

Cumberland Heights Foundation, Inc.
Environment of Care Plans
Utilities Management Plan

The Environment of Care Plans - Introduction to EOC Plans, including all defined terms, is incorporated herein by reference.

Purpose

To coordinate, manage and evaluate the provision of utilities in an effort to ensure the facilities of the Organization have reliable access to the various utilities that are necessary for the comfort and well being of the patients, visitors and staff. To this end, the Utility Management Plan provides for an organized approach to providing a safe, controlled and comfortable environment through continuous evaluation, improvement and maintenance of the utilities systems.

Scope

All Organization physical locations, facilities, buildings, patients, visitors and staff.

Note: Due to the nature of their use, the Organization's Outpatient facilities have been determined to not meet the criteria as critical areas and therefore are not addressed directly by this Plan. They are, however, covered in various policies and procedures that are listed in the Supporting Policies and Procedures section of this document.

Objectives

- To ensure that the data and communication systems of the facility are sufficient for the effective, safe and reliable care of our patients, visitors and staff.
- To reduce the potential for hospital-acquired illness (i.e. Pathogenic biological agents and airborne contaminants) by providing ongoing maintenance of the Heating, Ventilation & Air Conditioning (HVAC) systems.

- To assess and minimize risks of utility failures by testing and performing preventative and routine maintenance to the utility systems in an effort to ensure operational reliability.
- To plan responses to both expected and unexpected utility failures in an effort to minimize disruption to operations.
- To establish criteria for identifying, evaluating and ranking the inventory of critical operational components. The criteria address the impact of each utility system with regard to:
 - If the equipment is an integral part of a larger building system.
 - If the equipment is an integral part of an infection control system.
 - If the equipment supports systems that are necessary to maintain the operational environment in patient care areas.
 - If the equipment is an integral part of a communication and/or data system, which may affect the patient care environment. This includes cooling equipment that is required to maintain the operational integrity of a communication and/or data system that are required for patient care and/or safety.
 - NOTE: The Organization does not operate or utilize any life support utility systems.
- Provide compliance with regulatory agencies and applicable laws.
- Reduce incidents which result in unplanned utility interruptions or failures.
- Provide orientation and training information to staff that includes the employee's roles and responsibilities, use and limitations of utility

equipment, utility system failure procedures and emergency resources.

- Identify performance standards and monitoring indicators in an effort to improve performance.

Background

It is recognized that access to various utilities are an essential component to providing an effective patient care environment. It is also recognized that the provision of utilities are necessary for the function of certain vital operations. To this end, the Organization has established this Plan to manage the day-to-day utility operation, prepare for inevitable interruptions in those utilities and establish a backup for those utilities that are critical to the operation of the facility.

The Plan includes methods to use past problems and performance (accident and incident analysis); current problems/conditions (inspections and surveillance); and training in a proactive manner in preventing conditions and activities which cause injury, illness or loss.

Authority and Organization

Environment of Care Officer

As described in the Introduction to the EOC Plans, the CEO has named the Director of Support Services as the organization's Environment of Care Officer. In so doing the ECO has been granted the responsibility and authority to implement the Utility Management Plan. Included with this charge is the explicit authority and responsibility to take whatever action the ECO finds indicated whenever hazardous conditions exist which could result in personal injury to individuals or damage to equipment or buildings. This authority extends beyond his/her normal authority so as to allow the ECO complete autonomy as it relates to the mitigation of risk and/or injury to persons, equipment and/or structures. (See also: ECO Appointment and the Immediate Threat to Life and/or Property Policy in the Introduction to the EOC Plans)

Environment of Care Committee

The Committee shall provide oversight with regards to the operation of this Plan. As its Chairperson, the ECO shall bring matters to the Committee on an as needed basis. (See also: the Environment of Care Committee in the Introduction to the EOC Plans)

Organization and Responsibility

The Plan is established, supported, and maintained as part of the Support Services Department. The Director of Support Services is responsible for the overall management of the Plan. To this end, he/she is to provide utility systems that are safe, reliable and capable of providing for the safety and comfort of the environment.

Preventative Maintenance (PM) Program

The criteria used to select and prioritize the preventive maintenance activities that are to be included in this Plan are based on the actual utility and its relationship to the needs of the patient and overall facility operations. The criteria include the consequences of malfunction or failure of a system, the maintenance requirements and the history of problems. Equipment meeting the established criteria is included in the PM program and as such receives routine PM tests, inspections and maintenance.

