**Loss of Medical Gases**

**In the Event of a Loss of Medical Gases**

**Switchboard**

Receive alarm via central panel in Switchboard and determine priority, if alarm is **Priority 4**, or a call to 4444 is received from a clinical area reporting a loss of oxygen:

*Announce Loss of Medical Gases (Low Oxygen Alarm or location of loss)*

Notify:
- Respiratory Therapy (via Vocera extension 1335 – say “Call Lead RT”)
- Maintenance (3333)
- Security Operations Centre (4142)
- Affected Area Manager, if applicable
- After hours Manager On-Call/Administrative Coordinator

Refer to Page 9

**Plant Operations & Maintenance**

Confirm with Switchboard whether there is a low level alarm or a complete loss

Refer to Page 13

**Respiratory Therapy Lead**

Proceed to Connell 0 Cylinder Room (2-050) to inventory oxygen

Refer to Page 11

**Security Operations Centre**

Ensure Protection Services Manager is notified

Refer to Page 15

---

**Upon Hearing a Loss of Medical Gases Announced**

**All Staff**

Do Not Call Switchboard

(Unless it is urgent)

- Ensure medical gas supply is functional in your area
- If it is not, report the loss through **(3333)**
- Delegate a staff member to report to Connell 0 Cylinder Room (2-050) to obtain oxygen.

Refer to Page 5

November 2017
# Kingston General Hospital

## Loss of Medical Gases

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1.0 General Overview

1.1 Plan to be Used in Case of a Loss of Medical Gases
The loss of medical gases to a patient care area can be a life threatening emergency. As a result, this plan is in place to ensure that there is an immediate response to the loss of medical gases to mitigate risk to patients.

1.2 Medical Gas Inclusion
In this plan, the term “medical gases” refers to both oxygen (O₂), and medical air. Nitrous oxide (NO) is also a medical gas, but normally its loss is not an emergency.

1.3 Vacuum/Suction
The loss of vacuum (a.k.a. suction) lines will also be considered an emergency. However, part of the vacuum system is the suction regulators, which are made up of a variety of components that are assembled at the bedside.

It is essential that all staff are familiar with the operation and assembly of these components. If the components are not assembled correctly, the float traps and bacterial traps could be compromised allowing contamination or even blockage of the medical vacuum pipeline system.

1.4 Medical Gas Redundancies
The hospital has several redundancies in place for medical gas supply.
- There are automated alarms monitored by Maintenance and Switchboard, which provide notification when hospital gas supplies are at several points:
  - Reorder alarm (approximately 3 day supply of main tank)
  - Reserve supply (main tank empty, reserve of approximately 5 days available)

1.5 Portable gas supplies
Some portable gas supplies (tanks) are available from the Connell 0 Cylinder Room (2-050) and will be delivered by delegated staff from clinical areas without medical gas after notification of the emergency.

1.6 Resuming Normal Medical Gas Supply
The goal for the hospital response during a loss of medical gases is resumption of normal medical gas supply as quickly as possible. This will be done via a coordinated effort between Maintenance, patient care and Respiratory Therapy staff.

1.7 Notification
All areas will be notified whenever there has been a loss of medical gases to an area of the hospital. In emergency cases notification will be made through the overhead public address system. In cases of non-emergency use, or testing, this will be done in advance by e-mail or hard copy and by phone identifying critical areas. Prior to and upon completion of non-emergency shut downs, or testing, Plant Operations & Maintenance will notify the identified critical areas work has been completed.
1.8. Site Command Centre (SCC)
A site command centre will be established in the Oxygen Tank room on Connell 0 in order to organize the distribution of auxiliary oxygen to critical clinical locations that have been affected by the Loss of Medical Gases. The RT Lead and a delegate Clinical Manager (as selected by the Executive Vice President/Delegate) will staff Site Command for the duration of the incident. The Clinical Manager will be the liaison between the Site Command Centre and the Incident Command Centre.

1.9. Incident Command Centre (ICC)
In the event of a complete loss of medical gases, the Incident Commander is the Executive Vice President/Delegate. The Incident Command Centre (ICC) will be set-up in the Dietary 1 Security Office. The Incident Commander is the direct contact for the Kingston General Hospital Emergency Operations Center.

