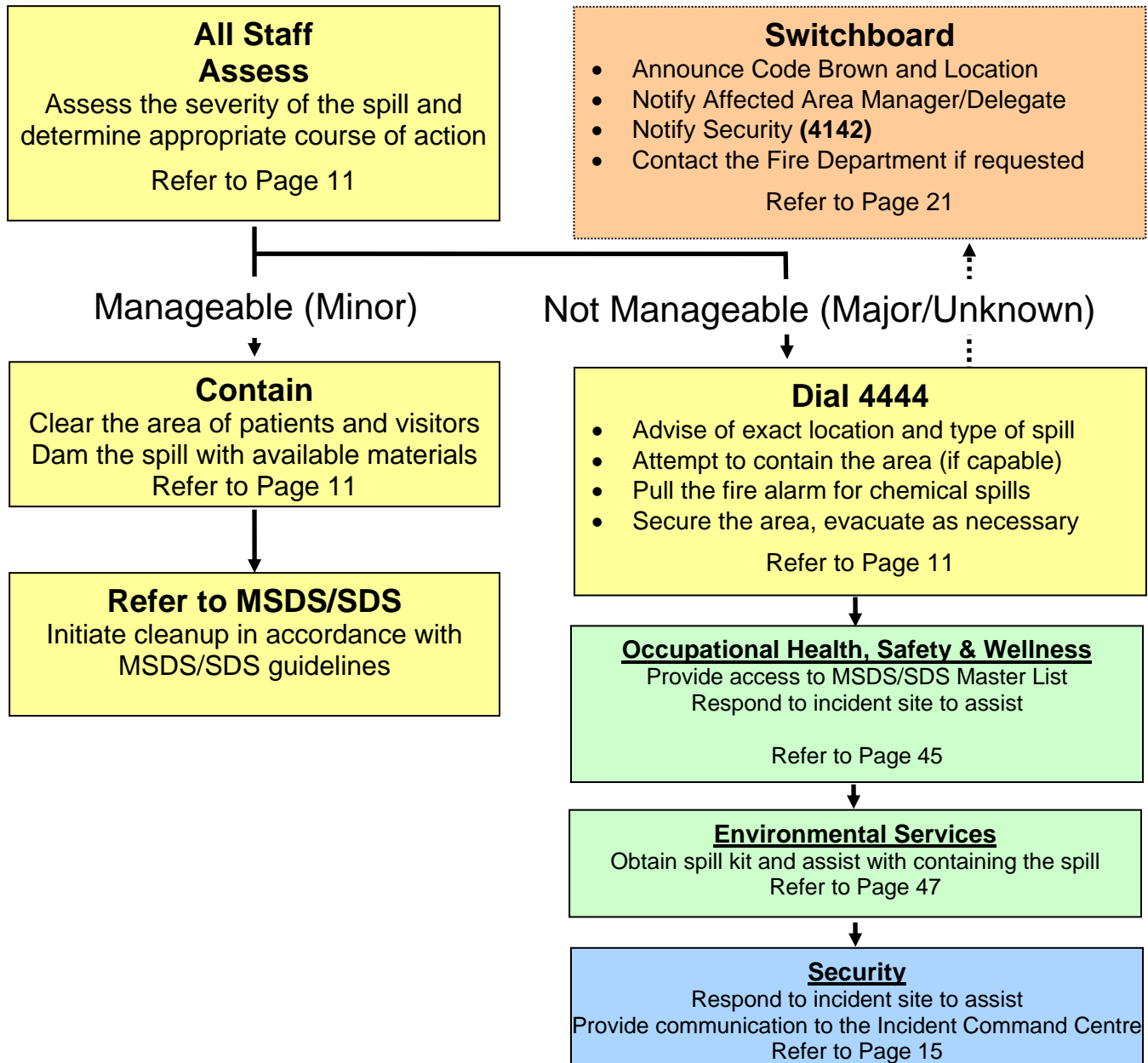


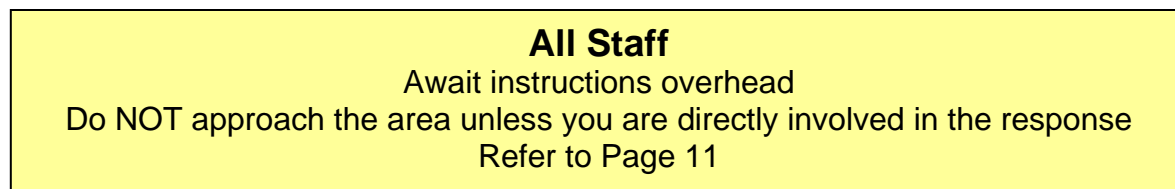
# CODE BROWN

## Hazardous Spill

### Upon Discovering a Hazardous Spill



### Upon Hearing a Code Brown Announcement



- This page intentionally left blank -

## **Table of Contents**

|            |  |           |
|------------|--|-----------|
| <b>1.0</b> | <b>General Overview .....</b>  | <b>5</b>  |
| 1.1.       | Plan to be Used in Case of a Hazardous Spill .....                       | 5         |
| 1.2.       | Authority to Declare .....   | 5         |
| 1.3.       | Definitions .....  | 5         |
| 1.3.1.     | Minor Spill .....  | 5         |
| 1.3.2.     | Major Spill .....  | 5         |
| 1.3.3.     | Unknown Spill .....  | 5         |
| 1.4.       | Support Equipment and Supplies .....                                     | 7         |
| 1.5.       | Common Sources of Hazardous Spills .....                                 | 7         |
| 1.5.1.     | Mercury (AKA: Quicksilver, Hydragryum) .....                             | 7         |
| 1.5.2.     | Raw Sewage Spill .....   | 8         |
| 1.5.3.     | Cytotoxic Drugs (AKA: Antineoplastics) .....                             | 8         |
| 1.6.       | Incident Command Centre .....  | 9         |
| <b>2.0</b> | <b>Response &amp; Recovery – All Staff .....</b>                         | <b>11</b> |
|            | <b>Response .....</b>  | <b>11</b> |
| 2.1.       | Upon Occurrence or Discovery of a Chemical Spill .....                   | 11        |
| 2.1.1.     | Procedure If You Discover a Mercury Spill (Less Than 2 Tbsp) .....       | 12        |
| 2.1.2.     | Procedure If You Discover a Mercury Spill (Greater Than 2 Tbsp) .....    | 13        |
| 2.1.3.     | Procedure If You Discover a Cytotoxic Drug Spill (Code Brown) .....      | 13        |
| 2.2.       | Upon the Occurrence or Discovery of a Biological Spill .....             | 15        |
| 2.2.1.     | For raw sewage spills/undetermined fluid leaks less than 4 litres: ..... | 15        |
| 2.2.2.     | For Raw Sewage Spills Greater Than 4 Litres (Code Brown): .....          | 16        |
| 2.3.       | Upon Occurrence or Discovery of a Radiological Spill.....                | 17        |
| 2.4.       | Procedure If You Hear a Code Brown Announced Overhead.....               | 18        |
| 2.4.1.     | All Hospital Staff in the Affected Area.....                             | 18        |
| 2.4.2.     | All Hospital Staff Not In the Affected Area.....                         | 18        |
|            | <b>Recovery .....</b>  | <b>18</b> |
| 2.5.       | Upon Notification that the Crisis Has Concluded .....                    | 18        |
| <b>3.0</b> | <b>Response &amp; Recovery – Switchboard .....</b>                       | <b>21</b> |
|            | <b>Response .....</b>  | <b>21</b> |
| 3.1.       | Upon Notification of an Unknown Spill.....                               | 21        |
| 3.2.       | Upon Notification of a Major Chemical Spill .....                        | 21        |
| 3.3.       | Upon Notification of a Major Biological Spill.....                       | 22        |
| 3.4.       | Upon Notification of a Major Radiological Spill .....                    | 23        |

|  |           |
|--|-----------|
| <b>Recovery .....</b>  | <b>24</b> |
| 3.5. Upon Notification that the Crisis Has Concluded .....   | 24        |
| <b>4.0 Response &amp; Recovery – Protection Services .....</b>                                       | <b>25</b> |
| <b>Response .....</b>  | <b>25</b> |
| 4.1. Upon Notification of a Minor Chemical Spill (Including Minor Mercury or Cytotoxic Spills) ..... | 25        |
| 4.2. Upon Receiving the Code Brown (Chemical Spill) Notification .....                               | 25        |
| 4.3. Upon Receiving a Minor Biological Spill Notification .....                                      | 26        |
| 4.4. Upon Receiving the Code Brown (Biological Spill) Notification .....                             | 27        |
| 4.4.1. For Raw Sewage Spills: .....  | 27        |
| 4.4.2. For Any Other Major Biological Spill: .....   | 28        |
| 4.5. Upon Receiving the Code Brown (Radiological Spill) Notification .....                           | 29        |
| <b>Recovery .....</b>  | <b>30</b> |
| 4.6. Upon Notification that the Crisis Has Concluded .....   | 30        |
| <b>5.0 Response &amp; Recovery – Incident Command Centre .....</b>                                   | <b>31</b> |
| <b>Response .....</b>  | <b>31</b> |
| 5.1. Incident Management System .....  | 31        |
| 5.2. Upon Receiving the Code Brown (Major Chemical Spill) Notification .....                         | 32        |
| 5.3. Upon Receiving the Code Brown (Major Biological Spill) Notification .....                       | 34        |
| 5.4. Upon Receiving the Code Brown (Major Radioactive Spill) Notification .....                      | 35        |
| <b>Recovery .....</b>  | <b>37</b> |
| 5.5. Upon Notification That the Crisis Has Concluded .....   | 37        |
| <b>6.0 Response &amp; Recovery – Affected Area Manager/Delegate .....</b>                            | <b>39</b> |
| <b>Response .....</b>  | <b>39</b> |
| 6.1. Upon Notification of a Minor Spill .....  | 39        |
| 6.2. Upon Receiving the Code Brown (Chemical Spill) Notification .....                               | 39        |
| 6.3. Upon Receiving the Code Brown (Biological Spill) Notification .....                             | 39        |
| 6.4. Upon Receiving the Code Brown (Radioactive Spill) Notification .....                            | 39        |
| <b>Recovery .....</b>  | <b>39</b> |
| 6.5. Upon Notification That the Crisis Has Concluded .....   | 39        |
| <b>7.0 Response &amp; Recovery – President &amp; CEO/Delegate .....</b>                              | <b>41</b> |

