Annex F:
Chemical, Biological, Radiological, & Nuclear (CBRN):
Decontamination Plan

This plan is designed for response to a Chemical, Biological, Radiological or Nuclear (CBRN) event in which patients are coming from the scene to the hospital. It is not applicable in situations where Georgia Health Sciences Health System is the source of the CBRN release. For such situations please refer to the Safety Policies on Hazardous Spills.
I. Introduction

Purpose

Hazardous Materials are used in a wide variety of applications and processes. Everyday, somewhere in the United States a Hazardous Substance is accidentally or intentionally introduced into the environment in an uncontrolled manner. These materials compose a variety of components which include Chemical, Biological, Radioactive, Nuclear, and Explosives (CBRNE).

As a result, victims who have been contaminated with such an agent pose a hazard to the safety and well being of the patients, staff, and visitors of Georgia Health Sciences Health System. Therefore, special precautions must occur in order to mitigate any cross contamination. This plan identifies the process by which each of the components are identified and mitigated through decontamination of personnel and equipment, when applicable.

First Receivers

Healthcare workers at a hospital receiving contaminated victims for treatment may be termed first receivers (Koenig, 2003). This group is a subset of first responders (e.g., firefighters, law enforcement, HAZMAT teams, and ambulance service personnel). However, most first responders typically act at the site of an incident (i.e., the location at which the primary release occurred). In contrast, inherent to the definition of first receivers, is an assumption that the hospital is not itself the primary incident site, but rather is remote from the location where the hazardous substance release occurred. Thus, the possible exposure of first receivers is limited to the quantity of substance arriving at the hospital as a contaminant on victims and their clothing or personal effects (Horton et al., 2003).

Scope

This plan applies to all Georgia Health Sciences Health System employees, members of the medical staff and house staff, students, agency personnel, volunteers, and contracted vendors. All persons mentioned above will be knowledgeable of this plan and their responsibilities under the plan.
II. Situation & Assumptions

Situation

Through manmade or naturally occurring events, an unspecified amount of a hazardous material escapes containment. As a result, through gas, liquid, or solid a person(s) is/are contaminated with the substance. The substance poses a risk to the lives of all who come in contact with it. Contaminated persons self transport themselves or others to the hospital seeking medical care.

Assumptions

- An Incident occurs involving contamination of patient(s) by a chemical, biological, radiological, or nuclear source which requires decontamination before patient enters the facility.
- The Hospital is not the release site.
- Patients arriving from the scene by ambulance will be decontaminated on scene by local HAZ MAT units prior to transport.
- A percentage of patients will self-transport to the Hospital and bypass on scene decontamination.
- Decontamination personnel are trained and certifications are current.
- All equipment is ready, usable, and operational.
- Procedures for Chemical Decontamination differ from that of Radiological Decontamination (see Appendix K- Radiological Decontamination).
- There are sufficient trained staff to run the decontamination facility at full capacity.
- The contaminant is known and decontamination procedures can progress without delay.
- A consistent water supply is available to the facility (low pressure/high volume water), estimated at 60-90 pounds per square inch (PSI) of pressure.
- The contaminant’s consistency is not persistent or overly viscous, requiring additional time and effort to perform the decontamination procedure.

III. Preparedness

Equipment

All PAPR’s will be inspected monthly by the Safety & Security Department well as before and after each use by the operator. Inspection records will be maintained by the Emergency Management Department. Decontamination equipment will be kept in two locations:

A. Emergency Department – a cart containing 5 PAPR’s, Chemicals Suits (Medium – 2XL), Chemical Gloves, Nitrile Gloves, Chemical Boots, Chem Tape, Batteries, Filters, and Flow
meters will be maintained. The cart will be located in the CMC ER: X-ray room. There will be enough supplies to outfit 5 people at a time.