1.10. Emergency Operations Centre (EOC)
If the loss of medical gases emergency escalates to the point where additional resources, outside agencies or a major evacuation (Code Green) is required, the KGH Emergency Operations Centre (EOC) may be activated. The EOC consists of senior administration officials and directs the actions of the Incident Command Centre. The EOC is normally established in the Watkins 2 Executive Committee room.

1.11. Joint Hospital Department/Program Responsibilities
In the event there is a loss of medical gases at one or more hospital sites, it is the expectation that management coverage for joint departments will be provided at each site for response. It will be the responsibility of the Director or delegate to ensure such coverage is provided.

1.12. Definitions
Priority Alarms

1.12.1. Priority Alarm Levels
The medical gas alarms at Switchboard are designated into four categories of alarm, 1 being the lowest and 4 being the highest priority (see Appendix A):

- **Priority 1** – Notify Maintenance
- **Priority 2** – Notify Maintenance/Maintenance Manager
- **Priority 3** – Notify Administrative Coordinator/Delegate, Maintenance/Maintenance Manager
- **Priority 4** – High Priority alarm, announce “Loss of Medical Gases Low Oxygen Alarm” overhead

---

1 Delegate refers to the next level of appointed authority; in this case the Administrative Coordinator/Duty Administrator
Stage 1 – Localized Loss of Medical Gases due to failure of any internal delivery and/or distribution systems
Loss of medical gases (O₂ and/or Medical Air) is due to the failure of any gas delivery components and/or distribution system, and only affects a specific area of the hospital. There is no supply interruption of medical gases to the rest of the hospital.

Stage 2 – Loss of Medical Gases to Entire Hospital
The supply of medical gases (O₂ and/or Medical Air) to the entire building has been compromised.

1.13. Threshold for Code Green (Evacuation) Implementation
There will be a point in the incident response where the level of auxiliary oxygen is just enough to maintain the supplies for a limited time or start the evacuation process. This will be dependent on the available supplies, and the number of patients requiring oxygen at that time.
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2.0 Response & Recovery – All Staff

Response
In the event of a loss of medical gases,

2.1. Upon announcement of Loss of Medical Gases Low Oxygen Alarm
- Identify which localized area is affected
- Staff from affected area must return to their unit
- Call 4444 to report loss of medical gases and have it announced overhead
- All available staff in affected areas to identify patients using oxygen and prepare to switch over to portable oxygen cylinders (found in local storage areas).
  - Record which patients are using oxygen
  - Perform inventory of extra cylinders in the area (use inventory sheet Appendix B
  - Delegate a staff member to attend the Connell 0 Cylinder Room (2-050) to obtain portable oxygen

2.2. Stage 1 – Localized Loss of Medical Gases due to failure of any internal delivery and/or distribution systems
- Identify which localized area is affected
- Staff from affected area must return to their unit
- Call 4444 to report loss of medical gases and have it announced overhead
- All available staff in affected areas to identify patients using oxygen and prepare to switch over to portable oxygen cylinders (found in local storage areas).
  - Record which patients are using oxygen
  - Perform inventory of extra cylinders in the area (use inventory sheet Appendix B
  - Delegate a staff member to attend the Connell 0 Cylinder Room (2-050) to obtain portable oxygen

2.3. Stage 2 - Loss of Medical Gases to Entire Hospital
All patient care staff are asked to report back to their units, all ancillary staff (Environmental Services, Transportation Services, etc.) are to report to their departments.

