Beth Israel Deaconess Medical Center Environment of Care Manual

Title: HAZARDOUS SPILL RESPONSE PROGRAM, ("CODE ORANGE")

Subtitle: Hazardous Waste Contingency Plan

Policy #: EC-43

Purpose:

The goal of this program is to implement a system to safely respond to a HAZARDOUS SPILL/other hazardous release "Code Orange" event with intent to minimize hazards to public health, safety, and welfare of the environment. This policy may be used in conjunction with BIDMC's EC-44, *Hazard Communication Program*, and *EOC-03, Hazardous Materials Management Program*. This document also serves as BIDMC's Contingency Plan in order to comply with the requirements of the Environmental Protection Agency's (EPA) 40 CFR 262, *Hazardous Waste*, and the Massachusetts Department of Environmental Protection's (MASS DEP) 310 CMR 30.000, *Hazardous Waste Regulations*.

Scope:

This policy covers all Medical Center clinical, research, administrative and general areas including East and West Campuses, as well as any and all off site areas owned and leased by BIDMC.

The **Code Orange Program**_provides the mechanism for response to "Emergency Releases" of hazardous materials (chemical, gas, biological, or radiological), as defined in Section A below. It also acts as a response mechanism for receipt of or expected receipt of patients contaminated with hazardous materials (in conjunction with EOC-08 Emergency Management Plan). Sources of **Code Orange** events may be from various or multiple factors, such as: accidental spills, accidental gas release, equipment failure, natural or man-made disasters, etc.

Policy Statement:

BIDMC shall assure the safe management of hazardous chemicals, gas or other hazards as described in the Hazardous Materials Management Program. This policy shall address the process of safely responding to spills, release, or leakage of hazards or events potentially resulting in harm to health, safety or the environment that may require the assistance of additional trained medical center personnel or external agencies.

PROGRAM OVERVIEW

A. SPILL PREVENTION & CONTROL

BIDMC employs various measures to ensure safe handling of hazardous materials, preventative measures, and safeguards against uncontrolled releases. Such

EC-43 Page 1 of 31

measures include:

- Annual safety training of hazardous material users;
- A Laboratory Safety Officer Program;
- Written Chemical Hygiene Plan, available as resource to all staff;
- · Annual surveys of research laboratories;
- Annual hazard surveys of areas such as loading docks, distribution, storage areas:
- Semi-annual surveys of clinical laboratories and other hazardous material use areas;
- Written Standard Operating Procedures for certain specific chemical or other hazardous material uses;
- Oil Spill Prevention, Control and Countermeasures Plan;
- Weekly & Monthly inspections of all Hazardous Waste Satellite and Main Accumulation Areas (SAA's & MAA's);
- Maintenance of chemical & biological spill kits in designated use areas;
- Maintenance and strategic placement of supplemental spill clean-up supplies (see Appendix A to this document);
- Customized air monitoring equipment in some laboratories to automatically increase air exchange rates when elevated contaminant levels are detected;
- Carbon Monoxide (CO) monitoring equipment in kitchens and generator rooms that will sound an alarm if levels exceed specified thresholds.

Reference documents & policies for above listed prevention and control measures:

- BIDMC Laboratory Safety Manual
- BIDMC Chemical Hygiene Plan
- BIDMC Biological Safety Manual
- Hazardous Materials and Waste Management Plan (EOC-03)
- Fire Response Code Red (EC-36)
- Hazard Communication Program (EC-44)
- Hazardous Chemical Wastes (EC-42)
- Universal Wastes Management Plan (EC-50)
- Hazardous Waste Drug Collection Procedure (EC-65)
- Chemotherapeutic Management Plan (EC-41)
- Compressed Gas Cylinder Storage and Handling (EC-62)
- Infectious Medical Waste Disposal (EC-59)
- Radiation Safety Manual

B. INCIDENTAL SPILL VS. EMERGENCY SPILL OR RELEASE

Due to the frequent and widespread use of hazardous materials at the medical center, "incidental" spills or releases occur periodically within maintenance, housekeeping, laboratory, and other areas and do not require activation of the **Code Orange Program**. Spills or releases are not categorized as "incidental" based on volume, but instead are based on the level of hazard presented, activation of specific monitoring alarms and/or the capabilities of the user(s) to safely clean up the material without assistance.

An incidental spill or release:

EC-43 Page 2 of 31

- does not require Code Orange activation
- is minor in scope;
- is known to present minimal or no hazard to surrounding personnel and environment;
- can be safely and adequately cleaned up by the user(s), based on their training, knowledge of the substance, and the available spill kit supplies;
- Note: All CO and ETO alarm activations are considered a code orange-see below

An "emergency" spill or release:

- requires Code Orange activation
- presents a significant or high hazard to surrounding personnel or the environment; due to volume, location, toxicity, or other factor;
- may be a low hazard release that cannot be safely cleaned up by the user(s), due to the limits of the training and/or supplies afforded to them;
- is one that the user feels uncomfortable attempting to clean without outside assistance
- any release or suspected release of an unknown material or gas e.g. when CO or ETO alarm is activated

Spill and monitoring equipment is maintained by EH&S Department for purpose of **Code Orange** assessment and clean up activities. (see Appendix A to this document).

BIDMC Maintenance staff or designated maintenance staff for all off-sites should maintain spill supplies as appropriate to handle incidental spills of the common hazardous materials used at each of those operations.

C. CODE ORANGE ACTIVATION

In an emergency release event, including release or suspected release of hazardous (or unknown) materials and/or alarm activation, the following shall apply under the Code Orange Program:

Stop the spill from spreading, if possible.

Move nearby staff away from hazard.

Assess if you can safely clean up the spill yourself. If not:

Report Code Orange (2-1212) from a nearby, safe location.

Tell affected staff to await first responders in a nearby, safe location.