B. Decontamination Team – All equipment for all members of the Decontamination Team will be maintained in the Harper St Parking Deck. At the start of an event / exercise, each member of the Decontamination Team who has successfully completed the NDLS-D course, is current on their training requirements, and successfully completed the OHS pre event medical screening will be issued a complete Decontamination kit to include 1 PAPR, 1 Chemical Suits, Sized Chemical Boots, 1 Lithium Battery, 3 Filters, 1 Roll of Chem-Tape, 1 pair sized chemical gloves, Nitrile gloves for use in said event / exercise. At the conclusion of the event, the operator will inspect and clean the equipment in accordance with set standards and return the equipment to the point of issue.

C. Additional Supplies – Georgia Health Sciences Health System will maintain enough supplies to treat 250 patients during a Mass Decontamination Incident.

Training & Certification

All personnel (paid or volunteer) who perform decontamination activities are required to attend a 24 hour training course on hospital decontamination / First Receiver techniques and attend 12 hours of annual refresher training every year after the initial year. This is in compliance with regulations and standard set forth in OSHA 29 CFR 1910. Any person who fails to complete their annual training requirement per calendar year will retake the 24 hour initial training before being allowed to perform decon operations.

In order to meet the training requirements listed above, all members of the Georgia Health Sciences Health System Decontamination Team or Emergency Department Decontamination Personnel must be certified in the National Disaster Life Support – Decon Course (NDLS-D). Personnel who possess HAZWOPER certification may present that in lieu of NDLS-D certification.

Bi-Monthly training will be offered by Georgia Health Sciences Health System Emergency Management which if attended will satisfy the annual training requirements. Team members are responsible to insure annual training requirements are met.

All Decon Personnel must demonstrate competency in all aspects of the Decontamination process on an annual basis in order to comply with OSHA 1910.120(q)(8)(i).
Exercises

In accordance with the Georgia Health Sciences Health System Hazard Vulnerability Analysis, Emergency Operations Plan, HSEEP and the Georgia Health Sciences Health System multi-year Exercise Plan, a Full-Scale Decontamination Exercise will be conducted no less than once every three years. In order to maintain currency in the suits, decontamination personnel will conduct a minimum of 2 drills and / or functional exercises per year which involve donning and doffing the chemical suits as well as the entire decontamination process.

IV. Concept of Operations (Response)

Triggers

The Decontamination Plan may be activated when:

1. The presentation of a patient(s) to the Emergency Department who is/are believed or known to have been exposed / contaminates with a hazardous or potentially hazardous substance.
2. There is notification of the Emergency Department by a credible source, (i.e. 911 Operator, Police, Fire, Haz Mat, EMS, EMA, etc) or verified source that patient(s) who is/are believed or known to be exposed/contaminated with a hazardous substance is/are enroute to the Emergency Department.
3. A request from a Region G hospital or agency has been made for the opening of the Georgia Health Sciences Health System Community Decon Center.

Notification

Any person in the Code Triage notification chain can initiate activation of the Decontamination Plan.

1. The Decontamination Team is notified by Facility Services Dispatch.
   a. Chemical Information (if known) will be provided to Facility Services. This information should include:
      1. Number, or estimated number of patients
      2. Identification of the contaminant (or placard number, chemical ID number, etc)
      3. Estimated time of arrival.

Substance Identification

Identification of a potentially hazardous substance is paramount in building the most efficient response. Several resources are available to identify a potentially hazardous substance to include:
A. NIOSH Handbook presents key information and data in abbreviated tabular form for 677 chemicals or substance groupings (e.g., manganese compounds, tellurium compounds, inorganic tin compounds, etc.) that are found in the work environment.

B. Material Safety Data Sheets (MSDS) are prepared by the manufacturer of a product for the purpose of providing information on the safe use, handling, and potential hazards of a product. Information provided may include health effects, patient care information, and PPE requirements.

C. The Emergency Response Guidebook (ERG) can help ED staff identify a chemical involved in an incident. Although the book does not contain detailed patient care information, the book will help identify the chemicals of concern. Once the chemical is identified, other resources can be used to gather detailed patient care information.