All Hospital Staff
There may be a need to evacuate some areas of the hospital into the Kidd or Connell wing during this Stage.
- Return to your area of work
- Staff must return to their unit
- Call 4444 to report loss of medical gases and have it announced overhead
- All available staff to identify patients using oxygen and prepare to switch over to portable oxygen cylinders (found in local storage areas).
  - Record which patients are using oxygen
Perform inventory of extra cylinders in the area (use inventory sheet Appendix B
Delegate a staff member to attend the Connell 0 Cylinder Room (2-050) to obtain portable oxygen
Assess staffing levels and provide feedback to your supervisor
Prepare for Code Green

In addition to the above job actions, specified areas must also complete the following:

Operating Room
- Complete OR procedures in process
- Anesthetic gas machines: check oxygen cylinders.
- Postpone/cancel upcoming procedures
- Assess the level of response required
- Notify the Incident Command Centre of any emergency medical procedures that require intervention during loss of medical gases

Emergency Department
- Assess patient load
- Assess the level of response required
- Notify OR and ICU of any critical patients that require immediate attention
- Consider possibility of closing the department to incoming patients
- Contact HDH Urgent Care Centre of the possibility of redirecting patients there
- Contact Ambulance Dispatch and advise of situation

Kidd 2 and Davies 4 ICU
- Prepare for response should evacuation (Code Green) be required as per EOC decision
  - Assess the level of response required
  - Triage patients for relocation
  - Request Incident Commander (via Switchboard) to contact CritiCall 1-800-668-4357 for assistance with patient relocation

Obstetrics (Labour & Delivery)
- Complete OR procedures in process
- Anesthetic gas machines: check oxygen cylinders.
- Postpone/cancel upcoming procedures
- Assess the level of response required
- Notify the Incident Command Centre of any emergency medical procedures that require intervention during loss of medical gases
Recovery

2.4. Upon Notification that the Crisis Has Concluded
☐ Advise patients and visitors that the crisis no longer exists
☐ Refer any media inquiries to the Strategy Management & Communications department
☐ Participate in a debriefing session
☐ Resume normal duties
3.0  Response & Recovery – Switchboard

Alarm priority is provided in Appendix A – Medical Gas Alarms
Responses by priority are as follows:

Response

3.1. Priority 1 gas level alarm notification (including vacuum loss)
☐ Notify:
  ☐ Facilities Management/On-Call (3333)

3.2. Priority 2 gas level alarm notification
☐ Notify:
  ☐ Facilities Management/On-Call (3333)
  ☐ Facilities Manager

3.3. Priority 3 gas level alarm notification
☐ Notify:
  ☐ Facilities Management/On-Call (3333)
  ☐ Facilities Manager
  ☐ Administrative Coordinator 7021 (when on duty)

3.4. Priority 4 gas level alarm notification
☐ Announce overhead three times: “Loss of Medical Gases Low Oxygen Alarm”
☐ Notify:
  ☐ Facilities Management/On-Call (if not already aware) (3333) – Provide specific the alarm name from the panel
  ☐ Respiratory Therapy (via Vocera extension 1335 – say “Call Lead RT”)
  ☐ Security Operations Centre (4142)
  ☐ Manager on call until 1700 hours
  ☐ Administrative Coordinator 7021 (when on duty)
    ☐ (If requested by Administrative Coordinator, Duty Administrator)

3.5. Stage 1 – Localized Loss of Medical Gases due to failure of any internal delivery and/or distribution systems
You will receive a call through 4444 of a report of a loss of medical gases for a specific area
☐ Announce overhead three times: “Loss of Medical Gases (location)”
☐ Notify:
  ☐ Facilities Management/On-Call (if not already aware) 3333
  ☐ Respiratory Therapy (via Vocera extension 1335 – say “Call Lead RT”)
  ☐ Security Operations Centre (4142)
☐ Affected Area Manager/Manager on call until 1700 hours
☐ Administrative Coordinator 7021 (when on duty)
  ☐ (If requested by Administrative Coordinator, Duty Administrator)

3.6. **Stage 2 - Loss of Medical Gases to Entire Hospital**
You will receive a call through 4444 of a report of a loss of medical gases
☐ Announce overhead three times: “Loss of Medical Gases KGH”
☐ Notify:
  ☐ Facilities Management/On-Call
  ☐ Respiratory Therapy (via Vocera extension 1335 – say “Call Lead RT”)
  ☐ Security Operations Centre (ext. 4142)
  ☐ Administrative Coordinator 7021 (when on duty)
    ☐ (If requested by Administrative Coordinator, Duty Administrator)

