditions found and the status of the malfunctioned or failed equipment.
4. The Central Control Operator on duty shall then notify the Manager of Electrical/Systems or the appropriate supervisor and report any unusual conditions, if the malfunction has occurred after hours or if the HVAC supervisory staff cannot respond to the alarm.

<table>
<thead>
<tr>
<th>Name</th>
<th>UT PHONE</th>
<th>MOBILE PHONE</th>
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<tbody>
<tr>
<td>Mike Nowicki, Manager, Mech./Gen Mainten.</td>
<td>4913</td>
<td>419-367-1602</td>
</tr>
<tr>
<td>Jim Graff, Director, Facilities Operations</td>
<td>4158</td>
<td>419-466-1682</td>
</tr>
<tr>
<td>Victor Brigner, University Facilities &amp; Biomedical Tech Officer</td>
<td>4357</td>
<td>419-297-7530</td>
</tr>
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The Central Control Operator upon further direction from the appropriate supervisor or manager will begin the call-in procedure for additional facilities personnel in consecutive rotation, as outlined in the on-call list located within Central Control.

5. The HVAC supervisor staff will define the cause and severity of the problem and report this information directly to the University Facilities & Biomedical Technology Officer.

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</table>

6. The University Facilities & Biomedical Technology Officer, along with the responding appropriate supervisory staff, shall evaluate the severity of the problem and taken appropriate action in restoring normal air handling service back to the area(s) affected by the outage.

The main criterion for determining the cause of action will be the time table for restoration of the normal air handling service and an evaluation of the capability to maintain an acceptable amount of air exchanges.

The actual needs for equipment and actions required will have to be based on the extent of damage incurred to the air handling system.

7. The University Facilities & Biomedical Technology Officer will notify the AVP of Facilities & Construction of the location of the outage or malfunction and the plan of action and the estimated time required to restore the air handler back to service.
8. The first HVAC person to arrive at the failure site should implement lockout/tag-out procedures if appropriate.

The Manager of Maintenance Facilities, or appropriate supervisor or the designee will assess the damage and if the UT staff cannot make repairs, shall implement the following procedures:

A. If the fan has breached its housing or steel fabrication is needed; one of the following vendors should be called:

1. Waterville Sheet Metal Company
   1210 Waterville-Monclova Road
   Waterville, OH 43566
   Phone: 419-878-5050
   419-825-5297 (John Kelso-Home)
   419-351-1932 (John Kelso-cell)

2. V.M. System, Inc.
   3125 Hill Avenue
   Toledo, OH 43607
   Phone: 419-535-1044
   419-461-2060 (Gary Con-cell)

B. If the mechanical failure is of a magnitude that cannot be accomplished within the Facilities Maintenance Department; one of the following mechanical contractors should be called:

1. Dimech Services, Inc.
   5505 Enterprise Blvd.
   Toledo, OH 43612
   Phone: 419-727-0111

2. Dunbar Mechanical
   2806 N. Reynolds Road
   Toledo, OH 43614
   Phone: 419-537-1900
   Cell: 419-261-0123

C. If during the course of repair, it is determined a specific part needs to be made or modified; the following company should be notified:

1. Alton Products, Inc.
   425 W. Sophia Street
   Maumee, OH 43537
   Phone: 419-893-0201
   419-891-9986 (Joe Albright-Home Phone)
   419-866-6293 (Tom Jawicki-Home Phone)
D. After repairs are complete and before the fan can be placed in service, a vibration analysis will be done and the fan(s) balanced as needed. The following companies should be contacted for this service:

1. Industrial Motor Service  
   1000 Post Street  
   Toledo, Ohio 43610  
   Bill Jones, Jim Mackey 24 hours 419-241-7367

2. Lemsco-Girkins, Inc  
   2056 Canton Avenue  
   Toledo, OH 43620  
   Phone: 419-242-4005 (24 Hour Service)  
   419-360-1788 (John - cell)  
   419-360-1823 (Dave - cell)  
   Fax: 419-242-8587

9. If deemed necessary to meet the emergency as determined by the Director of Facilities Maintenance and the Manager of Maintenance Facilities, the following procedures may be implemented:

A. Determine whether the supply or return fan of the malfunctioning air handling unit can be run without further damage to the unit. The fan should be run if it does not pose a safety hazard to those personnel working on the system.

B. Air dampers on the air handling unit should be configured to give the best possible air circulations.

C. Doors can be opened to adjoining areas served by other air handling units for circulation.

D. Outside windows and doors can be opened for cooling as needed when the outside conditions warrant.

E. Outside windows and doors should be closed for heating as needed when the outside conditions warrant.

F. Air can be circulated using plug in portable fans as needed.

G. Notify the Vice President of Facilities and Construction.