- The top priorities shall always be attending to any injured persons and preventing any further injury or contamination. Victims should be helped with locating and operating emergency eyewashes & showers as applicable. Obtain emergency medical assistance, if necessary.
- In the event of a spill at an off-site location, the site should activate the Code Orange alert to have BIDMC EH&S remotely consults and provides follow-up

EC-43 Page 3 of 31

- support. If a significant event, emergency spill response should also include immediately contacting the local Fire Department.
- Evacuate the affected area as necessary. Close doors, windows, or any openings to the area of incident and restrict access. If safe to accomplish, immediately turn off any equipment that may be contributing to the release. If imminent danger to surrounding areas is perceived, fire alarm can be activated to facilitate large scale evacuation. (see section D below)
- Notify nearby personnel of potential hazard & report a "Code Orange" event from a safe location:

Code Orange Reporting

- Dial 2-1212 from any BIDMC phone (or 617-632-1212 from a portable or cell phone) to report a "CODE ORANGE".
- Identify the type of hazardous release (chemical, biological, radiological, carbon monoxide (CO) alarm, or unknown spill/odor).
- State the location of the event (building & room #).
- o Give your name and call back phone number.
- o Give a brief description of the incident.
- If possible, identify name and approximate quantity of released material.
- Do not hang up until released by the operator.
- Standby for direct response and/or a return call from Environmental Health & Safety (EH&S) and/or Radiation Safety.
- Monitor the situation until help arrives. Restrict traffic into or through the area of incident. Post signs if needed to help prevent entry.
- Standby in safe location to provide additional information to Code Orange responders, upon arrival.
- EH&S (or Radiation Safety, if applicable) will direct all further actions under Code
 Orange response.
- Internal Emergency Coordinator Contact List note: When Code Orange is reported to MASCO operator, via 2-1212, EH&S and other first responders are notified via pagers to respond to event. If no EH&S responders arrive to scene or if unable to reach MASCO operator to report Code Orange, first responders should be notified via other contact means (see Appendix F).

D. EVACUATION

If event results in FIRE, the fire presents greater hazard and assumes priority - follow posted fire response procedures, "RACE", and actions described in the BIDMC's <u>EC-36 Fire Response Code Red</u>. Be sure to report to MASCO operator or when calling 911 for off-sites that fire event involves hazardous materials, and provide specifics if possible.

If no fire is present, but the event requires evacuation due to the exposure risks of the hazardous material release and/or alarm, scope of evacuation will be determined by BIDMC emergency responders from Environmental Health & Safety, Radiation Safety and/or Public Safety departments. Affected staff will be directed to evacuate via fire

EC-43 Page 4 of 31

alarm activation, overhead speaker announcement, or direct communication from emergency responders.

Evacuation Plans

- Inpatient and ambulatory areas have department specific evacuation plans centrally stored in their respective departments and areas. These plans include primary and secondary evacuation routes, rendezvous areas, notification of alarms, locations of pull stations and fire extinguishers, and other critical information.
- Research areas have research emergency procedures and response guideline flipcharts prominently posted in their respective laboratories and areas.

E. RESPONSIBILITIES

Responsibilities for Spill Response are outlined in the following sections by specific hazard type (**chemical**, **biological**, **radiological**) and based on individual and department roles. An event involving mixed hazards shall be addressed with priority given to the highest risk to health and the environment.

E.1. CHEMICAL or HAZARDOUS GAS RELEASE

E.1.a. MATERIAL USER / SPILL REPORTER

- Be aware of specific alarms and what it means e.g. CO or ETO Alarm.
- Alert people in the immediate area of the release. Reduce surrounding hazards if safe to do so – cap open containers, turn off any flame or heat sources, shut-off gas valves, etc.
- If personal injury occurred, immediately seek emergency medical treatment via 911 for off-campus locations or 2-1212 for on campus locations.
- Utilize a chemical fume hood, if possible, to enhance exhaust; open the sash fully, unless the spill occurred in the fume hood.
- Implement containment measures (berms, absorbents, etc.); if safe to do so, in order to prevent further spread of release.
- Report Code Orange, following directives outlined in Section B above.
- While waiting for Code Orange responders, obtain copy of relevant SDS or other product information, if possible.

E.1.b. MASCO COMMUNICATIONS OPERATOR

Upon report of a "Code Orange", the communications operator must:

- Obtain name of caller and telephone call back number, spill location, injury report, approximate volume and type(s) of hazard (chemical, gas, biological, radiological & material name, if known). In the case of the CO Alarm activation, state "CO Code Orange" to operator.
- Direct caller to stand by for a return call from emergency coordinator, (EH&S or alternate personnel).
- Initiate Code Orange page. Relay all pertinent information via alpha page. Public

EC-43 Page 5 of 31

Safety Dispatch is notified via the "All Code" pager.

- Relay an "All clear" via alpha pagers once notified by EH&S or Radiation Safety.
- If directed by EH&S Officer, operator may also need to contact Administrator on Call and Emergency Management

E.1.c. ENVIRONMENTAL HEALTH & SAFETY RESPONDERS

EH&S Department will respond to all **Code Orange** events, upon notification from MASCO. The following responsibilities will apply:

- Contact the spill reporter, via contact information provided, to gather additional details of event, advise on immediate actions for on-scene personnel, and determine appropriate response measures.
- Assure that any persons injured and/or exposed to hazardous agents are receiving appropriate medical attention.
- Mobilize to location of event, if necessary, to assess scope and impact of event.
- EH&S shall assume leadership role in directing all internal response actions, unless release involves Radiological materials – in which case Radiation Safety Office will assume lead for response actions, with support from EH&S.
- Assess the hazards of the release and the extent of the impacted area, considering volumes, material characteristics, location, and other pertinent data.
 Collect as much information as possible about event specifics from user / spill reporter.
- When the CO Alarm is activated (BIDMC Main Campus only), EH&S will determine when BFD is to be notified. Criteria include: length of time alarm is continuously activated; if anyone has physical symptoms; immediate need for rescue; need for immediate on-site CO level monitoring; sustained CO levels demonstrated by continual CO alarm; and, any other significant findings that would require having BFD on site. EH&S will direct Public Safety to immediately notify BFD of a CO Alarm event.
- Determine appropriate levels of evacuation and coordinate evacuation, to extent appropriate, with assistance of Public Safety and other emergency respondents. If necessary, fire alarm and/or public announcement devices can be activated to facilitate large area evacuation. (NOTE: in large scale event, additional policies may apply refer to EOC -08 Emergency Management Plan and EC-30 Evacuation Plan.
- Assess appropriate supplies, personal protective equipment, and other resources necessary for cleanup operation and determine if outside assistance is needed for remediation: haz-mat contractors, fire department, etc.
- If applicable, assist in implementing orders issued by fire department or other public authorities.
- If appropriate, have MASCO operator notify the Administrator-on-Call (AOC), Emergency Management, and other operations and administrative personnel as needed.
- Determine if notification is required to any governing agencies and complete as necessary.
- Coordinate appropriate cleanup operations, using EH&S staff, contracted technicians, and/or laboratory staff. Spill equipment shall be maintained by

EC-43 Page 6 of 31

EH&S staff for hazardous cleanup operations.

- Perform or arrange for any necessary air sampling before, during, and after cleanup operations.
- Confirm if and when the area is safe for normal activities to resume. When deemed safe, inform area occupants and report "All Clear" to MASCO operator via x. 2-1212.
- Restock EH&S spill supplies, as appropriate.
- Assure appropriate documentation of the incident investigation.
- Assure that the All Clear code is given to MASCO.