**Recovery**

3.7. **Upon Notification that the Crisis Has Concluded**
☐ Announce over overhead three times, “Loss of Medical Gases, All Clear”
☐ Notify:
  ☐ Facilities Management/On-Call
  ☐ Respiratory Therapy (via Vocera extension 1335 – say “Call Lead RT”)
  ☐ Security Operations Centre (4142)
  ☐ Affected Area Manager/Manager on call until 1700 hours
  ☐ Administrative Coordinator 7021 (when on duty)
    ☐ (If requested by Administrative Coordinator, Duty Administrator)
4.0 Response & Recovery – Respiratory Therapy

Response

4.1. Upon announcement of any Loss of Medical Gases (Low Level Oxygen, Stage 1 or Stage 2)

Respiratory Therapy Lead
☐ Attend Connell 0 Cylinder Room (2-050) to inventory oxygen
☐ Contact:
  ☐ RT covering each clinical unit to communicate oxygen cylinder needs
  ☐ Incident Command Centre to provide status update (6393)

Respiratory Therapists
☐ Liaise with Charge Nurse for oxygen needs of unit
☐ Communicate oxygen cylinder needs for your clinical area to RT Lead
☐ Assist with delegation of staff to obtain oxygen tanks from Connell 0 Cylinder Room (2-050)
☐ Prepare to assist with response should evacuation (Code Green) of critical care areas be required per Emergency Operations Centre decision

The following areas are particularly vulnerable to a loss of oxygen/medical air:
☐ Emergency Department
☐ Operating Rooms
☐ K2 and D4 ICU
☐ CV Lab
☐ Obstetrics (Labour & Delivery)

4.2. In case of Loss of Medical Vacuum
☐ Provide portable suction devices to patient care areas as required
☐ Prepare to assist with response should evacuation (Code Green) of critical care areas be required per EOC decision

Recovery

4.3. Return to Normal Operations

Respiratory Therapy Lead
☐ Ensure proper restock of used oxygen supplies
☐ Conduct a debriefing session with involved staff

Respiratory Therapists
☐ Obtain status update from RT Lead
Response & Recovery – Respiratory Therapy
☐ Participate in a debriefing session
☐ Return to normal duties
5.0 Response & Recovery – Plant Operations & Maintenance

Response

5.1. Priority Alarm Notification
Director of Facilities Management/Delegate
☐ Contact Switchboard to confirm you have received the page/information
☐ Refer to medical gases alarm listing in Appendix A
☐ Determine the alarm priority/severity
☐ Attend area of alarm origin and check equipment operation, pressures, etc.
☐ Call Praxair for oxygen delivery

5.2. All Stages
Director of Facilities Management/Delegate
☐ Upon notification that an area in the facility is without medical gases, report to that area
and assess the cause of the outage and determine the level of response required

5.3. Stage 1 – Localized Loss of Medical Gases due to failure of any internal
delivery and/or distribution systems
Director of Facilities Management/Delegate
☐ Notify Switchboard/Operator of Stage 1 Loss of Medical Gases and affected area, if not
already aware/announced
☐ Take necessary steps to rectify loss of medical gases
☐ Discuss with Respiratory Therapy Lead the possibility of backfilling the oxygen system

Facilities Management Staff
☐ Report to the Facilities Management department for required response to loss of
medical gases
☐ Receive direction on appropriate steps to rectify loss of medical gases

5.4. Stage 2 – Loss of Medical Gases to Entire Hospital
Director of Facilities Management/Delegate
☐ Notify Switchboard/Operator of Stage 2 Loss of Medical Gases, if not already
aware/announced
☐ Notify any additional available Facilities Management staff to assist
☐ Discuss with Respiratory Therapy Lead the possibility of backfilling oxygen system
☐ Provide updates to the Incident Commander

Facilities Management Staff
☐ Report to the Facilities Management department for required response to loss of
medical gases
☐ Receive direction on appropriate steps to rectify loss of medical gases

Response & Recovery – Plant Operations & Maintenance
5.5. **Loss of Medical Vacuum**