Tests, inspections, and maintenance of the critical operating components of all utility systems covered by the Plan are included in the PM program. Work orders are completed on an ongoing, scheduled basis that addresses the specific needs of each component. Work orders are completed by Support Services Staff or the appropriate contractor with the results documented in the PM logs and records.

Pathogenic Biological Agents and Airborne Contaminants

Written procedures are in place that addresses the management of pathogenic biological agents in domestic water and aerosolizing water systems.

The HVAC systems are installed and maintained in accordance with the guidelines established in the American Society of Heating, Refrigeration and Air Conditioning Engineers.

Maintenance of the HVAC system is performed according to the manufactures specifications. All HVAC systems are checked monthly and annually receive complete cleaning procedures that include:

- Cleaning appropriate subsystems with a chemical degreaser, detergent, and deodorant.
- Disinfecting appropriate subsystems with a chemical coil and drain pan disinfectant.
- Maintaining drain pans with an appropriate condensate pan treatment.
- Replacing HVAC filter media in accordance with the manufactures recommended schedule and the actual load on the particular system.
- Inspection, and cleaning when indicated, of the supply and/or return air duct systems.

Drawings and labeling controls

The drawings for mapping the distribution of utility systems and labeling of controls for a partial or complete emergency shutdown of the system are the responsibility of the Director of Support Services. The drawings are maintained in the Support Services Department and in the Safety Policy and Procedure Manual in each department. New

and updated utility systems are incorporated into the drawings as they become operational.

Work Orders

Problems, failures and users errors are reported to the Support Services Department through the Work Order system. Work Orders are forwarded to Support Services by company mail, phone, email or person to person. Completed work orders tracked so as to update the PM program.

A Work Order history is used to formulate changes in the PM program, justify the purchase of new equipment or identify needs for additional training of staff.

Education

The Director of Support Services has the overall responsibility for the education of staff with regards to the Plan. Information is provided in the general orientation program for new employees and is incorporated into the annual updates. Attendance records are maintained by the Human Resources Office.

Support Services or contracted maintenance companies staff are trained by the Director of Support Services on existing equipment with regard to the PM procedures, testing and inspection of the various utility systems. Contractors and manufactures representatives are responsible for training with regards to new equipment.

Performance Standards

The Director of Support Services is responsible for establishing Performance Improvement standards to measure the effectiveness of the Plan. The Performance Improvement measurement process consists of ongoing monitoring of overall operations effectiveness. Compliance with these measurements is essential in providing continuous program improvement.

Performance indicators monitored include:

- Utility power outages
- Emergency equipment inspection and test results
- Percentage of PM's completed on time
- Number of equipment failures
- Staff knowledge of the Plan

Indicators are measured by collecting data from the following sources:

- Work requests
- Observations, inspections and surveys
- Patient and staff complaints

Emergency Procedures

The Director of Support Services is responsible for establishing and developing emergency response procedures for the Plan.

Emergency procedures include the following:

- Alternate or back up systems available in the event of a failure of a covered system
- Specific information related to the location of essential or emergency controls to "shut down" covered utility systems
- Conditions under which the emergency shut down controls are to be activated
- Specific information with regard to the type of failures of covered utility systems that are to be reported.

Emergency procedures are included in the new employee and annual orientation of all staff.

The emergency utility plan is located in the Safety Policy and Procedure Manual located in each department.

Emergency Electricity Supply

Cumberland Heights does not utilize a fixed emergency electrical generator. Emergency power for egress and exit lighting, alarm systems, communication, and data systems are supplied by automatic backup batteries.

Emergency heating is supplied by portable generators for radiant heat as well as propane and kerosene heaters. A trained individual from the Support Services Department will be present whenever emergency heat is in use.

Supporting Documents:

Environment of Care Plans – Introduction to All Plans

Environment of Care Plans – Emergency Management Plan

Emergency Shut Down Diagrams and Drawings

Letter Agreements establishing Preferred Status with electrical and plumbing contractor(s)

Supporting Policies and Procedures:

Pathogenic Biological Agents in Water Systems Policy

Air Quality Policy

Utilities Outages – Telephone Policy

Utilities Outages – Water Policy

Utilities Outages – Electrical Policy

Various Communication and Data Policies

Preventative Maintenance Procedures

Electrical Equipment, HVAC Equipment, Plumbing System, Safety Equipment

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