E.1.d. RADIATION SAFETY DEPARTMENT

Upon receipt of Code Orange notification page, Radiation Safety Office will respond to assess for radiological hazards.

- If incident involves no radiological materials, no further action necessary.
- If release involved radiological materials, Radiation Safety Department will assume lead role in assessment of hazards and directing all appropriate response measures, as outlined in Section E.3 below.

E.1.e. PUBLIC SAFETY DEPARTMENT

Upon notification via the "All Code" pager at Public Safety Dispatch (Code Orange page):

- Obtain pertinent information, and dispatch officers to the scene of the incident.
- If applicable, notify Maintenance, via radio, of the incident and request assistance as appropriate.
- Officers assist with communications, traffic control, and evacuation, as needed.
- If first to arrive, identify spill reporter, collect contact info, and unless reporter needs emergency medical attention, ensure he/she stays in nearby safe area to meet with EH&S and/or Radiation Safety to discuss event specifics.
- Help, when necessary, in assuring availability of a spill cart at the scene, if needed. Assist in clean up functions only upon approval and under direction of the EH&S Responders. Do <u>not</u> initiate or take part in clean up functions unless requested by EH&S.
- Once the area is confirmed to be safe for normal activities to resume, public safety should no longer be required.
- Submit copy of report to EH&S Department.

E.1.f. MAINTENANCE or BUILDING MANAGEMENT

If notified by Public Safety, EH&S, or Radiation Safety Responders:

- Obtain pertinent information and respond to the scene of the incident.
- Provide emergency repairs, ventilation, shut off of gas or other mechanical adjustments as required.
- Assist as needed with communications, traffic control, evacuation, and accessing spill carts/other emergency equipment.
- Assist in clean up functions only upon approval and under direction of the EH&S responders. Do <u>not</u> initiate or take part in clean up functions unless requested by EH&S.

EC-43 Page 7 of 31

Once the area is confirmed to be safe for normal activities to resume,
 Maintenance should no longer be required.

E.1.g. ENVIRONMENTAL SERVICES

Environmental Services shall not be responsible for cleanup of hazardous materials. Representative shall respond to **Code Orange** event and seek direction from EH&S personnel.

- If released material is characterized by EH&S personnel as posing no significant hazard, Environmental Services may be requested to assist with cleanup, under direction of EH&S.
- If affected area presents a hazard, Environmental Services may be asked to provide general mop up/cleaning of the affected space after EH&S and other staff have cleaned up hazardous materials and deemed area safe for general use.
- Use warm soapy water to thoroughly clean the area. Staff may also be asked to wet-vacuum an area if a safety shower or eyewash has been used.

E.2. BIOLOGICAL SPILLS

E.2.a. BIOLOGICAL USER

- Stop work immediately and avoid inhaling airborne materials.
- Alert people in the area of the spill to evacuate. If necessary to evacuate large areas (e.g. an entire floor or building), the fire alarm may be pulled.
- Remove and disinfect any material that has been splashed on you, as you leave the affected area. Remove and disinfect contaminated clothing by placing inside out into a biohazard bag and autoclave.
- If personal injury occurred, immediately seek emergency medical treatment via 911 for off-campus locations or 2-1212 for on campus locations.
- Report Code Orange, following directives outlined in Section B above.
- Assess the situation from a safe location and have person knowledgeable of incident report to BioSafety Officer and/or other emergency respondents.
- If adequately trained and equipped with proper supplies and personal protective equipment, user(s) should anticipate participating in cleanup operations under the direction of BioSafety Officer and/or EH&S respondents. Note: Spill Cleanup Procedure (APPENDIX C). Additionally, the area of decontamination needs to be extended beyond the observed perimeter of the spill.

E.2.b. MASCO COMMUNICATIONS OPERATOR

Equivalent to E.1.b.

E.2.c. ENVIRONMENTAL HEALTH & SAFETY RESPONDERS

Equivalent to E.1.c, with addition of BioSafety Officer assuming lead role in assessment of hazards and direction of all response operations.

E.2.d. RADIATION SAFETY DEPARTMENT

Equivalent to E.1.d.

EC-43 Page 8 of 31

E.2.e. PUBLIC SAFETY DEPARTMENT

Equivalent to E.1.e.

E.2.f. MAINTENANCE

Equivalent to E.1.f.

E.2.g. ENVIRONMENTAL SERVICES

Equivalent to E.1.g.

E.3 RADIOACTIVE SPILLS

E.3.a. RADIATION USER

- Stop work immediately and avoid direct exposure to spilled materials.
- Notify all persons in the room at once and direct to evacuate as appropriate.
- If safe to do so, contain spill using absorbent materials.
- If personal injury occurred, immediately seek emergency medical treatment via 911 for off-campus locations or 2-1212 for on campus locations.
- Report Code Orange, following directives as outlined in Section B above.
- Assess the situation from a safe location and have person knowledgeable of incident report to Radiation Safety Department and/or other emergency respondents.

E.3.b. MASCO COMMUNICATIONS OPERATOR

Equivalent to E.1.b.

E.3.c. RADIATION SAFETY DEPARTMENT

Radiation Safety will respond to all radiological/nuclear **Code Orange** events, upon notification from MASCO. If event involves Radiological materials, the following responsibilities will apply:

- Gather additional details of event from spill reporter, advise on immediate actions for on-scene personnel, and determine appropriate response measures.
- Assure that any persons injured and/or exposed to hazardous agents are receiving appropriate medical attention.
- Mobilize to location of event to assess scope and impact of event.
- Radiation Safety responder(s) shall assume leadership role in directing all internal response actions,
- Assess the hazards of the release and the extent of the impacted area,
- Determine appropriate levels of evacuation and coordinate evacuation, to extent appropriate, with assistance of Public Safety and other emergency respondents. If necessary, fire alarm and/or public announcement devices can be activated to facilitate large area evacuation. (NOTE: in large scale event, additional policies may apply refer to BIDMC Radiological Emergency Response Plan, EOC -08 Emergency Management Plan and EC-30 Evacuation Plan.
- Assess appropriate supplies, personal protective equipment, and other resources necessary for cleanup operation and direct cleanup and decontamination

EC-43 Page 9 of 31

- activities as necessary.
- If applicable, assist in implementing orders issued by fire department or other public authorities.
- If appropriate, have MASCO operator notify the Administrator-on-Call (AOC) and other operations and administrative personnel as needed.
- Determine if notification is required to any governing agencies and complete as necessary.
- Perform or arrange for any necessary monitoring before, during, and after cleanup operations.
- Confirm if and when the area is safe for normal activities to resume. When deemed safe, inform area occupants and report "All Clear" to MASCO operator via x. 2-1212.
- Assure appropriate documentation of the incident.