- Director of Facilities Management/Delegate
- Investigate loss of medical vacuum
- Assess response required
- If the response needs to be escalated, notify:
  - Respiratory Therapy Lead
  - Executive Vice President/Delegate (Administrative Coordinator, after hours)

**Recovery**

5.6. **Return to Normal Operations**

**Director of Facilities Management/Delegate**

- Notify Switchboard/Operator to announce an All Clear
- Conduct a debriefing with Facilities Management staff

**Stage 1**

**Director of Facilities Management/Delegate**

- Notify Switchboard/Operator to announce an All Clear
- Conduct a debriefing with Facilities Management staff

**Facilities Management Staff**

- Participate in a debriefing with the Director of Facilities Management/Delegate
- Resume normal duties

**Stage 2**

**Director of Facilities Management/Delegate**

- Notify Switchboard/Operator to announce an All Clear
- Conduct a debriefing with Facilities Management staff

**Facilities Management Staff**

- Participate in a debriefing with the Director of Facilities Management/Delegate
- Resume normal duties
6.0 Response & Recovery – Protection Services

Response

6.7. Upon announcement of any Loss of Medical Gases (Low Level Oxygen, Stage 1 or Stage 2)

Security Operations Centre Operator

You made be notified of loss of medical gases via 3333 when the Maintenance office is closed.

☐ Notify (if not already aware):
   ☐ Shift Supervisor of Stage 1 loss of medical gases and location if not already aware
   ☐ Facilities Management (or on-call FM staff), if not already aware
   ☐ Protection Services Manager

☐ Document all activity related to internal loss of medical gases response

☐ If authorized by the Incident Commander:
   ☐ Activate the KGH Primary fan out contact through Call-Em-All to notify Emergency Operations Centre (EOC) members. Advise EOC members to report to the Kingston General Hospital Watkins 2 Committee Room with identification

☐ If you are contacted with ongoing information concerning the loss of medical gases, notify the Incident Commander at (6393) when the Incident Command Centre is established

Shift Supervisor

☐ Ensure notification of the following (if not already aware):
   ☐ Security Operations Centre ext. 4142
   ☐ Protection Services Manager
   ☐ Respiratory Therapy Lead
   ☐ Administrative Coordinator (when on duty)

☐ Liaise with Director/Manager of Affected Area/Delegate

Monday – Friday (after hours), Weekends & Holidays

☐ Report to Dietary 1 Security Office to establish Incident Command Centre

☐ Notify, Administrative Coordinator and discuss contacting Switchboard to provide the appropriate Loss of Medical Gases announcement (If there has not been an announcement)

☐ Prepare to transfer command to a higher authority and respond as directed

☐ If authorized by the Incident Commander:
Take Emergency Operations Centre (ECO) kit from Dietary 1 Office to the Watkins 2 Committee Room to set up the EOC

Prepare for the possibility of an evacuation. Refer to Code Green Plan

Security Officer
Await instruction from Shift Supervisor

Director of Protection Services/Delegate
Report to Dietary 1 Security Office to assist with set up of Incident Command Centre, ensure the Executive Vice President is aware of the incident and will attend the Incident Command Centre
Receive status report/discuss initial action plan with required positions
Refer to Incident Command Centre Section of Plan on page 11 for further instructions
Provide update to EOC
Prepare for the possibility of an evacuation (Refer to Code Green Plan)

Manager of Security & Life Safety /Delegate
Report to the Dietary 1 Security Office
Ensure the continuation of Security shift functions for all sites
Call in extra staff as required
Ensure an Officer is posted at Watkins 2 to control access to EOC (if active)
Prepare for the possibility of an evacuation (Refer to Code Green Plan)

Manager of Emergency Management, Parking & Security Operations Centre /Delegate
Report to the Dietary 1 Security Office
Be prepared to take on role of Incident Commander
Refer to Incident Command Centre Section of Plan on page 11 for further instructions
Prepare for the possibility of an evacuation (Refer to Code Green Plan)