|   |           |
|---|-----------|
| <b>Response .....</b>   | <b>41</b> |
| 7.6. Upon Receiving the Code Brown Notification .....                           | 41        |
| <b>Recovery .....</b>   | <b>41</b> |
| 7.7. All Clear – Declaring Return to Normal Operations .....                    | 41        |
| <b>8.0 Response &amp; Recovery – Emergency Department.....</b>                  | <b>43</b> |
| <b>Response .....</b>   | <b>43</b> |
| 8.1. Upon Hearing Code Brown Announced Overhead .....                           | 43        |
| 8.2. Activating Code Orange Decontamination Process .....                       | 43        |
| <b>Recovery .....</b>   | <b>43</b> |
| 8.3. Upon Notification that the Crisis Has Concluded .....                      | 43        |
| <b>9.0 Response &amp; Recovery – Occupational Health, Safety &amp; Wellness</b> | <b>45</b> |
| <b>Response .....</b>   | <b>45</b> |
| 9.1. Upon Receiving the Code Brown Notification .....                           | 45        |
| <b>Recovery .....</b>   | <b>45</b> |
| 9.2. Upon Notification That the Crisis Has Concluded .....                      | 45        |
| <b>10.0 Response &amp; Recovery – Infection Control .....</b>                   | <b>47</b> |
| <b>Response .....</b>   | <b>47</b> |
| 10.1. Upon Receiving the Code Brown (Biological Spill) Notification .....       | 47        |
| 10.2. Activating the Code Brown Decontamination Process .....                   | 47        |
| <b>Recovery .....</b>   | <b>48</b> |
| 10.3. Upon Notification That the Crisis Has Concluded .....                     | 48        |
| <b>11.0 Response &amp; Recovery – Environmental Services .....</b>              | <b>49</b> |
| <b>Response .....</b>   | <b>49</b> |
| 11.1. Upon Notification of a Minor Chemical or Biological Spill .....           | 49        |
| 11.2. Upon Hearing Code Brown Announced Overhead.....                           | 49        |
| <b>Recovery .....</b>   | <b>49</b> |
| 11.3. Upon Notification That the Crisis Has Concluded .....                     | 49        |

|             |   |           |
|-------------|---|-----------|
| <b>12.0</b> | <b>Response &amp; Recovery – Radiation Safety Officer / Nuclear<br/>Medicine Technologist .....</b> | <b>51</b> |
|             | <b>Response .....</b>   | <b>51</b> |
| 12.1.       | Upon Notification of a Minor Radiological Spill.....  | 51        |
| 12.2.       | Upon Receiving the Code Brown (Radioactive Spill) Notification.....                                 | 51        |
| 12.3.       | Upon Notification of an Unknown Radioactive Spill.....  | 51        |
|             | <b>Recovery .....</b>   | <b>51</b> |
| 12.4.       | Upon Notification That the Crisis Has Concluded .....   | 51        |
| <b>13.0</b> | <b>Appendix A – Radioactive Decontamination.....</b>  | <b>1</b>  |
| <b>14.0</b> | <b>Appendix B – Radioactive Incident Report .....</b>   | <b>1</b>  |

## 1.0 General Overview

### 1.1. Plan to be Used in Case of a Hazardous Spill

A hazardous spill is defined as the escape from containment of any substance, which by its nature presents a threat to life or safety of the person or the environment through contact, absorption, inhalation or ingestion or a secondary threat of fire or explosion.

Only spills considered major, or unknown, will be announced overhead.

Anyone working with chemical, radioactive or biological materials must take all precautions necessary to prevent/reduce the risk of a spill.

### 1.2. Authority to Declare

Anyone that is aware of a **major chemical** or **biological** or **unknown spill** is authorized to activate a Code Brown. The fire alarm will be activated to shut down the ventilation systems.

### 1.3. Definitions

#### 1.3.1. Minor Spill

- Hazardous chemical or biological spill, which is physically **less than 4 litres**
- Radiological spill of any physical size, which displays a radioactivity level less than 5 times the annual limit on intake (5 ALI)
- Easily contained
- Minimal staff/equipment required for isolation and clean up
- Evacuation unlikely or very limited

#### 1.3.2. Major Spill

- Hazardous chemical or biological spill, which is physically **equal to or greater than 4 litres**
- Radiological spill of any physical size, which displays a radioactivity level **greater than 5 times the annual limit on intake (5 ALI)**
- Genuine threat to staff or environment by virtue of:
  - Airborne contamination
  - Fire
  - Explosion
  - Highly infectious agents
- Greater number of staff/equipment required for isolation and clean up
- Limited evacuation likely; extended evacuation possible
- Probable Hazardous Materials (HAZMAT) team or Fire Department involvement

#### 1.3.3. Unknown Spill

- When it is unknown what the substance is, or how harmful it is to people in the area, the spill will be considered a major spill until proven otherwise
- When the spill substance is unknown, refer to “Response & Recovery – All Staff 2.1 Upon Discovery of a Chemical Spill” for response

**NOTE: WHEN IN DOUBT, A SPILL SHOULD BE CONSIDERED MAJOR**

**Hazardous Chemical**

Any substance, having properties which are corrosive, flammable, explosive, oxidizing, reactive, or poisonous, or any substance containing chemical material.

**Chemical Classifications**

- Class A – Compressed Gas
- Class B – Combustible and Flammable Material
- Class C – Oxidizing Material
- Class D – Div. 1, 2, 3 – Poisonous and Infectious
- Class E – Corrosive Material
- Class F – Dangerously Reactive Material

**Radiological**

Any substance that is itself a radioisotope, or which contains radioisotopes, is considered radioactive. (i.e. bodily fluids from a person containing unsealed sources of radiological material)

**Biological**

Biological agents are substances containing living organisms (i.e. bacteria or viruses) that have the potential to cause infection/disease some of which could have person-to-person spread. Biological agents are classified in three categories in accordance to their risk factor:

**Category A**

High-priority agents include organisms that pose a risk to national security because they:

- can be easily disseminated or transmitted from person to person;
- result in high mortality rates and have the potential for major public health impact;
- might cause public panic and social disruption; and
- require special action for public health preparedness

**Examples:**

*Anthrax*

*Botulism*

*Smallpox*

**Category B**

Second highest priority agents include those that:

- are moderately easy to disseminate;
- result in moderate morbidity rates and low mortality rates; and
- require specific enhancements of Health Canada diagnostic capacity and enhanced disease surveillance

**Examples:**

*Brucellosis*

*Food safety Threats (e.g., Salmonella, Escherichia Coli)*



**Category C**

Third highest priority agents include emerging pathogens that could be engineered for mass dissemination in the future because of:

- availability;
- ease of production and dissemination; and
- potential for high morbidity and mortality rates and major health impact

**Examples:**

*Emerging infectious diseases such as Nipah virus and Hantavirus*

**1.4. Support Equipment and Supplies****Material Safety Data Sheets (MSDS) / Safety Data Sheets (SDS)**

When responding to a spill, staff should check departmental Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for possible hazardous substances located in the area.

The MSDS/SDS Master list is maintained by Materials Management. Copies are located in:

- Intranet
- Occupational Health, Safety & Wellness

**Hazardous Spill Containment Kit**

Hazardous spill containment kits are located in:

- Environmental Services Department – ext. 7250
- Connell 0 hallway
- Receiving – ext. 4024

**Mercury Spill Kit**

A kit specific to dealing with mercury spills is located in the Maintenance department.

**Spill Cleanup**

It is the responsibility of the end-user in consultation with the Operations Officer, to arrange proper cleanup of any and all hazardous spills in accordance with departmental protocol or MSDS/SDS procedures. Environmental Services will not clean up any spill; they will only act in a supportive role either by assisting in containing a spill or cleaning the area after the initial clean up process has been completed.

**1.5. Common Sources of Hazardous Spills****1.5.1. Mercury (AKA: Quicksilver, Hydragyrum)**

Mercury, (elemental abbreviation Hg) is one of the few metals which are in a liquid phase at room temperature.

There are several medical devices that the hospital has which may contain mercury. E.g. thermometers, sphygmomanometer gauges, fluorescent light bulbs (including compact and projector) etc. Typically, these items contain very small amounts of mercury, and would not require the use of

Code Brown if they were to spill. However, specific steps need to be taken in order to isolate, clean and dispose of mercury safely.

The main effects of mercury exposure to humans are understood to be neurological, renal (kidney), cardiovascular and immunological impacts. Chronic exposure to mercury can cause damage to the brain, spinal cord, kidneys, liver and developing fetus. Exposure to mercury while in the womb can lead to neurodevelopmental problems in children. Mercury can impair the ability to feel, see, move and taste, and can cause numbness and tunnel vision. Long-term exposure can lead to progressively worse symptoms and ultimately personality changes, stupor, and in extreme cases, coma or death. Recent findings have described adverse cardiovascular and immune system effects at very low levels.<sup>1</sup>

In the unlikely event of a mercury spill of greater than 2 tbsp, a Code Brown should be activated. When calling Switchboard for a mercury spill, state that the Fire Department does not need to be notified. An external company may be contacted by the Incident Command Centre to arrange for mercury cleanup and disposal.

To prevent mercury spills, the facility has endeavored to replace mercury containing devices with non-mercury containing equipment whenever possible. The fluorescent bulbs in use have lowest amount of mercury possible but still present a hazard.

Clean-up of the spill should be done with the mercury spill kit. A normal vacuum should NEVER be used to clean up mercury as it can disperse harmful mercury vapours. Proper PPE (Personal Protective Equipment) should always be worn when mercury is involved. This should include nitrile gloves, eye protection, closed toe footwear, and a gown. Respiratory protection is not routinely required since the clean up procedures involve the use of a vapour suppressing powder and amalgamation powder, both of which reduce aerosolizing of mercury vapours.