E.3.d. ENVIRONMENTAL HEALTH & SAFETY RESPONDERS

- Upon receipt of a Code Orange notification page indicating radiological release, EH&S Department shall respond to contact information provided to seek additional information.
- EH&S will also make contact with Radiation Safety Department to assess need for EH&S assistance.
- EH&S will support Radiation Safety during event response as appropriate (i.e. site control, general hazard assessment, etc.).

E.3.e. PUBLIC SAFETY DEPARTMENT

Equivalent to E.1.e.

E.3.f. MAINTENANCE

Equivalent to E.1.f.

E.3.g. ENVIRONMENTAL SERVICES

Equivalent to E.1.g.

F. TRAINING

- All BIDMC employees shall receive initial training on Code Orange activation as a requirement of New Employee Orientation by completing the Employee Comprehensive Education training program. All BIDMC employees shall also receive annual refresher training as part of the Employee Comprehensive Education training program.
- Both initial and annual training shall include overview of what constitutes an emergency release of a Hazardous Material and the proper procedure for reporting such event to activate the Emergency Response Team.
- Further training may be conducted at any time in the form of drills and/or spot quizzes as employed by EH&S Department or area managers.

EC-43 Page 10 of 31

G. APPENDICIES:

Appendix A: Spill Supply Information & Locations

Appendix B: Incidental Chemical Spill Cleanup Procedures Appendix C: Incidental Biological Spill Cleanup Procedures Appendix D: Incidental Radiological Spill Cleanup Procedures

Appendix E: Carbon Monoxide Response Procedures Appendix F: ETO Alarm Procedures for East CPD Appendix G: Emergency Contact Information

Appendix H: Internal Emergency Coordinator Contact List

Vice President Sponsor: Walter Armstrong, Sr. VP Capital Facilities and

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Approved By:

☑ EOC Committee: 11/08/17
 W. Armstrong & K. Murray
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Original Date Approved: 6/98

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EC-43 Page 11 of 31

APPENDIX A to EC-43 -Spill Supply Information & Locations

Spill Supplies – maintained by BIDMC Environmental Health & Safety

PPE

Tyvek suits

Rubber boots

Gloves- nitrile, silver shield, pvc

Goggles

PVC apron

Face shield

Spill Clean Up Materials

Loose absorbent in bags

Acid neutralizer powder

Base neutralizer powder

Formaldehyde powder

Solvent absorbent

Absorbent pillows

Absorbent socks

Absorbent pads

Simple Green and other cleaning detergents

Equipment and containers

Large push broom

Small hand brush

Dust pan

Flat head shovel

High power fan (EVS East Campus ST-1, EVS West Campus Dana basement, Research North MAA)

Various size open top drums and buckets located in each MAA

Thick mil yellow "HAZMAT" bags

Testing Equipment

Four Gas Meter

Multi Gas Meter (includes ETO and formaldehyde)

IEQ Meter

Air-O-Cell

ppbRAE - Photo Ionizing Detector

Main Campus Spill Supply Locations*:

East Campus - Rose 0B04 & SL-0B03

West Campus - Farr 0BM3

Center for Life Science - Main Accumulation Area

Research North - Main Accumulation Area

Oil Spill kits at all areas storing more than 55 gallons of oil

* BIDMC Maintenance staff for all off-site clinics should maintain spill supplies as appropriate to handle incidental spills of the common hazardous materials used at each of those operations.

EC-43 Page 12 of 31

APPENDIX B to EC-43 – Incidental Chemical Spill Clean up Procedures

Before attempting to clean-up any hazardous material spill, user must evaluate the release to determine if spill is categorized as "incidental", as defined in Section A of Policy EC-43: <u>Hazardous Spill Response Program</u>. If user is unfamiliar with the hazards or does not have the appropriate training, PPE, and supplies necessary to clean the spill, Code Orange response should be activated.

Incidental chemical spills occur periodically in high chemical-use areas, such as laboratories. Staff in laboratories and other high-chemical use areas are expected to maintain spill kits in applicable work areas, with supplies for cleaning up small, incidental spills without the need for Code Orange response activation. Below are guidelines for clean-up of incidental chemical spills.

- Before handling any spilled materials, don all appropriate Personal Protective Equipment (PPE), such as lab coat, safety goggles, protective gloves; Ensure gloves selected for clean-up are appropriate for the specific chemicals released;
- Wearing appropriate PPE, stop chemical release by returning spilled containers to upright postion, placing leaking containers in containment, or otherwise eliminating source of chemical release:
- Contain spread of release with absorbent materials or berms;
- Notify surrounding personnel of spill and associated hazard(s);
- If spill involves acidic materials, neutralize with bicarbonate or similar basic powder for neutralization;
- If spill involves caustic materials, neutralize with citric acid or similar acidic powder for neutralization;

Note: with any corrosive neutralization, begin with moderate application and proceed with caution. Corrosive neutralization reaction can cause significant heat generation.

- Absorb liquid spill with paper towels, spill-pillow, sponge, or other appropriate absorbent materials.
- Sweep & scoop up solid spill materials with dust pan & brush, shovel, or other physical devices available:
- Contain spill materials in a sealed container or taped-up bag (do not use Biohazard bag for chemical waste) and label as hazardous chemical waste;
- Use paper towels with water and/or mild detergent to clean up residues from spill area (<u>be sure</u> that any detergents used pose no risk for hazardous reaction);
- Place labeled spill debris in Satellite Accumulation Area for pick-up by Environmental Health & Safety.

EC-43 Page 13 of 31

APPENDIX C to EC-43 - Incidental Biological Spill Cleanup Procedures

II. Spill Procedure:

The following procedures are recommended for the management of small spills of blood, body fluids, or other potentially infectious materials. If a large volume of a biohazardous material spills, concentrated infectious agent cultures, or if equipment (centrifuge/ biosafety cabinet/etc.) malfunctions while processing biohazardous materials that may create aerosol, this will require immediate assistance through the CODE ORANGE SPILL PROGRAM.