Recovery

6.8. Upon Notification that the Crisis Has Concluded

Director of Protection Services/Delegate
Conduct a team debriefing

Manager of Emergency Management, Parking & Security Operations Centre/Delegate
Ensure that all documentation is collected for debrief preparation
Ensure that a comprehensive occurrence report is filed immediately
Dismantle the EOC/ICC and update supplies as needed
☐ Participate in a team debriefing
☐ Resume normal duties

Manager of Security & Life Safety /Delegate
☐ Participate in a team debriefing
☐ Provide direction to Shift Supervisor/Delegate/Delegate
☐ Resume normal duties

Shift Supervisor
☐ Participate in a team debriefing
☐ Resume normal duties

Security Operations Centre
☐ Prepare documentation for debriefing
☐ Participate in a team debriefing
☐ Resume normal duties

Security Officers
☐ Await direction from the Shift Supervisor/Delegate
☐ Resume normal duties
7.0 Response & Recovery – Site Command & Incident Command Centre

Response

7.1. Upon announcement of any Loss of Medical Gases (Low Level Oxygen, Stage 1 or Stage 2)

Incident Management System
7.1.1. **Site Command and Incident Command**
Site Command will be staffed by the Respiratory Therapy Lead and a Clinical Manager/delegate
The Clinical Manager/delegate will act as a resource for the Respiratory Therapy Lead and as the liaison between Site Command and the Incident Command Centre

**Incident Commander – Executive Vice President/Delegate**
- Establish the Incident Command Centre (Dietary 1 Security Office)
- If required, the evacuation of ICUs will need to be coordinated with CritiCall. The hospital President & CEO must authorize the request and contact Criticall (1-800-668-4357)
- Ensure a Clinical Manager/delegate has been assigned to the Site Command Centre to assist the Respiratory Therapy Lead and to act as a liaison between Site Command and Incident Command

**Site Command Liaison (Clinical Manager/Delegate)** ______________________

- Contact Switchboard/Operator and ensure they are aware of the contact number for the Incident Command Centre
- Appoint the following positions, only if the regular assigned persons are not available:
  - Planning ___________________________
  - Logistics ___________________________
  - Operations ___________________________
  - Recording Secretary ___________________________

- Receive status report/discuss initial action plan with required positions
- Liaise with the Site Command Liaison via Vocera or the Oxygen room telephone extension (4242)
- Ensure the following departments are notified of the Loss of Medical Gases and that they will delegate a representative to attend the Connell 0 Cylinder Room (2-050) to obtain oxygen:
  - Emergency Department
  - Operating Rooms
  - K2 & D4 ICU
  - CV Lab

---

2 Delegate refers to the next level of appointed authority; after hours this would be the Administrative Coordinator or other suitable Manager as assigned by the Incident Commander.
Kingston General Hospital

Loss of Medical Gases

☐ Obstetrics (Labour & Delivery)

☐ Contact the following departments to provide information on the incident:
  ☐ Infection Control
  ☐ Risk Management

  ☐ If the incident is expected to cost more than $5000 for clean-up and repair:
    ☐ Ensure a SAFE Report is submitted online
    ☐ Ensure required information for insurance purposes is gathered
  ☐ Strategy Management and Communications

☐ Prepare to provide a situational report to the President & CEO/Delegate

☐ After hours, liaise with Administrative Coordinator and Duty Administrator and assess the need to activate the Corporate Emergency Operations Center (EOC) and call back of Program Directors

  ☐ Notify Security Operations Centre Operator to call KGH Fan Out Primary Contacts via Call-Em-All if required, and have them report to the EOC at Kingston General Hospital in the Watkins 2 Executive Committee room

☐ Authorize staff fan-out lists, as required, in consultation with Program Directors/Managers/Delegates

☐ Brief Program Directors on the status of the incident

☐ Be prepared to transfer command to a higher authority (i.e. CEO)

☐ Prepare for the possibility of an Evacuation (Code Green)

☐ If Emergency Operations Centre is activated provide the President & CEO/Delegate with regular updates

  ☐ Discuss whether Code Green should be activated

Operations Officer – Representative of Protection Services/Delegate

☐ Provide communication links as necessary to Incident Command Centre

☐ Liaise with Respiratory Therapy Lead and obtain regular status updates

☐ Liaise with Facilities Management to obtain regular status updates

☐ Prepare for the possibility of an Evacuation (Code Green)

Logistics Officer – Manager of Emergency Management, Parking & Security Operations Centre/Delegate

☐ Be prepared to provide provisions for the Incident Command Centre in the event of an extended emergency (i.e. food, water, etc.)