### **1.5.2. Raw Sewage Spill**

Any raw sewage spill represents a biological hazard. In sufficient quantities (greater than 4 litres) raw sewage spills represent a Code Brown. However, any raw sewage spill, regardless of the quantity, will be dealt with internally and does not require the notification of the Fire Department. When calling Switchboard for a raw sewage spill Code Brown, state that the Fire Department does not need to be notified.

To prevent raw sewage spills care should always be taken to ensure that materials not compatible with the hospital sewage system are disposed of properly.

### **1.5.3. Cytotoxic Drugs (AKA: Antineoplastics)**

The term cytotoxic drug refers to a drug or enzyme that is administered to plants, animals or humans for the specific purpose of altering the metabolic process or possessing a specific destructive action on cells.

Standard precautions and cytotoxic precautions are used when handling blood, emesis, or excreta of a patient who has received hazardous drugs within 7 days. When calling Switchboard for a cytotoxic drug spill, state that the Fire Department does not need to be notified.

Risks from exposure are based on the inherent toxicities of the drugs. The risks include:

- Chromosomal changes (genotoxicity).
- Fertility impairment (teratogenicity).
- Cancer (carcinogenicity).
- Organ toxicity thus causing organ damage.
- Acute symptoms from accidental exposure in poorly ventilated areas such as headache, nausea and dizziness.

---

<sup>1</sup> Environment Canada – Mercury and the Environment, 2004

Types of cytotoxic drugs include:

- Chemotherapy (e.g. chlorambucil, cyclophosphamide, cisplatin, dacarbazine, doxorubicin).
- Biotherapy (e.g. interferons).
- Antiviral agents (e.g. ganciclovir).
- Immunosuppressive agents.

NOTE: All investigational agents should be regarded as potentially hazardous.

Safe practices are key when cytotoxic drugs are being utilized:

- HEPA-filtered Biological safety cabinet pharmacies (externally exhausted, if possible) to store the drugs.
- Personal Protective Equipment
- Double glove
- Chemoprotectant gown
- Face mask (N95 mask to be worn when cleaning up spills)
- Face shield or goggles (worn when there is a possibility of splashing)

### **1.6. Incident Command Centre**

#### **Weekdays 0800 – 1600 hours**

Upon receiving notice of a major hazardous spill Protection Services will immediately establish an Incident Command Centre<sup>2</sup> within the Security Office on Dietary 1. The Director of Protection Services/Delegate will assume command and coordinate the response activities.

The person acting as the Incident Commander (e.g., Director, Protection Services/Delegate) must be prepared to transfer command to a higher authority (HAZMAT Team, Fire Department, etc.), or apply unified command<sup>3</sup>.

---

<sup>2</sup> "Incident Command Centre" is a centrally located space available to coordinate and manage resources.

"Incident Command" reports to the Hospital Emergency Operations Centre (if active).

<sup>3</sup> "Unified Command" is a team effort which allows all departments/agencies with responsibility for the incident, to jointly provide management direction to an incident through a common set of incident objectives and strategies established at the command level.

**- This page intentionally left blank -**

## 2.0 Response & Recovery – All Staff

### Response

#### 2.1. Upon Occurrence or Discovery of a Chemical Spill

**If the spill is minor (i.e. less than 4 litres) - A CODE BROWN IS NOT NECESSARY:**

- ☐ Look for injured persons in the affected area and remove them to fresh air if possible to do so without becoming a casualty, activate a **Code 99 (Medical Emergency)** if required
- ☐ Isolate and contain the spill by damming and closing doors
- ☐ Assess the severity and size of the spill to determine whether it is minor or major
- ☐ Clean up the spill, according to departmental protocol or **MSDS/SDS** instructions
- ☐ If assistance is required to contain the spill or to mop the area after the initial clean up notify:
  - ☐ Environmental Services (**2309 or Vocera**) to obtain the spill kit for containment
  - ☐ Ensure that MSDS/SDS instructions for decontamination and disposal are followed
- ☐ If chemical has been spilled on a person's skin:
  - ☐ Move the person to the nearest shower, they should remove all clothing and shower for 15 minutes with soap and water.
  - ☐ Change into uncontaminated clothing and report to the Emergency Department immediately
- ☐ If chemical has been spilled in a person's eyes, or has been ingested or inhaled, review first aid measures (i.e. copious amounts of water to the eyes for a minimum of 15 minutes, etc.) and have that person report to the Emergency Department immediately
- ☐ Contact Occupational Health, Safety & Wellness/Delegate

**If the spill is major (i.e. greater than 4 litres), or, the chemical is unknown:**

- ☐ Initiate a limited evacuation of the immediately threatened area
- ☐ **Pull the nearest fire alarm pull station**
- ☐ Notify Switchboard (**4444**) providing:
  - ☐ Nature of the emergency (e.g. We have had a major chemical spill and have activated the fire alarm system).
  - ☐ Your name and title
  - ☐ Location
  - ☐ Name of chemical spilled if known
- ☐ Move to a safe place near the area and await the arrival of Security and the Fire Department and provide them with MSDS/SDS information on the chemical spilled
- ☐ Be prepared to provide detailed information to the Incident Command Centre
- ☐ Ensure the MSDS/SDS instructions for decontamination and disposal are followed

- ☐ If chemical has been spilled on a person's skin:
  - ☐ Move the person to the nearest shower, they should remove all clothing and shower for 15 minutes with soap and water.
  - ☐ Change into uncontaminated clothing and report to the Emergency Department immediately
- ☐ If chemical has been spilled in a person's eyes, or has been ingested or inhaled, review first aid measures (i.e. copious amounts of water to the eyes for a minimum of 15 minutes, etc.) and have that person report to the Emergency Department immediately
- ☐ Contact Occupational Health, Safety & Wellness/Delegate

**2.1.1. Procedure If You Discover a Mercury Spill (Less Than 2 Tbsp)**  
**Monday – Friday during regular hours**

- ☐ Turn off fans and room air conditioners
- ☐ Close the door to the affected area and restrict access to required staff only
- ☐ Environmental Service (**2309 or Vocera**) and request mercury spill kit
- ☐ Immediately notify the Maintenance (**4030**) of the mercury spill and request their assistance in:
  - ☐ Controlling and cleaning up the spill
  - ☐ Shutting down HVAC to the area of the spill
- ☐ Notify Security (**4142**)
- ☐ Notify Area Program Manager/Delegate
- ☐ Notify Occupational Health, Safety, & Wellness (**4389**)
- ☐ If the mercury beads have made contact with the employee's skin or eyes, immediately implement first aid measures (i.e. copious amounts of water to the eyes for a minimum of 15 minutes). Should treatment beyond first aid only and/or consultation be required, the exposed employee should report to the Occupational Health, Safety & Wellness department during normal business hours or the Emergency Department after hours

**After-hours, Weekends & Statutory Holidays**

- ☐ Turn off fans and room air conditioners
- ☐ Immediately notify the Maintenance On-Call of the mercury spill and request their assistance in:
  - ☐ Controlling and cleaning up the spill
  - ☐ Shutting down HVAC to the area of the spill
- ☐ Notify Security (**4142**)
- ☐ Close the door to the affected area and restrict access to required staff only
- ☐ Notify Administrative Coordinator (**7021**)

- ☐ Notify Occupational Health, Safety & Wellness Manager 1630-0700 **(via Switchboard)**
- ☐ If the mercury beads have made contact with the employee's skin or eyes, immediately implement first aid measures (i.e. copious amounts of water to the eyes for a minimum of 15 minutes). Should treatment beyond first aid only and/or consultation be required, the exposed employee should report to the Occupational Health, Safety & Wellness department during normal business hours or the Emergency Department after hours

### **2.1.2. Procedure If You Discover a Mercury Spill (Greater Than 2 Tbsp)**

- ☐ Wash hands and other exposed areas with soap and water immediately
- ☐ If clothing is contaminated, remove clothing as soon as possible and place in a plastic bag; shower with soap and water
- ☐ Notify Switchboard @ **4444** providing:
  - ☐ Name and title
  - ☐ Location
  - ☐ Give details regarding mercury spill (**state that the Fire Department does NOT need to be notified**)
- ☐ Turn off fans and room air conditioners
- ☐ List other people who have been in the immediate area for follow up if required
- ☐ Notify:
  - ☐ Security (**4142**), **if not already aware**
  - ☐ Affected Area Manager/Nursing Supervisor/Delegate
  - ☐ Occupational Health, Safety & Wellness

### **2.1.3. Procedure If You Discover a Cytotoxic Drug Spill (Code Brown)**

- ☐ Initiate a limited evacuation of the contaminated area of any unnecessary, uncontaminated staff
- ☐ Isolate and contain the spill by damming and closing doors
- ☐ Notify Switchboard (**4444**) providing:
  - ☐ Name and title
  - ☐ Location
  - ☐ Nature of emergency
  - ☐ Name of cytotoxic drug spilled, if known (**state that the Fire Department does NOT need to be notified**)
- ☐ Contact Occupational Health, Safety & Wellness/Delegate
- ☐ Notify Environmental Services (**7250**) regarding the location and extent of the spill
- ☐ Be prepared to provide detailed information to the Incident Command Centre