Key actions for all spills:

- Wear gloves and proper protective clothing. Heavyweight, puncture-resistant, utility gloves are recommended to be worn over disposable latex or nitrile gloves. If the spill contains broken glass or other objects, these should be removed and discarded without contact with the hands. Rigid sheets of cardboard used as a "pusher" and "receiver" may be used to handle such objects and should be discarded with the objects into an appropriate biohazard container. If the spill is large and/or there is a potential of contaminating the worker's shoes, water-impermeable shoe covers should be worn.
- Absorb the spill. Because most disinfectants are less active, or even ineffective in the presence of high concentrations of protein that are found in blood and serum, the bulk of the spilled liquid should be absorbed prior to disinfection. Absorb the spilled material with disposable absorbent material (e.g., paper towels, gauze pads, or tissue paper wipes). If the spill is large, granular absorbent material may be used to absorb the liquid. Absorbent granular material, such as an Isolyzer, containing a chemical that releases chlorine upon wetting is commercially available. The efficacy of such material for disinfection is not known and, therefore, should not be relied upon to disinfect a spill. After absorption of the liquid, all contaminated materials should be discarded as biological waste.
- **Disinfect the spill site** using an appropriate intermediate to high-level hospital disinfectant, such as household bleach. Flood the spill site or wipe down the spill site with disposable towels soaked in disinfectant to make the site "glistening wet."

NOTE: If bleach does not disinfect the material or is not appropriate to use, then you are required to use an EPA approved disinfectant. Ensure the proper contact time prior to disposal.

• Rinse the spill site with water to remove any noxious chemicals or odors. Dry the spill site to

EC-43 Page 14 of 31

prevent slipping.

• **Dispose** all disposable materials used to decontaminate the spill are placed into biological waste container. Handle the material in the same manner as other infectious waste. Handle sharps with appropriate tools (e.g. tweezers, tongs) and dispose of any sharps in a sharps container.

A. Small Spills

Typically a CODE ORANGE response will not be called for small spills and Environmental Health and Safety Staff will not be requested to respond. However, we are providing this information on best practices for handling these types of spills. The following procedures are recommended for the management of small spills of blood, body fluids, or other potentially infectious materials in the laboratory or in a biosafety cabinet. Follow the procedures outlined in the Research Emergency Procedures and Response Guidelines flipcharts for Biological or Blood Spill or the BIDMC Biosafety Manual.

- Put on protective clothing (laboratory coat, gloves, and, if indicated, face protection and shoe
 covers) and assemble clean-up materials (disinfectant, autoclavable container or bag, forceps, and
 paper towels). Preferably, a spill kit should be readily available.
- If the spill has occurred in a biosafety cabinet, keep the cabinet turned on.
- For a spill inside a BSC, bleach is not recommended because it will corrode the stainless steel. If bleach is the most appropriate disinfectant then it should be followed up with several rinses of distilled water. Soak paper towels or other absorbent with disinfectant appropriate to the agent in use and let soak for at least 20 minutes contact time. The work surface, the interior walls (not including the supply filter diffuser), and the interior surface of the window should be wiped with 70% ethanol or other disinfectant as determined by the PI to meet the requirements of the particular activity. The key is to cover any areas that could have come in contact with material especially as a splash of microdroplets.
- Clean approximately 1 to 2 feet of area around the spill including equipment, furniture, floor, or wall.
- Pick up any broken glass or sharps with tongs, tweezers, forceps, dustpan/brush or other tools. Discard broken glass or sharps in a sharps container.
- After the appropriate contact time, soak up the disinfectant and spill with paper towels, gauze, or other absorbent material.
- Remove all spilled materials and decontaminate the area again with an appropriate disinfectant
- Discard all clean-up materials as biohazardous waste in the double-lined biological waste box.
- If reusable lab coats are contaminated, they must be placed in a biohazardous waste bag and labeled as contaminated. Proper decontamination must be done before any protective equipment

EC-43 Page 15 of 31

such as lab coats can be washed and/or reused.

Wash hands and exposed skin areas thoroughly with soap and water.

B. Large spills:

The following procedures are recommended for a large volume biological spill in the laboratory area, in a BSC, or if equipment malfunctions while processing biological materials:

- Keep people out of the area to prevent spread of the contamination. Put up a warning sign.
- Remove any contaminated clothing and put it into a biohazard bag for decontamination later.
- Wash hands and exposed skin thoroughly with soap and water.

For major spills / spills of BL2+agents outside containment:

Same as described above, with the addition of the following:

- If necessary, pull the fire alarm to quickly evacuate the affected area and adjacent areas.
- In case of aerosolization risk, at least 30 minutes should be waited to allow aerosols to settle before reentering the affected area with appropriate PPE.
- A spill of BSL2+ agents in a room without negative air pressure may require taping the space under a door close, while wearing appropriate PPE with a respirator.
- Immediately notify EH&S Director and Biosafety Officer
- Assume role of Code Orange Safety Officer for hazardous materials spill response activity until relieved by the EH&S Director.
- Initiate evacuation of adjacent locations if necessary or help implement evacuation orders issued by public authorities.
 - NOTE: Additional procedures may be needed refer to <u>EOC -08 Emergency Management Plan</u> and EC-30 Evacuation Plan.
- Have the MASCO Communications Operator notify the Administrator-on-Call (AOC) and other operations and administrative personnel as needed. Assure the AOC. Legal and Public Affairs are informed as deemed necessary.
- Assure every effort has been taken to safely contain the spread of the spill if possible.
- Confirm potential hazards to public health, safety, or the environment.
- Biosafety Officer with notify Boston Public Health Commission, Communicable Disease Center and other local, state and federal agencies as required if the incident presents a public hazard as described. See agency listing, below in Section F.4.
- Oversee decontamination efforts. If necessary contact an emergency response service company specialized in biological decontamination.
- Monitor and support cleanup operations. Perform or arrange for any necessary biological testing. Confirm that the area is safe for normal activities to resume. Call "All Clear".

EC-43 Page 16 of 31

APPENDIX D to EC-43 - Incidental Radiological Spill Clean-up Procedures

a. DECONTAMINATION OF LOCALIZED, MINOR CONTAMINATION INCIDENTS

This following applies to contamination incidents that can be cleaned up by the user:

- Select cleaning tools to be used in the cleanup operations. Do not remove them from the room for unrestricted use without determining that they are free of radioactive contamination.
- Use protective clothing as appropriate (safety glasses, lab coats, shoe covers, gloves). Wear
 impervious protective gloves (preferably two pairs) to prevent contamination of hands. (Wash
 hands first if they are contaminated as a result of the accident.)
- Drop absorbent paper, cloth, or a commercial preparation such as Speedi-dri on wet contaminated areas to limit the spread of contamination. Potentially contaminated areas that are dry should also be covered with some protective material.
- Use a radiation monitor to locate the outer boundary of the contaminated area and mark it off. If personnel could inadvertently come in contact with the contamination, mark the boundary with "radioactive" warning tape.
- Cleaning agents normally used in the laboratory should be adequate. Use no more cleaning supplies than are needed to do the job. Proceed from the outermost edges of the contaminated area inward, reducing systematically the area that is contaminated.
- Put all contaminated objects, including cleaning supplies, into sealed bags or containers to prevent spread of contamination.
- Assign someone with a survey meter sensitive to the radionuclide spilled (or supplies for taking wipes if the spill is tritium) to observe the cleanup operations and to watch for the accidental spread of contamination.
- The removable contamination level should be brought down to those specified in Laboratory Survey Procedures handed out at Orientation. If you are uncertain, contact the Radiation Safety Office for confirmation.

