

VALLEYCARE
OLIVE VIEW-UCLA MEDICAL CENTER/HEALTH CENTERS
DEPARTMENT: FACILITIES
POLICY & PROCEDURE

NUMBER: 656
VERSION: 1

SUBJECT/TITLE: MEDICAL GAS/VACUUM SYSTEM – EMERGENCY PROCEDURES

POLICY: In the event the Medical Gas System, Medical Air system or Vacuum System fails this procedure should be implemented. The intent of this procedure is to:

1. Ensure patients receive gases that are critical to their well being.
2. Limit down time and place back-up systems into critical areas as soon as possible.
3. Keep care givers appraised of the status of the failure.

PURPOSE:

DEPARTMENTS: FACILITIES

DEFINITIONS:

PROCEDURE: Loss of Medical Air

In the event that one of the three medical air compressors fail, every effort will be made to repair the unit. Medical air is supplied to the hospital by three 75 horsepower pumps. One pump runs at a time unless pressure drops or demand increases, then the next pump starts to satisfy the demand as shown in the following schedule:

PRESSURE SWITCH SETTING SCHEDULE -

<u>PRESSURE SWITCH</u>	<u>PUMP STARTS AT</u>	<u>PUMP STOPS AT</u>
Lead Pump	70 PSI	80 PSI
Middle pump	65 PSI	75 PSI
Lag Pump	60 PSI	70 PSI

The lead pump starts at 70 PSI, runs until it reaches 80 PSI, then continues to run for six minutes once it reaches 80 PSI, then the pump shuts off. In the event of all pumps malfunctioning, notify respiratory therapy so they can hook up bottled medical air until system is repaired. A portable medical air pump can be installed in Co-Generation plant until house pumps can be repaired.

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PROCEDURE: Loss of Vacuum

Medical vacuum is supplied to the hospital by the means of three pumps located in the Co-Generation Plant. One pump runs at a time unless vacuum drops or demand increases, then next pump starts to satisfy the following demand:

VACUUM SWITCH SETTING SCHEDULE

<u>VACUUM SWITCH</u>	<u>PUMP STARTS AT</u>	<u>PUMP STOPS AT</u>
Lead Pump	17” H.G.	22” H.G.
Middle pump	15” H.G.	20” H.G.
Lag Pump	13” H.G.	18” H.G.

In the event of one pump malfunctioning, the other pumps will start automatically to satisfy the demand. In the event all pumps fail, notify Respiratory Therapy so they can hook up portable vacuum pumps.

PROCEDURE: Loss of Medical Gases (Nitrous Oxide & Oxygen)

Should a medical gas system fail, the affected department will be notified and portable tanks will immediately be taken to the area required. Additional back up tanks will be requisitioned from our medical gas supplier as needed. If a failure in the liquid oxygen supply occurs, notify Praxair: Emergency (800) 772-9247.

Facilities

1. Assess the extent of failure and inform Administration or Nursing Supervisor, Surgery, Respiratory Therapy and the Emergency Room.
2. In conjunction with Materials Management and/or Respiratory Therapy, redistribute portable gas tanks as required.
3. Notify Materials Management 818-364-4014 of failure and need for back up supply.
4. If a compressor or vacuum pump fails, back up unit(s) will be obtained through Harbor-UCLA Medical Center.
5. If a leak is found in any medical gas system, the following steps should be taken:
 - a. Notify the using department to determine if patients are using the gas. If patients are using the gas, have using departments change from piped

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gas to bottled gas, or move the patient to another area not affected by the leak.

- b. Contact Respiratory Therapy and the Nursing Supervisor and then close area valve for the gas system to be repaired.
- c. If the leak is in a wall outlet or nose drop, repair the leak.
- d. If the leak is found to be in copper tubing or fittings:

Do not attempt any repair.

Notify your supervisor.

In emergency, call ext. 4900 or 4100 (BEAS).

Medical gas piping must be certified and special pipe and silver solder used.

- e. After repairs and tests are completed, notify the departments and workers concerned.
- 6. Complete a report of the incident and return it to the Director of Facilities who will forward it to Safety Committee.
 - 7. After repairs are made, notify the departments.

References:	
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