- ☐ Ensure the instructions for decontamination and disposal are followed
- ☐ If drug has been spilled on a staff person's skin or in eyes, or has been ingested or inhaled, review first aid measures (i.e. copious amounts of water to the eyes for a minimum of 15 minutes, etc.) and have that person immediately report to the Occupational Health, Safety & Wellness Department or the KGH Emergency Department, after hours
- ☐ Change clothing/linens as appropriate (follow safe handling of linen guidelines)
- ☐ Obtain a hazardous drug spill kit. Replacement kits are available from Stores
- ☐ Instructions for use of the spill kit are in the Parental I.V. Therapy Manual under "Safe Handling Procedure For Hazardous (Cytotoxic) Drug Spills"
- ☐ Don Personal Protective Equipment (PPE) for managing spills e.g. gloves, disposable gown, face shield, shoe covers and N95 mask
- ☐ If spill is on carpet, sprinkle absorbent powder evenly over the spill. Solidified material should be removed with scoop & scraper
- ☐ Absorb spill by placing down chemo prep mats (2) plastic side up. Liner acts as a vapour barrier and absorbent fibers of the mat soak up liquid. Using spill kit brush and dustpan clean up glass fragments and place into Hazardous (Cytotoxic) waste container
- ☐ Clean up the spill:
- ☐ **Hard Surfaces:**
  - ☐ Place contaminated mats in yellow Chemo Waste Bag
  - ☐ Use disposable wiper towels to clean the spill area 3 times with detergent solution followed by clean water. Clean from least to the most contaminated areas
  - ☐ Use fresh detergent solution followed by clean water to wash items located in the spill areas (i.e. pump) and repeat washing
- ☐ **Carpeted Surfaces**
  - ☐ Clean up spill as per above procedures AND
  - ☐ Notify the Maintenance (**4030**) to organize replacement of carpet tiles affected by the spill
- ☐ Place contaminated disposable items into Hazardous (Cytotoxic) waste container
- ☐ Place all contaminated non-disposable items into double laundry bag or double clear bags and label with Hazardous (Cytotoxic) stickers or mark these bags as Hazardous (Cytotoxic)
- ☐ Notify Central Processing (**4020**) and Portering (**4240**) for collection of non-disposable items (e.g. pumps)



**2.2. Upon the Occurrence or Discovery of a Biological Spill****If the spill is minor (i.e. less than 4 litres) - A CODE BROWN IS NOT NECESSARY:**

All patient care staff are asked to report back to their units, all ancillary staff (Environmental Services, Portering, etc.) are to report to their departments.

- ☐ Clean up the spill, according to departmental protocol or **MSDS/SDS** instructions, wearing the appropriate personal protective equipment
- ☐ If assistance is required to contain the spill or to mop the area after the initial clean up notify:
  - ☐ Environmental Service (**2309 or Vocera**) to obtain the spill kit for containment
  - ☐ Occupational Health, Safety & Wellness
- ☐ Ensure that **MSDS/SDS** instructions for decontamination and disposal are followed
- ☐ If a biological agent has been spilled on a person's skin:
  - ☐ Move the person to the nearest shower, they should remove all clothing and shower for 15 minutes with soap and water
  - ☐ Change into uncontaminated clothing and report to the Emergency Department immediately
- ☐ If a biological agent has been spilled in a person's eyes, or has been ingested or inhaled, review first aid measures (i.e. copious amounts of water to the eyes for a minimum of 15 minutes, etc.) and have that person report to the Emergency Department immediately
- ☐ Contact Occupational Health, Safety & Wellness/Delegate

**2.2.1. For raw sewage spills/undetermined fluid leaks less than 4 litres:**

- ☐ Notify:
  - ☐ Security Operations Centre at (**4142**) providing:
    - ☐ Name and position
    - ☐ Location
    - ☐ Give details regarding sewage spill or undetermined fluid leak
    - ☐ If assistance is required to contain the spill ask Environmental Service (**2309 or Vocera**) to obtain the spill kit for containment
  - ☐ 0800-1600 hours notify Affected Area Manager/Delegate<sup>4</sup>
  - ☐ 1600-0800 hours notify Administrative Coordinator (**7021**)
  - ☐ If the sewage spill has been spilled on a person's skin or in eyes, or has been ingested or inhaled, implement first aid measures as necessary:
    - ☐ Wash hands and other exposed areas with soap and water immediately
    - ☐ If clothing is contaminated, remove clothing as soon as possible and place in a plastic bag; shower with soap and water

---

<sup>4</sup> Delegate is the next level of appointed authority; in this case, the Charge Nurse.

- ☐ Flush eyes with copious amounts of water for a minimum of 15 minutes
- ☐ Have the affected person report to the Occupational Health, Safety & Wellness department during normal business hours or the Emergency department after hours

**2.2.2. For Raw Sewage Spills Greater Than 4 Litres (Code Brown):**

- ☐ Notify **Switchboard (4444)** providing:
  - ☐ Name and position
  - ☐ Location
  - ☐ Nature of emergency (state that it is a raw sewage spill and that the Fire Department does **NOT** need to be notified)
- ☐ Turn off fans and room air conditioners
- ☐ Discontinue treatment and initiate a limited evacuation of the immediately threatened area
- ☐ For dialysis patients discuss treatment options with Charge Nurse and Nephrologist
- ☐ Take direction from Infection Control representatives regarding continuation of duties
- ☐ Wash hands and other exposed areas with soap and water immediately
- ☐ If clothing is contaminated, put on N95 mask and remove clothing as soon as possible and place in a plastic bag; shower with soap and water; the clothing may be taken away for testing to identify the substance and biological agents they were exposed to
- ☐ In the case of full body contamination, report to the Emergency Department for showering and decontamination
- ☐ Notify:
  - ☐ Security Operations Centre **(4142)**
  - ☐ Affected Area Manager/Delegate
- ☐ List other people who have been in the immediate area for follow up if required

**If the spill is major (i.e. greater than 4 litres), or, the biological agent is unknown:**

- ☐ Infection Control and Occupational Health must be notified immediately by medical staff, nursing staff or the health unit if there is any suspicion or indication of exposure of staff or patients to an infectious agent due to a bio-terrorist act

**In the event that you are aware of a non-controlled biological agent, whether by spill or attack (i.e. suspicious powder found in mail):**

- ☐ If the substance is large in quantity or unable to be contained (e.g. airborne dusts) evacuate the area immediately
- ☐ Notify Switchboard @ **4444** providing:
  - ☐ Name and title
  - ☐ Location

- ☐ Nature of emergency
- ☐ Turn off fans and room air conditioners
- ☐ Leave the room, close the door and keep others from entering the room
- ☐ Wash hands and other exposed areas with soap and water immediately
- ☐ If clothing is contaminated, put on an N95 class mask and remove clothing as soon as possible and place in a plastic bag; shower with soap and water; the clothing may be taken away for testing to identify the substance and biological agents
  - ☐ In the case of full body contamination, move the person to the nearest shower, they should remove all clothing and shower for 15 minutes with soap and water
  - ☐ Change into uncontaminated clothing and report to the Emergency Department immediately
- ☐ List other people who have been in the immediate area for follow up if required

### **2.3. Upon Occurrence or Discovery of a Radiological Spill**

- ☐ Look for injured persons in the affected area and remove them to fresh air if possible to do so without becoming a casualty, activate a Code 99 (Medical Emergency) if required
- ☐ Isolate and contain the spill by damming and closing doors
- ☐ Initiate a limited evacuation of the contaminated area of unnecessary, uncontaminated staff
- ☐ If qualified, measure the level of radioactivity in the spill

#### **If the spill is minor (any size but displays less than 5 ALI) - A CODE BROWN IS NOT NECESSARY:**

- ☐ Notify:
  - ☐ Environmental Service (**2309 or Vocera**) to obtain the spill kit for containment
  - ☐ Radiation Protection Officer
  - ☐ Ensure that decontamination procedures are followed

#### **If the spill is major (greater than 5 ALI):**

- ☐ Notify Switchboard (**4444**) providing:
  - ☐ Name and title
  - ☐ Location
  - ☐ Nature of emergency
- ☐ Move to a safe place near the area and await the arrival of the Radiation Protection Officer

#### **If not qualified to measure the level of radioactivity in the spill:**

- ☐ Notify Switchboard (**4444**) providing:
  - ☐ Name and title

- ☐ Location
- ☐ Nature of emergency
- ☐ During working hours (Monday – Friday 0800 – 1600), the Radiation Safety Officer **(4536)** or **(6819)**
- ☐ After working hours, the Nuclear Medicine Technologist **(613-536-7583)**
- ☐ Move to a safe place near the area and await the arrival of Security and the Radiation Safety Officer or Nuclear Medicine Technologist
- ☐ If radioactive material has been spilled on a person's skin or in eyes, or has been ingested or inhaled, review first aid measures (i.e. copious amounts of water to the eyes for a minimum of 15 minutes, etc.) and have that person report to the Emergency Department immediately
- ☐ Contact Occupational Health, Safety & Wellness/Delegate

## **2.4. Procedure If You Hear a Code Brown Announced Overhead**

### **2.4.1. All Hospital Staff in the Affected Area**

- ☐ Cease all unnecessary activity
- ☐ Move self and other staff to a safe location

### **2.4.2. All Hospital Staff Not In the Affected Area**

- ☐ **Do not call Switchboard unless it is urgent**
- ☐ **Do not approach the area**, unless you are involved with the response
- ☐ Continue with normal duties unless directed otherwise

## **Recovery**

## **2.5. Upon Notification that the Crisis Has Concluded**

### **If the spill was minor:**

- ☐ If Security was contacted be prepared to provide a statement to the attending Security Officer
- ☐ Ensure any required documentation is completed and delivered to Occupational Health and Wellness

### **If the spill was major:**

- ☐ If you are the initiator of the Code Brown be prepared to provide a statement to the attending Security Officer
- ☐ Ensure any required documentation is completed and delivered to Occupational Health, Safety & Wellness
- ☐ Ensure a Safe Report is completed on the incident

- ☐ Should an employee have an unprotected exposure to mercury beads, they should immediately flush the area with copious amounts of water, report this to their Supervisor/Manager, and complete an Employee Incident Report. Should further treatment and/or consultation be required, visit the Occupational Health, Safety & Wellness department during business hours or the Emergency Department after hours.
- ☐ Be prepared to participate in a debriefing session, if required
- ☐ Upon hearing the “All Clear” resume normal duties

**- This page intentionally left blank -**

### 3.0 Response & Recovery – Switchboard

#### Response

#### 3.1. Upon Notification of an Unknown Spill

- ☐ Announce overhead three times **“CODE BROWN (location)”**
- ☐ Refer any media inquiries to the Strategy Management + Communications office
- ☐ Obtain the location and contact number for the Incident Command Centre from Security/Affected Area Manager/Delegate as soon as possible