b. DECONTAMINATION OF PERSONNEL

- Identify contaminated areas on the person with an appropriate survey method.
- If you are uncertain what procedure to follow, contact the Radiation Safety Office first (ext. 7-2510).
- Do not use decontamination methods that might spread localized material or increase penetration of the contaminant into the body (as by abrasion of the skin).
- Use the following procedures on intact skin:
 - Wet hands and apply detergent.
 - Work up a good lather; keep lather wet.
 - Work lather into contaminated area by rubbing gently for 2 to 3 minutes. Apply water frequently.
 - Rinse thoroughly with lukewarm water (limiting water to contaminated areas).
 - Repeat above procedures several times at intervals of five to ten minutes, gently scrubbing residual contaminated areas with a soft brush if necessary.
- If the radiation level is still above background, consult with the Radiation Safety Office as to the significance of the residual radioactivity and the need for more aggressive decontamination procedures.
 - NOTE: Radioactivity detected on the fingertips is often sharply reduced by clipping the nails. In stubborn cases, contamination may be reduced by wearing a rubber glove overnight, which induces sweating.
- Seek medical treatment for contamination in wounds, in the eyes, or in the mouth.
 Decontamination should be supervised by a physician but should also be initiated promptly.
 Judgment on the sequence of steps is important here. The following approach will generally be

EC-43 Page 17 of 31

appropriate:

Irrigate any wounds or other contaminated areas in difficult locations profusely with lukewarm water, and clean with a swab. Follow with soap or detergent and water (and gentle scrubbing with a soft brush if needed and feasible). Avoid the use of organic solvents, which may increase skin penetration by contaminant.

D.2.b.i. DISRUPTION OF A SEALED SOURCE

If a disruption of a sealed source occurs, the following measures should be taken immediately.

- No immediate attempt should be made to clean up the spill.
- All windows should be closed; fans and air conditioners should be shut off. The Engineering Department shall be notified immediately.
- Everyone should leave the room.
- All doors shall be closed and locked.
- The RSO shall be notified immediately.
- The spread of radioactive contamination shall be diminished by restricting the movements of potentially contaminated persons to a local zone just outside the spill area until the extent of body and clothing contamination is ascertained.
- If powdered or gaseous radioactive material is involved, the door and all other openings leading into the room should be sealed with wide masking tape or other adhesive tape.
- Every person who might have been contaminated should be monitored for radioactivity, and, if contaminated, should remove his/her clothing and be decontaminated.
- If no means are available for monitoring, it should be assumed that the person is contaminated.

EC-43 Page 18 of 31

Appendix E to EC-43: Carbon Monoxide Response Procedures (BIDMC Main Campus Only)

Carbon Monoxide detectors are located in the following locations:

East Kitchen- Service Building 1st floor and Stoneman Building 2nd floor West Kitchen- Farr Basement Clinical Center West Emergency Generator- CCW 8th floor Farr Building Emergency Generator- Farr Subbasement

All CO alarms have an audio and visual component local to the alarm that is separate and different from the fire alarm audio-visuals. The alarms are tied into the fire alarm system for each of the buildings and report back to the Public Safety Office remote panels.

When a CO alarm is triggered for any amount of time a code orange must be called to the **MASCO emergency code line (617-632-1212)**. State that the nature of the issue is Carbon Monoxide or CO in short. Staff has been trained to recognize these alarms and has training on the proper response procedures for their areas.

Public Safety Responsibilities

Dispatch- Recognize incoming CO alarms and responds quickly. A code orange should be called for any alarm condition CO event. Officers should be dispatched to the area but directed to stay outside of the immediate area if the alarms are still active. The dispatcher should not immediately call BFD but should wait for Environmental Health and Safety to determine if this is necessary. The dispatcher should prompt the officers to report back frequent updates so that EHS can make an informed decision on whether to contact BFD based on the dispatcher's information. If EHS is off-site they will be in close contact with the dispatcher and be looking for information such as whether the alarms have reset themselves or if any staff are exhibiting symptoms of exposure. Notify Maintenace via the radio to respond. **Responding Officers**- Respond to the area immediately outside of the alarm, leave a door between you and the alarms. If the alarms have reset themselves you may enter the area to investigate. Update the dispatcher with any information such as staff with symptoms or if the alarms have reset themselves. Any staff that is symptomatic should be directed to EOHS during normal business hours or to the ED for evaluation. If serious or life threatening symptoms presented which requires immediate medical intervention, a First Aid/Medical Emergency should be activated by calling 2-1212. If the alarms are still active when the officers arrive they will secure the area and only allow EHS or BFD to enter while alarms are active. An officer will meet BFD to guide them to the event if it is determined BFD needs to be called to the scene.

Environmental Health and Safety Responsibilities

If on site, respond to the event location with the 4 gas meter capable of measuring CO concentration. If not on site check in with Public Safety dispatch and let them

EC-43 Page 19 of 31

know ETA if needed. Collect any relevant information from the dispatcher and prompt them to collect more information if needed.

Use the 4 gas meter to investigate the alarm and determine if it is a true CO event. If the alarms have reset themselves the 4 gas meter can be used to help trouble shoot issues with specific equipment.

EHS will determine if BFD needs to be called to the scene based if anyone is exhibiting symptoms or if the alarms are not resetting themselves with a short time (~5 minutes). EHS will work with PS dispatch to have BFD called to respond to the incident if needed. As with all other code oranges, EHS will be the group responsible for calling the all clear.

Maintenance Responsibilities

Call a Code orange for any alarms triggered while generators are running. Respond to all CO alarms, notification will come via the radio from PS. Stay outside of the area if the alarms are still triggered; leave a door between you and the alarms. If the alarms have reset themselves you may enter the space and investigate the cause of the alarm. If BFD is called they may need maintenance assistance such as HVAC control and gas shut-off. Maintenace will maintain and service the alarms as needed through the fire alarm vendor. Maintenance will keep the service and repair records.

Program Evaluation

EHS will run a drill at least annually to test response by all departments involved. The drill records will be kept by EHS and a copy will be given to the manager of the area that was drilled.

Training

EHS- will complete CO response training upon hire and annually thereafter Kitchen Staff- will complete CO response training upon hire and annually thereafter Maintenance- will complete CO response training upon hire and annually thereafter Public Safety- will complete CO response training upon hire and annually thereafter EVS- will complete CO response training upon hire

EC-43 Page 20 of 31

Appendix F to EC-43 - CPD ETO ALARM Procedures

ETO Sensor & Alarm (located in ETO Room) – Will sound a high pitched alarm in room and GREEN light turns to RED. Set to activate at ≥20 ppm.