☐ Be prepared to assume role of Incident Commander of the Incident Command Centre when the Emergency Operations Centre is activated

☐ Prepare for the termination of the emergency and any debriefing requirements

☐ Prepare for the possibility of an Evacuation (Code Green)
Planning Officer – Manager, Security &, Life Safety /Delegate
☐ Provide communication as necessary to Incident Command Centre
☐ Prepare to receive any risk issues from Security Officers
☐ Prepare for the possibility of an Evacuation (Code Green)

Security Shift Supervisor
☐ Receive instruction from Manager of Security & Life Safety/Delegate for response

Recording Scribe
☐ Answer phone in the Dietary 1 Security Office
☐ Document all actions within the Incident Command Centre
☐ Prepare for the termination of the emergency and any debriefing requirements (i.e. paper, pens, location, etc.)

Operations Officer – Respiratory Therapist Lead
☐ Relay status updates to Incident Command Centre from Connell 0 Cylinder Room (2-050) via Vocera/telephone (4242)
☐ Communicate with Respiratory Therapists in clinical areas on status of portable oxygen supplies

Planning Officer – Manager, Security & Life Safety /Delegate
☐ Continue communication with municipal P.U.C.
☐ Regularly assess risk and make recommendations on length of loss of medical gases and any special needs including the shutting down of specific equipment as part of energy conservation
☐ Provide communication as necessary to Incident Command Centre
☐ Prepare to receive any risk issues from Security Officers

Logistics Officer – Manager of Emergency Management, Parking & Security Operations Centre/Delegate
☐ Be prepared to assume role of Incident Commander of the Incident Command Centre when the Emergency Operations Centre is activated

Recovery

7.2. Return to Normal Operations

Incident Commander
☐ Upon notification that the medical gas supply has been restored authorize Switchboard to announce an All Clear
☐ Liaise with President & CEO/Duty Administrator
- Prepare for a debriefing with the Incident Command Centre
- Prepare for a debriefing with the EOC, if it was established
- Instruct staff to resume normal duties

**Operations Officer**
- Debrief staff on lessons learned and procedural/equipment changes needed
- Instruct staff to resume normal duties

**Planning Officer**
- Prepare for a debriefing with the Incident Command Centre

**Logistics Officer**
- Dismantle the EOC/ICC and update supplies as needed
- Participate in a team debriefing
- Compile any reports for debriefing

**Recording Scribe**
- Document recovery actions and communication within the Incident Command Centre
8.0 Response & Recovery – Executive Vice President/Delegate

Response

8.3. Upon announcement of any Loss of Medical Gases (Low Level Oxygen, Stage 1 or Stage 2)

☐ Assign a Clinical Manager/Administrative Coordinator (when on duty)/Delegate to the Site Command Centre to assist the Respiratory Therapy Lead and to act as a liaison between Site Command and Incident Command

☐ Attend the Dietary 1 Security Office to assume role of Incident Commander (refer to page 19)

Recovery

8.4. Upon Notification that the Crisis Has Concluded

☐ Arrange for a debrief session between Incident Command and the Emergency Operations Centre

☐ Arrange for a debrief session with involved staff

---

Delegate refers to the next level of appointed authority; after hours this would be the Duty Administrator.
## 9.0 Appendix A – KGH Medical Gases Alarms