#### **Notify:**

#### **Monday to Friday (During normal business hours 0800 – 1600)**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “unknown hazardous spill”)
- ☐ Security Operations Centre **(4142)**
- ☐ Affected Area Manager/Delegate
- ☐ Administration
- ☐ Occupational Health, Safety & Wellness

#### **Monday – Friday (After normal business hours), Weekends & Holidays**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “unknown hazardous spill”)
- ☐ Security Operations Centre **(4142)**
- ☐ Environmental Services 7250
- ☐ Occupation Health & Wellness On-Call Person
- ☐ 1700 – 1900 Duty Administrator 7021
- ☐ 1900 – 0700 Administrative Coordinator at 7021

#### 3.2. Upon Notification of a Major Chemical Spill

- ☐ Announce overhead three times **“CODE BROWN (location)”**
- ☐ Refer any media inquiries to the Strategy Management + Communications office
- ☐ Obtain the location and contact number for the Incident Command Centre from Security/Affected Area Manager/Delegate as soon as possible

#### **Notify: (*Fire Department notification is not necessary for mercury spills or cytotoxic drug spills*):**

#### **Monday to Friday (During normal business hours 0800 – 1600)**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “Chemical Spill”)

- ☐ Security Operations Centre **(4142)**
- ☐ Affected Area Manager/Delegate
- ☐ Manager of Environmental Services **2309**
- ☐ Manager of Occupational Health, Safety and Wellness **4389**
- ☐ Infection Control **4015**
- ☐ Risk Management **4496**
- ☐ President & CEO **2341**

**Monday – Friday (After normal business hours), Weekends & Holidays**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “Chemical Spill”)
- ☐ Security Operations Centre **(4142)**
- ☐ Environmental Services **7250**
- ☐ Occupation Health & Wellness On-Call Person
- ☐ 1700 – 1900 Duty Administrator
- ☐ 1900 – 0700 Administrative Coordinator **7021**

**3.3. Upon Notification of a Major Biological Spill**

- ☐ Announce overhead three times **“CODE BROWN (location)”**
- ☐ Refer any media inquiries to the Strategy Management + Communications office
- ☐ Obtain the location and contact number for the Incident Command Centre from Security/Affected Area Manager/Delegate as soon as possible

**Notify:****Monday to Friday (During normal business hours 0800 – 1600)**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “Biological Spill”)
- ☐ Security Operations Centre **(4142)**
- ☐ Affected Area Manager/Delegate
- ☐ Occupational Health, Safety & Wellness **4389**
- ☐ Manager of Environmental Services **2309**
- ☐ Infection Control **4015**
- ☐ Risk Management **4496**
- ☐ President & CEO **2341**
- ☐ On-call Infectious Disease Physician

**Monday to Friday (After normal business hours), Weekends and Holidays**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “Biological Spill”)



- ☐ Security Operations Centre **(4142)**
- ☐ Environmental Services **7250**
- ☐ 1700 – 1900 Duty Administrator
- ☐ 1900 – 0700 Administrative Coordinator at 7021
- ☐ Occupation Health & Safety On-Call Person
- ☐ Infection Control Practitioner (through fan out list numbers)
- ☐ On-call Infectious Disease Physician

### **3.4. Upon Notification of a Major Radiological Spill**

- ☐ Announce overhead three times “**CODE BROWN (location)**”
- ☐ Refer any media inquiries to the Strategy Management + Communications office
- ☐ Obtain the location and contact number for the Incident Command Centre from Security/Affected Area Manager/Delegate as soon as possible

#### **Notify:**

#### **Monday to Friday (During normal business hours 0800 – 1600)**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “Radiological Spill”)
- ☐ Security Operations Centre **(4142)**
- ☐ Radiation Safety Officer **4536 or 6819**
- ☐ President & CEO **2341**
- ☐ Affected Area Manager/Delegate
- ☐ Manager of Environmental Services **2309**
- ☐ Manager of Occupational Health, Safety & Wellness **4389**
- ☐ Infection Control **4015**
- ☐ Risk Management **4496**

#### **Monday to Friday (After normal business hours), Weekends and Holidays**

- ☐ Fire Department **(911)** (When speaking to Fire Department do not use the term Code Brown. Instead, state “Radiological Spill”)
- ☐ Security Operations Centre **(4142)**
- ☐ Nursing Supervisor/Delegate
- ☐ Nuclear Medicine Technologist On-Call at pager **613-536-7583**
- ☐ Environmental Services 7250
- ☐ 1700 – 1900 Duty Administrator
- ☐ 1900 – 0700 Administrative Coordinator at 7021
- ☐ Occupation Health & Wellness On-Call Person

**Recovery****3.5. Upon Notification that the Crisis Has Concluded**

- ☐ Announce over the public address system three times, **“CODE BROWN, ALL CLEAR”**
- ☐ Refer any media inquiries to the Strategy Management + Communication

## 4.0 Response & Recovery – Protection Services

### Response

**Note: For Unknown Spills, Respond Using 4.2 Upon Receiving The Code Brown (Chemical Spill) Notification**

#### 4.1. Upon Notification of a Minor Chemical Spill (Including Minor Mercury or Cytotoxic Spills)

##### **Security Operations Centre Operator**

###### **Notify:**

- ☐ Shift Supervisor, if he/she is not already aware

##### **Security Shift Supervisor**

- ☐ Proceed to the site and assist as necessary
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.
- ☐ Notify the Security Operations Centre **(4142)** – **be sure to say the spill is being considered minor**
- ☐ Obtain:
  - ☐ Name and title of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ Notify the Security Operations Centre **(4142)** should the incident escalate

##### **Security Officers**

- ☐ Assist as required with the isolation and containment of the spill
- ☐ Obtain and deliver the Hazardous Spill Containment Kit/Mercury Spill Kit to the site, if not already delivered by Environmental Services

#### 4.2. Upon Receiving the Code Brown (Chemical Spill) Notification

##### **Security Operations Centre Operator**

###### **Notify:**

- ☐ Director of Protection Services/Delegate
- ☐ Security Shift Supervisor
- ☐ Environmental Services
- ☐ During working hours:
  - ☐ Maintenance
- ☐ After working hours:
  - ☐ Maintenance On-Call (through the Switchboard)

- ☐ Emergency Management On-Call person

**Security Shift Supervisor**

- ☐ Ensure a Security Officer is on-route to meet the Fire Department at the designated entrance
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ Request an Officer to obtain and deliver the **Hazardous Spill Containment Kit** to the site, if not already delivered by Environmental Services
- ☐ Assist as required with the isolation and containment of the spill, under direction of the HAZMAT team and the Fire Department

**WHEN IT IS SAFE TO DO SO**

- ☐ Ensure an Officer has proceeded to the spill site and obtained:
  - ☐ Name and position of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ Be prepared to transfer command to a higher authority (Director of Protection Services, Duty Administrator, etc.)

**Security Officers**

- ☐ Notify the Security Operations Centre (**4142**)
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ Meet the Fire Department at the designated emergency services entrance
- ☐ Obtain and deliver the Hazardous Spill Containment Kit/Mercury Spill Kit to the site, if necessary
- ☐ Await instruction from the Security Shift Supervisor

**4.3. Upon Receiving a Minor Biological Spill Notification****Security Operations Centre**

- ☐ Dispatch a Security Officer to proceed to the spill site
- ☐ Notify:
  - ☐ Security Shift Supervisor
  - ☐ Environmental Services

**Security Shift Supervisor**

- ☐ Ensure an Officer has proceeded to the spill site and obtained:
  - ☐ Name and position of person reporting the spill
  - ☐ Name of substance believed to have been spilled

- ☐ Details of the cause of the spill
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ Request an Officer to obtain and deliver the **Hazardous Spill Containment Kit** to the site, if not already delivered by Environmental Services
- ☐ Assist as required with the isolation and containment of the spill

**Security Officer**

- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ Proceed to the site and obtain:
  - ☐ Name and position of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ Assist as required with the isolation and containment of the spill

**4.4. Upon Receiving the Code Brown (Biological Spill) Notification****4.4.1. For Raw Sewage Spills:****Security Operations Centre**

- ☐ Dispatch a Security Officer to proceed to the spill site
- ☐ Notify:
  - ☐ Security Shift Supervisor
  - ☐ During regular hours:
    - ☐ Maintenance **4030**
    - ☐ Infection Control **4015**
  - ☐ After hours:
    - ☐ On-call Maintenance person (through the Switchboard)
    - ☐ On-call Infection Control Practitioner (through the Switchboard)
- ☐ Emergency Management On-Call person

**Security Shift Supervisor**

- ☐ Ensure an Officer has proceeded to the spill site and obtained:
  - ☐ Name and position of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)

- ☐ Request an Officer to obtain and deliver the **Hazardous Spill Containment Kit** to the site, if not already delivered by Environmental Services
- ☐ Assist as required with the isolation and containment of the spill, under direction of Infection Control

**Security Officer**

- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ Proceed to the site and obtain:
  - ☐ Name and position of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ Assist as required with the isolation and containment of the spill, under direction of Infection Control

**4.4.2. For Any Other Major Biological Spill:****Security Operations Centre**

- ☐ Dispatch a Security Officer to proceed to the spill site
- ☐ Notify:
  - ☐ Security Shift Supervisor
  - ☐ During regular hours:
    - ☐ Maintenance **4030**
    - ☐ Infection Control **4015**
  - ☐ After hours:
    - ☐ Maintenance On-call (through the Switchboard)
    - ☐ Infection Control Practitioner On-call (through the Switchboard)
- ☐ Emergency Management On-Call person

**Security Shift Supervisor**

- ☐ Ensure an Officer is en route to meet the Fire Department at the designated entrance
- ☐ Ensure an Officer has proceeded to the spill site and obtained:
  - ☐ Name and position of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)

- ☐ Request an Officer to obtain and deliver the **Hazardous Spill Containment Kit** to the site, if not already delivered by Environmental Services
- ☐ Assist as required with the isolation and containment of the spill, under direction of Infection Control

**Security Officers**

- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ Proceed to the site and obtain:
  - ☐ Name and position of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ Assist as required with the isolation and containment of the spill, under direction of Infection Control