<u>Sensor alarm also triggers Remote Alarms located on main Column in CPD and in Sterile Stores side (Blue Box – Green light normal and RED Light when alarm Activated)</u>. Alarms will stop when ETO level drops below 20 ppm.

Occupants must do the following regardless if alarm continues to sound or stops:

- **❖** Immediately Evacuate ETO Room and close doors.
 - **❖** Activate CODE ORANGE by calling 2-1212.
- Evacuate all areas of CPD to Hall (Prep & Pack, Sterile Stores and Decontamination Areas)
 - Do not reenter any area until ALL Clear issued by Environmental Health and Safety Officer

Fan Alarm to control CPD Positive and Negative Air

Flow Only (located on right side of column in Prep & Pack area)

<u>Blue Strobe Flash and Alarm</u> will activate if there is a negative or positive air pressure failure. Alarm will continuously sound until air flow is restored. Blue strobe flash can be seen from hallway outside main entrance to CPD.

- **❖** Notify Maintenance by calling SRC @ 5-9700.
- **Alert Maintenance if system is still running.**
- **❖** No repair to be initiated until ETO system is completely off.
 - Do Not Run any ETO machine cycles until exhaust failure fixed.
 - Activate Code Orange and evacuate area ONLY if ETO Sensor & Alarms are also activated.

EC-43 Page 21 of 31

EC-43 Appendix G - External Emergency Contact/Function List

8/14

Agency	Address	Contact #	Function	Reporting and Response
			Environmental	
Massachusetts Department of Environmental Protection (MassDEP)	Northeast Regional Office 1 Winter Street Boston, MA 02108	888-304-1133	Ensures clean air and water, the safe management of toxics and hazards, the recycling of solid and hazardous wastes, the timely cleanup of hazardous waste sites and spills, and the preservation of wetlands and coastal resources.	
Environmental Protection Agency (EPA) region 1 (MA, NH, VT, ME, CT and RI)	One Congress Street, Suite 1100 Boston, MA 02114	888-372-7341	Protects human health and to safeguard the natural environment - air, water and land -upon which life depends.	
Triumvirate Environmental, Inc. (primary responder)	200 Inner Belt Road Somervill e, MA 02143	800-966-9282	Provides environmental consulting and hazardous material spill clean-up.	Chemical Spill - all reportable quantity environmental spills (oil, chemical) must be reported to the National Response Center, MassDEP and EPA region 1. Response to be utilized primarily through Triumvirate Environmental or Veolia Environmental Services as back-up resource.

EC-43 Page 22 of 31

Veolia Environmental Services LLC (back-up responder)	398 Cedar Hill Street Marlboro, MA 01752	508-804-4800 800-354-2382 (after hours)	Provides hazardous material spill clean-up.	Air Emissions - excessive air emissions (>permit levels) must be reported to the MassDEP.
National Response Center	c/o United States Coast Guard (CG- 3RPF-2) - Room 2111-B 2100 2nd Street, SW Washingt on, DC 20593- 0001	617-223-7265	Acts as sole national point of contact for reporting all oil, chemical, radiological, biological and etiological discharges into the environment anywhere in the United States and its territories. NRC is also the contact for any activity related to terrorism (bombs).	Waste Water Discharges - excessive waste water discharges (>permit levels) must be reported to the MWRA. Storm Water Discharges - Excessive storm-water/ground-water discharges (over national pollutant discharge elimination system or NPDES permit) must be reported to EPA region 1 and MassDEP.
Massachusetts Water Resources Authority (MWRA)	2 Griffin Way Chelsea, MA 02150	617-242-6000 (main line – Keary Simmerman)	Provides wholesale water and sewer services to 2.5 million people and more than 5,500 large industrial users in 61 metropolitan Boston communities.	Patient Decontamination Event - If during a patient decontamination event water must be discharged to sewer, EH&S dept. will notify the MWRA, MassDEP and EPA region 1. The contaminated bladder water will be handled by Triumvirate Environmental (waste to be determined by Triumvirate as regulated waste). If Triumvirate Environmental cannot handle then Veolia Environmental Services will handle.

EC-43 Page 23 of 31

	Occupational Health and Safety						
Massachusetts Labor and Workforce Development (Division of Occupational Safety)	19 Staniford Street, 2nd Floor Boston, MA 02114	617-626-6975	Manages programs in lead, asbestos, indoor air quality, minimum wage, prevailing wage, mine safety and others.	Employee Incidents - any employee death or inpatient hospitalization of 3 or more employees must be reported to OSHA within 8 hours of the incident occurring. This reporting will be done in conjunction with Employee Occupational Health Services department.			
Occupational Safety and Health Administration (OSHA) region 1 (MA, NH, VT, ME, CT and RI)	JFK Federal Building, Room E340 Boston, MA 02203	617-565-9860	Protects worker health and safety by regulating worker standards. OSHA and its state partners have approximately 2100 inspectors, plus complaint discrimination investigators, engineers, physicians, educators, standards writers, and other technical and support personnel spread over more than 200 offices throughout the country. This staff establishes protective standards, enforces those standards, and reaches out to employers and employees through technical assistance and consultation programs.	обранитель.			
National Institute for Occupational Safety and Health (NIOSH)	P.O. Box 87040 South Dartmouth , MA 02748	508-997-6126	Conducts research program for the Services sector is to eliminate occupational diseases, injuries, and fatalities among persons working in these industries through a focused program of research and prevention.				

EC-43 Page 24 of 31

Fire and Rescue	58	617-689-3098	Conducts scheduled and non-scheduled
Training, Inc.	Middlesex	(office)	(emergency) confined space permit entry rescue
	Street	617-543-0333	operations.
	Quincy,	(cell)	
	MA 02170		
Environmental	117 Fourth	781-247-4299	Provides consulting in industrial hygiene, safety,
Health and	Street	(office)	environmental, and biosafety regulations/concerns.
Engineering	Needham,		
(EH&E)	MA 02494		
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B&V Testing	222	508-851-9081	Biological safety services
	Calvary		
	Street Waltham,		
	MA 01752		
Air Systems Inc.	940	408-280-1677	Biological safety services
All Systems inc.	Remillard		Biological safety services
	Ct.	(24/7) 800-829-1666	
		000-029-1000	
	San Jose,		
	CA 95122		