<table>
<thead>
<tr>
<th>Source location: Main Bulk Pad</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alarm #</strong></td>
<td></td>
</tr>
<tr>
<td>5 Oxygen Line Pressure Low</td>
<td>3</td>
</tr>
<tr>
<td>6 Oxygen Line Pressure High</td>
<td>1</td>
</tr>
<tr>
<td>10 Oxygen Reserve Pressure Low</td>
<td>4</td>
</tr>
<tr>
<td>12 Oxygen Reserve Supply In Use</td>
<td>2</td>
</tr>
<tr>
<td>13 Oxygen Reserve Liquid Level Low</td>
<td>4</td>
</tr>
<tr>
<td>16 Oxygen main Liquid Level Low - Re-Order</td>
<td>1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Source location: Connell 0 tank Room</th>
<th>Notification</th>
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</thead>
<tbody>
<tr>
<td><strong>Alarm #</strong></td>
<td></td>
</tr>
<tr>
<td>7 Nitrogen Line Pressure High</td>
<td>1</td>
</tr>
<tr>
<td>8 Nitrogen Reserve Supply In Use</td>
<td>1</td>
</tr>
<tr>
<td>9 Nitrogen Line Pressure Low</td>
<td>3</td>
</tr>
<tr>
<td>17 Nitrous Oxide Line Pressure Low</td>
<td>3</td>
</tr>
<tr>
<td>20 Nitrous Oxide Line Pressure High</td>
<td>1</td>
</tr>
<tr>
<td>21 Nitrous Oxide Reserve In Use</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source Location: Kidd Level 8</th>
<th>Notification</th>
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<tbody>
<tr>
<td><strong>Alarm #</strong></td>
<td></td>
</tr>
<tr>
<td>22 Medical Air Line Pressure Abnormal</td>
<td>1</td>
</tr>
<tr>
<td>33 Medical Air Lag Compressor In Use</td>
<td>1</td>
</tr>
<tr>
<td>34 Medical Air Reserve In Use</td>
<td>1</td>
</tr>
<tr>
<td>35 Medical Air Cylinders Empty</td>
<td>2</td>
</tr>
<tr>
<td>36 Medical Air Dew Point Alarm</td>
<td>1</td>
</tr>
<tr>
<td>37 Switching Failure Dryer &quot;A&quot;</td>
<td>1</td>
</tr>
<tr>
<td>Alarm #</td>
<td>Description</td>
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<tr>
<td>39</td>
<td>Switching Failure Dryer &quot;B&quot;</td>
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<tr>
<td>40</td>
<td>Dryer Low Outlet Pressure</td>
</tr>
<tr>
<td>43</td>
<td>Compressor Overtemp Alarm</td>
</tr>
<tr>
<td>41</td>
<td>Vacuum Line Below Normal</td>
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<tr>
<td>42</td>
<td>Vacuum Lag Pump In Use</td>
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<td></td>
<td><strong>Source Location: Kidd Level 0</strong></td>
</tr>
<tr>
<td>1</td>
<td>Vacuum Lag Alarm</td>
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<tr>
<td>2</td>
<td>Air Lag Alarm</td>
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<tr>
<td>3</td>
<td>Vacuum Line Vacuum Abnormal</td>
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<td>4</td>
<td>Air Line Line Pressure Abnormal</td>
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<td>44</td>
<td>Compressor Overtemp Alarm</td>
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<td>45</td>
<td>Medical Air Dew Point High</td>
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<td>46</td>
<td>Dryer Low Purge Pressure</td>
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<td>47</td>
<td>Air Dryer Switching Failure</td>
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<tr>
<td>48</td>
<td>Medical Air Reserve In Use</td>
</tr>
<tr>
<td>49</td>
<td>Medical Air Cylinders Empty</td>
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</tbody>
</table>

**Priority 1** – Notify Maintenance
**Priority 2** – Notify Maintenance/Maintenance Manager
**Priority 3** – Notify Administrative Coordinator/Delegate, Maintenance/Maintenance Manager
**Priority 4** – High Priority alarm, announce “Loss of Medical Gases Low Oxygen Alarm” overhead
### Oxygen Inventory Sheet

<table>
<thead>
<tr>
<th>Date:</th>
<th>Name:</th>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Wing, Level and Room Number</th>
<th>Oxygen Set Up and Flow</th>
<th>Cylinder Pressure</th>
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