**4.5. Upon Receiving the Code Brown (Radiological Spill) Notification****Security Operations Centre Operator****Notify:**

- ☐ Director of Protection Services/Delegate
- ☐ Security Shift Supervisor, if he/she is not already aware

**Security Shift Supervisor**

- ☐ Ensure a Security Officer is on-route to meet the Fire Department at the designated entrance
- ☐ Direct the on-site Officer to assist with the set-up of the Incident Command Centre if you are not immediately available
- ☐ Assist the Affected Area Manager and/or Nursing Supervisor/Delegate with establishing the Incident Command Centre in the Security Office – Dietary 1 – **refer to Incident Command Centre Section 5.4 Upon Receiving The Code Brown (Radiological Spill) Notification**
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ Be prepared to transfer command to a higher authority (Director of Protection Services, Duty Administrator, etc.)
- ☐ Assist as required with the isolation and containment of the spill, under direction of the Radiation Protection Officer

**Security Officer**

- ☐ Notify the Security Operations Centre **(4142)**
- ☐ If entering the affected area, don appropriate Personal Protective Equipment (gown, gloves, goggles, etc.)
- ☐ **Cautiously**, proceed to the site and obtain:
  - ☐ Name and title of person reporting the spill
  - ☐ Name of substance believed to have been spilled
  - ☐ Details of the cause of the spill
- ☐ Meet the Fire Department at the designated emergency services entrance
- ☐ Obtain and deliver the Hazardous Spill Containment Kit to the site, if not already delivered by Environmental Services
- ☐ Await instruction from the Security Shift Supervisor

**Recovery****4.6. Upon Notification that the Crisis Has Concluded****Security Operations Centre Operator****Notify:**

- ☐ Director of Protection Services/Delegate, if not already aware
- ☐ Security Shift Supervisor, if he/she is not already aware

**Security Shift Supervisor**

- ☐ Ensure that a comprehensive electronic occurrence report is filed immediately
- ☐ Participate in a debriefing session

**Security Officers**

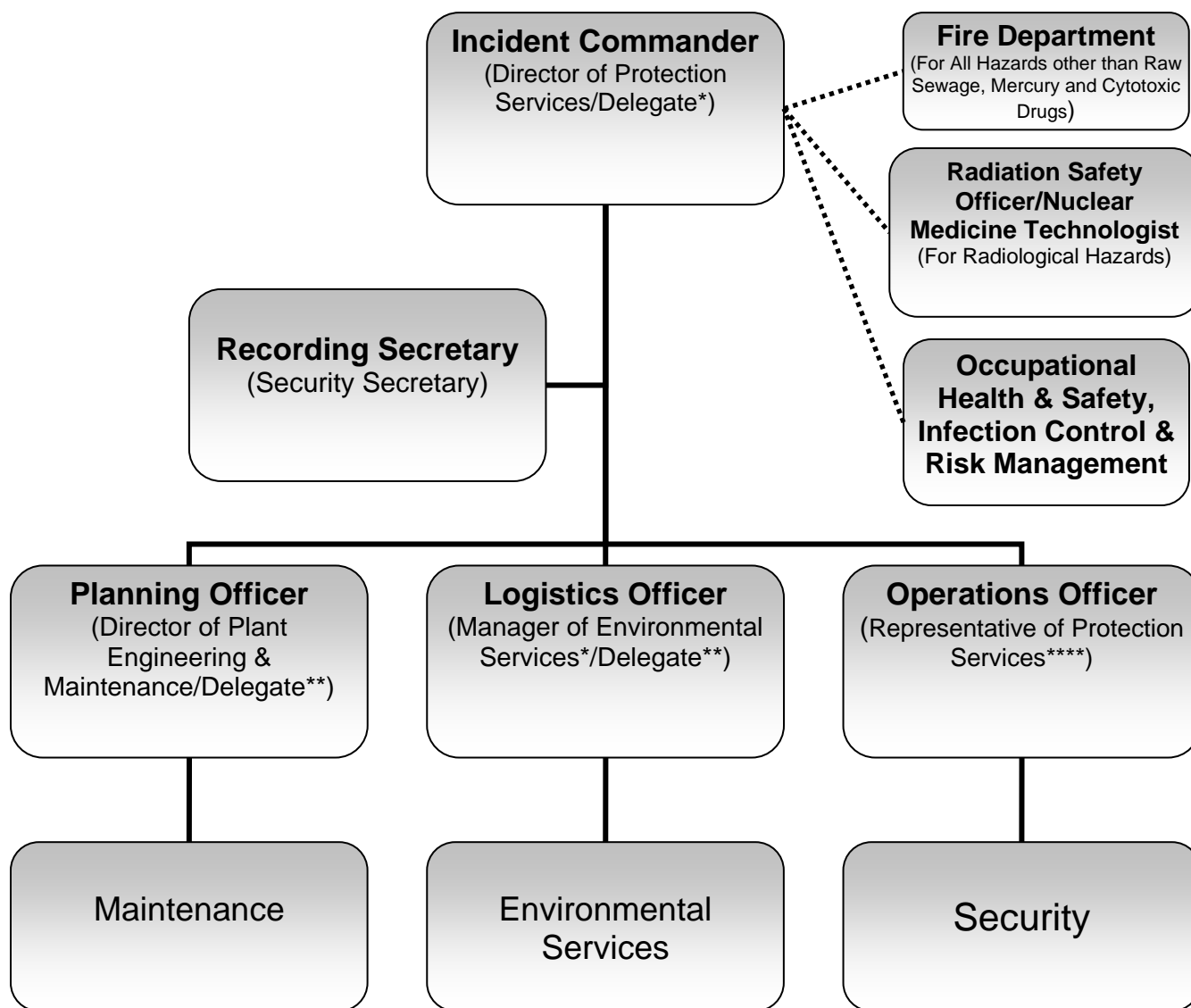
- ☐ Await direction from the Incident Commander or Security Shift Supervisor
- ☐ Participate in a debriefing session



## 5.0 Response & Recovery – Incident Command Centre

### Response

#### 5.1. Incident Management System



\* Delegate is the next level of appointed authority. In this case, it may be but is not limited to: the Manager of Emergency Management, Parking & Security Operations Centre; Manager of Security, Life Safety & Access Control, or Security Supervisor

\*\* Delegate is the next level of appointed authority. In this case, the Manager of Plant Engineering and Maintenance

\*\*\* Delegate is the next level of appointed authority. In this case, the Supervisor of Environmental Services

\*\*\*\* Representative of Protection Services may be but is not limited to: Director of Protection Services; Manager of Emergency Management, Parking & Security Operations Centre; Manager of Security, Life Safety & Access Control, or Security Supervisor

**5.2. Upon Receiving the Code Brown (Major Chemical Spill) Notification****Incident Commander – Director of Protection Services/Delegate**

- ☐ Establish the Incident Command Centre (Security office on Dietary 1)
- ☐ Contact Switchboard 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
- ☐ Notify Switchboard **(0)** that the Incident Command Centre has been established and provide the contact number
- ☐ Advise:
  - ☐ Emergency Department of the spill and possibility of casualties
  - ☐ Manager of Environmental Services/Delegate of the spill (via Switchboard)
  - ☐ Director of Plant Engineering & Maintenance/Delegate (via Switchboard)
  - ☐ Occupational Health, Safety & Wellness of the incident
  - ☐ Infection Control
  - ☐ Risk Management
- ☐ Conduct regular business cycles with members of the Incident Command Centre
- ☐ Prepare to provide a situational report to the CEO/Delegate
- ☐ Be prepared to transfer command to a higher authority (e.g., HAZMAT Team/Fire Department/CEO), or initiate unified command
- ☐ Notify Risk Management of the incident
  - ☐ 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
- ☐ Keep the President & CEO/Delegate informed, as required
- ☐ Liaise with Duty Administrator and assess the need to activate the Corporate Emergency Operations Center (EOC) and call back of Program Directors
- ☐ Notify Security Operations Centre to call Corporate EOC members if required, and have them report to the EOC at Watkins 2 Executive Committee room

- ☐ Authorize staff fan-out lists, as required, in consultation with Program Directors/Managers
- ☐ Ensure the EOC is appropriately informed of any identified risk issues
- ☐ Brief Program Directors on the status of the incident
- ☐ When the EOC is activated assume role of Emergency Management/Liaison Officer and delegate role of Incident Commander

**Planning – Director of Plant Engineering & Maintenance \ Delegate**

- ☐ Report to the Incident Command Centre (Dietary 1 Security Office)
- ☐ Oversee Maintenance response to the spill
- ☐ Initiate the recall of off-duty Maintenance staff, as required
- ☐ Ensure the continuation of Maintenance functions in the remainder of the facility
- ☐ Consider implications of the spill on the function of mechanical and plant engineering equipment
- ☐ Contact Strategy Management + Communications to provide information about the incident

**Logistics Officer – Manager of Environmental Services \ Delegate**

- ☐ Report to the Incident Command Centre after initial assessment of the spill
- ☐ Oversee the Environmental Services response to the spill
- ☐ Ensure an Environmental Services Assistants are responding to assist with containment and clean-up of the spill
- ☐ Ensure the continuation of Environmental Services functions in the remainder of the facility
- ☐ Contact contracted HAZMAT Team (**Waste Management Services 1 800-267-7874**) to be prepared to respond
- ☐ Oversee the Environmental Services response under direction of Infection Control and assist, as required
- ☐ Initiate the recall of off-duty Environmental Services staff, as required

**Operations Officer – Representative of Protection Services**

- ☐ Oversee the Security response under direction of the HAZMAT team and the Fire Department and assist, as required
- ☐ Ensure the hazardous spill kit has been sent to the incident site

**Recording Secretary**

- ☐ Document all action within the Incident Command Centre
- ☐ Prepare for the termination of the emergency and any debriefing requirements (i.e. paper, pens, location, etc.)