EC-43 Page 25 of 31

			Public Health and Safety	
Boston Public Health Commission	1010 Massachu setts Ave, 2nd floor Boston, MA 02218	617-534-2679 617-534-5965	Protects, preserves, and promotes the health and wellbeing of all Boston residents, particularly those who are most vulnerable. The Commission's more than 40 programs are grouped into six bureaus: Child, Adolescent & Family Health; Community Health Initiatives; Homeless Services; Infectious Disease; Addictions Prevention, Treatment & Recovery Support Services; and Emergency Medical Services. It also provides guidance in biological safety concerns.	Employee Incidents - any incident regarding exposure from a BSL3 lab requires reporting to Boston Public Health Commission. This will be done in conjunction with Employee Occupational Health Services. Other incidents involving poison, infectious diseases will be handled by Employee Occupational Health Services department. These incidents may involve required reporting to OSHA (see above). In this case EH&S dept. will work with
Massachusetts Department of Public Health	250 Washingto n St., 6th floor Boston, MA 02108	617-624-5632	Serve all the people in the Commonwealth, particularly the under served, and to promote healthy people, healthy families, healthy communities and healthy environments through compassionate care, education and prevention. Conducts research and evaluation; and provides health information and statistics.	Employee Occupational Health Services department to ensure proper reporting.
Massachusetts and Rhode Island Poison Center	300 Longwood Avenue Boston, MA 02115	800-222-1222	Provides consultation concerning the medical management of human exposure to drugs, chemicals, and other toxins.	

EC-43 Page 26 of 31

Agency for Toxic Substances and Disease Registry region 1 (MA, NH, VT, ME, CT and RI) (division of the Centers for Disease Control and Prevention)	1 Congress Street Suite 1100 (HBT) Boston, MA 02114	617-918-1495 770-488-7100 (24 hour hazardous response line)	Serves the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and diseases related to toxic substances. Performs specific functions concerning the effects on public health of hazardous substances in the environment. Also provides hazardous materials response.	
Massachusetts Emergency Management Agency (State Emergency Response Commission)	400 Worcester Road Framingha m, MA 01702	508-820-2010	Responsible for coordinating federal, state, local, voluntary and private resources during emergencies and disasters in the Commonwealth of Massachusetts. MEMA provides leadership to: develop plans for effective response to all hazards, disasters or threats; train emergency personnel to protect the public; provide information to the citizenry; and assist individuals, families, businesses and communities to mitigate against, prepare for, and respond to and recover from emergencies, both natural and man made.	

EC-43 Page 27 of 31

	Police and Fire Departments					
Boston Police Department (Bomb Squad and HazMat team - a division of Special Operations)	400 Frontage Road Boston, MA 02119	911 (emergencies) 617-343-4245 (business)	Responds to bomb and hazardous materials emergencies. They can be equipped with full level A protection. They investigate unknown, chemical, biological and radiological materials. They take samples and send to state lab. in Jamaica Plain. They do not abate the hazard.	Hazardous Materials Response - If any incident (spill, threat, etc.) of unknown, chemical, biological or radiological materials cannot be handled internally by the EH&S department, Radiation Safety department (for radiological materials), Triumvirate Environmental or Veolia Environmental Services then the Boston Fire Department - Special Operations HazMat team shall be notified for an investigation, sampling and hazard abatement/removal. The BFD HazMat team takes control in a HazMat incident.		
Local Police Department		911	Contact depending on location of site.			

EC-43 Page 28 of 31

Boston Fire Department (Special Operations HazMat team)	115 Southampt on Street Boston, MA 02118	617-343-2116	Responds to hazardous materials emergencies. They can be equipped with full level A protection. They investigate unknown, chemical, biological and radiological materials. They take samples and send to state laboratory in Jamaica Plain for immediate turn-around. After analysis they can abate or remove the hazard. The BFD HazMat team takes control at the incident site. They can provide photo-ionization detectors for volatile organic compounds detection; thermal radiation meters for radiological detection; an APC meter for chemical warfare detection (chemicals/nerve agents); an ABD 2000 meter for chemical and nerve agents' detection; and a Canberra Inspection 1000 meter for identification of radiological isotopes.	
Local Fire Department		911	Contact depending on location of site.	
Boston Police Department District 18	Special Operations Division 1249 Hyde Park Avenue	911 (emergencies) 617-343-5651 (business)	Responds to other non-hazardous materials type emergencies - SWAT, canine division.	
Boston Fire Department District 5	560 Huntington Avenue Boston, MA 02115	911 (emergencies) 617-536-1500 (business)	Responds to local fires. May be contacted for Carbon Monoxide (CO) alarm.	

EC-43 Page 29 of 31

Boston Fire Department (Laboratory Inspection Division)	115 Southampt on Street Boston, MA 02118	617-719-8768 (Captain Steve McGillis)	Provides laboratory inspections services and guidance.	
Boston Fire Department (Fire Prevention Division)	1010 Massachus etts Avenue Boston, MA 02118	617-343-3650 (Lt. Bob Hayes)	Directs fire prevention activities. It handles the more technical fire prevention problems, maintains appropriate records, grants permits, investigates the causes of fires, and conducts public education programs. All commercial or multiple-dwelling buildings are inspected at regular intervals, and orders are issued for the correction of violations of fire laws. If necessary, court action is taken to compel compliance.	
Massachusetts State Police Department (hazardous materials response program - district 2)	1 Ashburton Place Suite 2133 Boston, MA 02108	978-567-3150	Provides specialized response of personnel and equipment for hazardous materials response purposes.	

EC-43 Page 30 of 31

EC-43 Appendi	x H - Internal Emergency Coord	dinator Contact List (Rev. 3/17)	
Chemical/Biological Materials Incidents			_
EH&S On-Call Pager: 33137			-
Plan Manager	Job Function	Home Address	- Contact #
		418 Pond St.	Office # 617-632-0613
Alana Dale	Senior Safety Officer Chemical Hygiene Officer	Weymouth, MA 02188	Home # 617-594-8985 (cell)
			Pager # 93204
Primary Emergency Coordinator			
		23 Revere St	Office # 617-632-0612
Robert Seeley	Safety Officer Chemical Hygiene Officer	Malden, MA 02148	Home # 617-733-0124 (cell)
		·	Pager # 31373
Secondary Emergency Coordinator			
		32 Wren St	Office # 617-632-0610
Gary Schweon	Director, EHS	West Roxbury, MA 02132	Home # (cell) 617-817- 2939
		•	Pager # 39118
Radioactive Materials Incidents			
Radiation On-Call Pager: 91969			
Emergency Coordinator	Job Function	Home Address	Contact #
		41 Park Street	Office # 617-667-2038
Joseph Ring	Radiation Safety Director	Green Harbor, MA 02041	Home # (cell) 617-620- 1842
			Pager # 30602

EC-43 Page 31 of 31