**5.3. Upon Receiving the Code Brown (Major Biological Spill) Notification****Incident Commander – Director of Protection Services/Delegate**

- ☐ Establish the Incident Command Centre (Security office on Dietary 1)
- ☐ Contact Switchboard 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** \_\_\_\_\_

- ☐ Advise:
  - ☐ Emergency Department of the spill and possibility of casualties
  - ☐ Manager of Environmental Services/Delegate of the spill (via Switchboard)
  - ☐ Director of Plant Engineering & Maintenance/Delegate (via Switchboard)
  - ☐ Occupational Health, Safety & Wellness of the incident
  - ☐ Infection Control
  - ☐ Risk Management
- ☐ Liaise with Duty Administrator and assess the need to activate the Corporate Emergency Operations Center (EOC) and call back of Program Directors
- ☐ Notify Security Operations Centre to call Corporate EOC members if required, and have them report to the EOC at Watkins 2 Executive Committee room
- ☐ Conduct regular business cycles with members of the Incident Command Centre
- ☐ Be prepared to transfer command to a higher authority (e.g., Infection Control/CEO), or initiate unified command
- ☐ Keep the President & CEO/Delegate informed, as required

**Planning Officer – Director of Plant Engineering & Maintenance**

- ☐ Oversee Maintenance response to the spill
- ☐ Initiate the recall of off-duty Maintenance staff, as required
- ☐ Ensure the continuation of Maintenance functions in the remainder of the facility
- ☐ Consider implications of the spill on the function of mechanical and plant engineering equipment
- ☐ Contact Strategy Management + Communications to provide information about the incident

**Logistics Officer – Manager of Environmental Services**

- ☐ Oversee the Environmental Services response to the spill
- ☐ Ensure an Environmental Services Assistants are responding to assist with containment and clean-up of the spill
- ☐ Ensure the continuation of Environmental Services functions in the remainder of the facility
- ☐ Contact contracted HAZMAT contractor (**Waste Management Services 1 800-267-7874**) to be prepared to respond
- ☐ Initiate the recall of off-duty Environmental Services staff, as required
- ☐ Ensure the hazardous spill kit has been sent to the incident site
- ☐ Oversee the Environmental Services response under direction of the Radiation Safety Officer or Nuclear Medicine Technologist and assist, as required

**Operations Officer – Representative of Protection Services**

- ☐ Oversee the Security response under direction of the Incident Command and Infection Control and assist, as required
- ☐ Ensure the hazardous spill kit has been sent to the incident site

**Recording Secretary**

- ☐ Document all action within the Incident Command Centre
- ☐ Prepare for the termination of the emergency and any debriefing requirements (i.e. paper, pens, location, etc.)

**5.4. Upon Receiving the Code Brown (Major Radioactive Spill) Notification****Incident Commander – Director of Protection Services/Delegate**

- ☐ Establish the Incident Command Centre (Security office on Dietary 1)
- ☐ Contact Switchboard 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**

---

## Advise:

- ☐ Emergency Department of the spill and possibility of casualties
- ☐ Manager of Environmental Services/Delegate of the spill (via Switchboard)
- ☐ Director of Plant Engineering & Maintenance/Delegate (via Switchboard)
- ☐ Occupational Health, Safety & Wellness of the incident
- ☐ Infection Control
- ☐ Risk Management
- ☐ Advise Radiation Safety Officer/Nuclear Safety Technologist/Delegate of the incident, if not already aware
- ☐ Liaise with Duty Administrator and assess the need to activate the Corporate Emergency Operations Center (EOC) and call back of Program Directors
- ☐ Notify Security Operations Centre to call Corporate EOC members if required, and have them report to the EOC at Watkins 2 Executive Committee room
- ☐ Conduct regular business cycles with members of the Incident Command Centre
- ☐ Advise the Emergency Department of the spill and possibility of casualties
- ☐ Be prepared to transfer command to a higher authority (e.g., Radiation Safety Officer/CEO), or initiate unified command
- ☐ Keep the President & CEO/Delegate informed, as required

**Planning Office – Director of Plant Engineering & Maintenance**

- ☐ Oversee Maintenance response to the spill
- ☐ Initiate the recall of off-duty Maintenance staff, as required
- ☐ Ensure the continuation of Maintenance functions in the remainder of the facility
- ☐ Consider implications of the spill on the function of mechanical and plant engineering equipment
- ☐ Contact Strategy Management + Communications to provide information about the incident

**Logistics Officer – Manager of Environmental Services**

- ☐ Oversee the Environmental Services response to the spill
- ☐ Ensure an Environmental Services Assistants are responding to assist with containment and clean-up of the spill
- ☐ Ensure the continuation of Environmental Services functions in the remainder of the facility
- ☐ Contact contracted HAZMAT contractor (**Waste Management Services 1 800-267-7874**) to be prepared to respond
- ☐ Initiate the recall of off-duty Environmental Services staff, as required

**Operations Officer – Representative of Protection Services**

- ☐ Oversee the Security response under direction of the Radiation Safety Officer or Nuclear Medicine Technologist and assist, as required
- ☐ Ensure the hazardous spill kit has been sent to the incident site

**Recovery****5.5. Upon Notification That the Crisis Has Concluded****Incident Commander**

- ☐ Consult with all involved departments on the decision to call an all clear
- ☐ When decided, instruct Switchboard to announce “Code Brown All Clear”
- ☐ Arrange and prepare for a debriefing session
- ☐ Attend debriefing with Hospital Emergency Operations Centre, if activated
- ☐ Resume normal duties

**Planning Officer**

- ☐ Ensure equipment used has been returned and in proper storage
- ☐ Attend the Incident Command Centre debriefing session
- ☐ Contact Strategy Management + Communications
- ☐ Resume normal duties

**Logistics Officer**

- ☐ Ensure any required documentation is completed and delivered to Occupation Health & Safety
- ☐ Contact contracted HAZMAT contractor (**Waste Management Services 1 800-267-7874**)
- ☐ Attend the Incident Command Centre debriefing session
- ☐ Resume normal duties

**Operations Officer**

- ☐ Attend the Incident Command Centre debriefing session
- ☐ Resume normal duties

**Recording Secretary**

- ☐ Document recovery actions within the Incident Command Centre

**- This page intentionally left blank -**



## **6.0 Response & Recovery – Affected Area Manager/Delegate<sup>5</sup>**

### **Response**

#### **6.1. Upon Notification of a Minor Spill**

- ☐ Provide direction as required with clean up of the spill in accordance with the substance's material safety data sheet (if applicable)
- ☐ Ensure necessary documentation is completed and submitted to the appropriate Government agencies, as required

#### **6.2. Upon Receiving the Code Brown (Chemical Spill) Notification**

- ☐ Report to and assume command of the area until arrival of Security / HAZMAT Team / Fire Department
- ☐ Refer to All Staff Response: 2.1. Upon Occurrence or Discovery of a Chemical Spill

#### **6.3. Upon Receiving the Code Brown (Biological Spill) Notification**

- ☐ Report to the area and assume command of the area until arrival of Infection Control
- ☐ Refer to All Staff Response: 2.2. Upon Occurrence or Discovery of a Biological Spill

#### **6.4. Upon Receiving the Code Brown (Radioactive Spill) Notification**

- ☐ Report to the area and assume command of the area until arrival of Radiation Safety Officer or Nuclear Medicine Technologist
- ☐ Refer to All Staff Response: 2.3. Upon Occurrence or Discovery of a Radioactive Spill

### **Recovery**

#### **6.5. Upon Notification That the Crisis Has Concluded**

- ☐ Conduct a debriefing session with involved staff
- ☐ Ensure any required documentation is completed and delivered to Occupational Health and Wellness
- ☐ Resume normal duties

---

<sup>5</sup> Delegate refers to the next level of appointed authority. In this case, the Administrative Coordinator.

**- This page intentionally left blank -**

## **7.0 Response & Recovery – President & CEO/Delegate<sup>6</sup>**

### **Response**

#### **7.6. Upon Receiving the Code Brown Notification**

- ☐ Prepare to receive situational report / briefing from the Incident Commander
- ☐ If recommendation is to commence further evacuation consider the following:
  - ☐ Implementation of Hospital Emergency Operations Centre (See EOC Implementation Plan)
  - ☐ Implementation of Code Green (Evacuation)
  - ☐ Implementation of Crisis Communication Plan

### **Recovery**

#### **7.7. All Clear – Declaring Return to Normal Operations**

- ☐ In consultation with the Incident Command Centre, HAZMAT Team, Fire Department, and / or other relevant staff, determine whether the crisis has concluded and authorize the Switchboard to announce the “All Clear”.
- ☐ Implement a course of action to manage a major disruption of Hospital routine, if necessary
- ☐ Arrange for a debrief session between the Incident Command Centre and the Emergency Operations Centre, if established
- ☐ Arrange for a debrief session with involved staff

---

<sup>6</sup> Delegate refers to the next level of appointed authority. In this case, the Duty Administrator.

**- This page intentionally left blank -**

## **8.0 Response & Recovery – Emergency Department**

### **Response**

#### **8.1. Upon Hearing Code Brown Announced Overhead**

- ☐ Prepare for the influx of patients
- ☐ Prepare for the need to set up decontamination process

#### **8.2. Activating Code Orange Decontamination Process**

- ☐ The Emergency Department will be notified to activate the decontamination process either by an internal source (Infection Control, Security); or an external source, Emergency Services (Police, Fire, EMS) or KFL&A Public Health.
- ☐ Upon notification for the need of the decontamination process, activate the appropriate Code Orange Stage (Stage 2 or Stage 3)

### **Recovery**

#### **8.3. Upon Notification that the Crisis Has Concluded**

- ☐ Ensure affected staff participate in a debriefing session
- ☐ Return to normal operations

**- This page intentionally left blank -**

## **9.0 Response & Recovery – Occupational Health, Safety & Wellness**

### **Response**

#### **9.1. Upon Receiving the Code Brown Notification**

- ☐ If requested, provide access to the MSDS/SDS master list
- ☐ Prepare to respond to the Code Brown site to assist in treatment of any affected staff
- ☐ Once on site assume command of any staff persons requiring medical treatment and suggest course of action required

### **Recovery**

#### **9.2. Upon Notification That the Crisis Has Concluded**

- ☐ Resume normal duties
- ☐ Prepare to receive required documentation

**- This page intentionally left blank -**



## 10.0 Response & Recovery – Infection Control

### Response

#### 10.1. Upon Receiving the Code Brown (Biological Spill) Notification

- ☐ Report to the area of the spill to ensure proper infection control procedures are in effect
- ☐ Reference the Infection Control Manual section **3-70 (Biological Disasters/Events)**
- ☐ Determine if the decontamination process needs to be activated

##### **No:**

- ☐ Continue to monitor the area until cleaned

##### **Yes:**

- ☐ Notify the emergency department to activate the decontamination process

#### 10.2. Activating the Code Brown Decontamination Process

- ☐ Notify KFL&A Public Health and Infectious Diseases of activation of the decontamination process
- ☐ Report to the emergency department and put on protective clothing
- ☐ Following decontamination, Infection Control will follow-up with **stable** patients being held in the isolation area waiting room
- ☐ In consultation with KFL&A Public Health and/or Infectious Diseases, determine whether patients are potentially infectious or incubating a serious disease where person-to-person transmission is a concern

##### **If they are not:**

- ☐ Patient will be discharged (possibly under home quarantine) with follow-up by KFL&A Public Health

##### **If they are:**

- ☐ Patients who do not require admission for medical reasons but who require strict quarantine (determined by KFL&A Public Health) will need to be transported to quarantine facilities
- ☐ A line listing of all patients, including their home address and phone number for the ensuing 3 weeks, will be completed for each patient by an Infection Control Practitioner prior to their discharge and the list will be given to KFL&A Public Health

Following decontamination, Infection Control will follow-up with **unstable** patients being treated in the isolation area treatment area

- ☐ In consultation with KFL&A Public Health and/or Infectious Diseases, determine whether patients are potentially infectious or incubating a serious disease where person-to-person transmission is a concern

- ☐ Assess patients, who require admission for medical reasons, as to isolation requirements
- ☐ Notify the Incident Command Centre of any special room requirements

### **Recovery**

#### **10.3. Upon Notification That the Crisis Has Concluded**

##### **Decontamination process not activated:**

- ☐ Ensure spill area conforms to infection control policy
- ☐ Resume normal duties

##### **Decontamination process activated:**

- ☐ Nondisposable items will be gathered, placed in plastic containers, sealed and placed in biohazard bags. Arrange for cleaning and sterilization of these items after consultation with the Manager of Central Processing.
- ☐ The disinfectant to be used for decontamination of a biological spill is: PerCept (0.5% hydrogen peroxide) 1:16 dilution for 5 minutes
- ☐ Inspect the isolation room and equipment and authorize the staff in the area to resume normal duties
- ☐ Report to the Incident Command Centre for debriefing

## **11.0 Response & Recovery – Environmental Services**

### **Response**

#### **11.1. Upon Notification of a Minor Chemical or Biological Spill**

##### **Manager Environmental Services/Delegate<sup>7</sup>**

- ☐ Send an Environmental Services Assistant to the area to arrange in cleaning the area after the spill has been initially cleaned

##### **Environmental Services Assistants**

- ☐ Obtain spill kit and bring to Code Brown location
- ☐ Don appropriate personal protective equipment
- ☐ Assist, as required, with the cleaning of the area after the spill has been initially cleaned

#### **11.2. Upon Hearing Code Brown Announced Overhead**

##### **Manager Environmental Services/Delegate**

- ☐ Report to the area of the spill for initial assessment
- ☐ Ensure Environmental Services staff are assigned to the incident site
- ☐ Report to the Incident Command Centre

##### **Environmental Services Assistants**

- ☐ Obtain spill kit and bring to Code Brown location
- ☐ Don appropriate personal protective equipment
- ☐ Assist, as required, with the containment of the spill
- ☐ Assist, as required, with the cleaning of the area after the spill has been initially cleaned

### **Recovery**

#### **11.3. Upon Notification That the Crisis Has Concluded**

##### **Manager Environmental Services/Delegate**

- ☐ Conduct a debriefing with involved staff
- ☐ Ensure any required documentation is completed and delivered to Occupational Health and Safety

##### **Environmental Services Assistants**

- ☐ Participate in a debriefing
- ☐ Resume normal duties

---

<sup>7</sup> Delegate refers to the next level of appointed authority. In this case, the Environmental Services Supervisor.

**- This page intentionally left blank -**

## **12.0 Response & Recovery – Radiation Safety Officer / Nuclear Medicine Technologist**

### **Response**

**If not completed already ensure section “2.3 Upon Occurrence or Discovery of a Radiological Spill” is referenced for staff actions**

#### **12.1. Upon Notification of a Minor Radiological Spill**

- ☐ Oversee the clean up of the radioactive spill
- ☐ Ensure the safe disposal of materials used to clean up the spill
- ☐ Ensure the monitoring and assessment of all personnel in the area as to the degree of exposure, and the initiation of necessary medical treatment
- ☐ Ensure that decontamination procedures are followed (**Appendix A – Radioactive Decontamination of Personnel**)

#### **12.2. Upon Receiving the Code Brown (Radioactive Spill) Notification**

- ☐ Assume command of the area in cooperation with Incident Commander
- ☐ Oversee the clean up of the radioactive spill
- ☐ Ensure the safe disposal of materials used to clean up the spill
- ☐ Ensure the monitoring and assessment of all personnel in the area as to the degree of exposure, and the initiation of necessary medical treatment
- ☐ Ensure that decontamination procedures are followed (**Appendix A – Radioactive Decontamination of Personnel**)

#### **12.3. Upon Notification of an Unknown Radioactive Spill**

- ☐ Report immediately to the spill site

**Treat the spill as major until proven otherwise, (Reference 12.2 Upon Receiving the Code Brown (Radioactive Spill) Notification)**

### **Recovery**

#### **12.4. Upon Notification That the Crisis Has Concluded**

For **minor** radioactive spills only it will be the responsibility of the Radiation Safety Officer or Nuclear Medicine Technologist to determine that it is safe to resume normal duties in an area where the radioactive spill occurred.

- ☐ Take necessary precautions to ensure that it safe to resume normal duties
- ☐ Document occurrence on **Appendix B – Radioactive Incident Report**
- ☐ Forward documentation to the appropriate authorities
- ☐ Advise staff in the area that it is safe to resume normal duties

For **major** radioactive spills the Radiation Safety Officer or Nuclear Medicine Technologist will consult with the Hospital's EOC to determine that it is safe to resume normal duties in an area where the radioactive spill occurred.

## **13.0 Appendix A – Radioactive Decontamination**

### **1. Contaminated Wounds:**

- 1.1. Decontamination of wounds takes priority over other contaminated areas.
- 1.2. Irrigate with copious amounts of normal saline, using bulb syringe for 3 minutes.  
Repeat irrigation if a radiation survey shows that contamination remains.
- 1.3. Surgical debridement may be necessary.
- 1.4. Save all tissue removed for analysis.
- 1.5. Suturing may then be carried out in the usual manner. There is no reason to leave the wound open unless closure has been so long delayed that infection is likely.
- 1.6. Cover decontaminated wound with dressing prior to washing other areas.

### **2. Contaminated Skin (intact):**

- 2.1. Wash with soap and tepid water, and, if still contaminated, repeat washing.
- 2.2. If still contaminated, scrub gently with E-Z scrub brush. A mixture of 50% laundry detergent and 50% cornmeal or 3% solution of bleach may be used. If bleach is used, rinse immediately with water to prevent irritating the skin.
- 2.3. Discontinue washing if skin becomes irritated.

### **3. Contaminated Eyes:**

- 3.1. Irrigate with eye stream in the direction of nose to temple.
- 3.2. Survey and repeat irrigation if necessary.

### **4. Contaminated Ear Canals:**

- 4.1. Irrigate gently with a small amount of water.
- 4.2. Suction excess water to prevent pressure build up.
- 4.3. Survey and repeat irrigation if necessary.

### **5. Contaminated Nose or Mouth:**

- 5.1. Turn head to side if possible
- 5.2. Rinse with small amounts of water suctioning frequently.
- 5.3. Avoid water getting into stomach.
- 5.4. Perform gastric lavage if necessary, monitoring and sampling contents.

### **6. Contaminated Hair:**

- 6.1. Shampoo for 2-3 minutes and rinse thoroughly. Ensure conditioner is not applied.
- 6.2. Survey and repeat washing if necessary.
- 6.3. If necessary hair may be cut off, shaving must be avoided.

### **7. Burns**

- 7.1. Gently wash burn area with lukewarm, sterile water and cover with a dressing.
- 7.2. The body will get rid of any remaining contamination on its own.
- 7.3. Large burned areas should not be washed because of the danger of hypothermia.
- 7.4. Skin regenerates every 14 days.

**- This page intentionally left blank -**



## 14.0 Appendix B – Radioactive Incident Report

**Minor Incidents** are those in which less than **5 ALI** is involved. This form must be completed and a copy sent to the Radiation Safety Officer.

**Major Incidents** are those in which more than **5 ALI** is involved. The Radiation Safety Officer / Nuclear Medicine Technologist must be informed as soon as possible after the incident has occurred. This form must be completed.

Date:        /        /         
               YYYY    MMM    DD

Reported By: \_\_\_\_\_

Name of Staff Involved in Incident: \_\_\_\_\_

Patient(s) Involved in Incident?

☐ Yes

Name: \_\_\_\_\_

CR#: \_\_\_\_\_

☐ No

Staff Contamination?

☐ Yes

☐ No

Location Where Incident Took Place: \_\_\_\_\_

Date & Time of Incident: \_\_\_\_\_

Isotope Involved: \_\_\_\_\_

Estimated Activity: \_\_\_\_\_

Description of Incident: \_\_\_\_\_

Causes of Incident & Action Taken to Prevent Recurrence of Incident: \_\_\_\_\_

Report Forwarded to:

☐ Radiation Safety Officer

☐ Area Manager

☐ Occupational Health and Safety

☐ Protection Services

**- This page intentionally left blank -**