D. TOXNET (www.toxnet.nlm.nih.gov) is a cluster of databases covering toxicology, hazardous chemicals, environmental health and related areas. It is managed by the Toxicology and Environmental Health Information Program (TEHIP). TOXNET is free to use.

E. The Agency for Toxic Substance and Disease Registry (ATSDR). http://www.atstd.cdc.gov/ ATSDR is directed by congressional mandate to perform specific functions concerning the effect on public health of hazardous substances in the environment. These functions include public health assessments of waste sites, health consultations concerning specific hazardous substances, health surveillance and registries, response to emergency releases of hazardous substances, applied research in support of public health assessments, information development and dissemination, and education and training concerning hazardous substances.

F. The Radiation Emergency Assistance Center / Training Site (REAC/TS) http://orise.orau.gov/reacts/ As part of its mission to strengthen medical response to radiation emergencies, REAC/TS staff are available 24 hours a day/seven days a week to deploy and provide emergency medical consultation for incidents involving radiation anywhere in the world.

G. Poison Control - 1.800.222.1222 – Provides real time data and/or education of healthcare professionals in the areas of clinical toxicology, poisoning epidemiology, poisoning prevention, toxicological diagnosis and care.

**Decontamination Team (Decon Team) & Emergency Room Decon Personnel**

A. Decon Personnel Selection Process:

1. Team members must be employees of Georgia Health Sciences Health System who are in good standing (no current probationary status or pending disciplinary actions).
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2. Interested staff may contact the Emergency Management Specialist.

3. Every attempt will be made to maintain a balance of male and female team members and to limit the number of members selected from each department.

4. The Director of Safety and / or the Emergency Management Specialist, with input from Human Resources, is responsible for selecting and removing team members.

5. Interested employees must discuss with their supervisors and obtain written approval to join the Decon Team before acceptance will occur.

B. Membership Requirements:

1. All potential candidates must pass a medical screening administered by Occupational Health Services (OHS).

2. Team members must be on-call approximately one week per month and able to be at Georgia Health Sciences Health System within 30 minutes of being called.

3. Attend all meetings, training and exercises unless pre-approved by the Director of Safety or Emergency Management Specialist. Training Sessions are bi-monthly and have a 2 hour time duration. Additional training opportunities are presented throughout the year which include newsletters, independent study, and 1 hour training periods.

4. All members must possess First Receiver certification (or approved equivalent) and be current on all annual training requirements.

5. Members must be able to physically perform decon duties (to include but not limited to lifting 75 pounds, prolonged standing, running, and deep knee bends) while working in Level C hazardous material suits and PAPRs.

Lockdown

The purpose of any decontamination procedure is two fold. While insuring the patient does not incur further injury, decontamination also prevent cross contamination of the hospital, staff, employees, patients and visitors. Therefore, it is paramount that the facility be secured from entry by persons who have been contaminated as quickly as possible. The entry of one contaminated person into the facility will compromise and endanger all occupants and operations. Such actions could lead to temporary closure and / or evacuation.

Early detection and identification of possible contaminated patients is the only way to insure rapid lockdown of the facility. Upon Notification of a Decon type event, Security will ensure complete lockdown.
of all entry doors. Lockdown may be performed manually, electronically, or by any means deemed appropriate by the Security Supervisor.

**Decontamination Process**

**A. Personal Protective Equipment (PPE):**

All persons working within the Hospital Decontamination Zone (aka Warm Zone) will be trained in the use and operation of and will wear the following:

- Powered air-purifying respirator (PAPR) that provides a protection factor of 1,000. The respirator must be NIOSH-approved.
- Combination 99.97% high-efficiency particulate air (HEPA)/organic vapor/acid gas respirator cartridges (also NIOSH-approved).
- Double layer protective gloves.
- Chemical resistant suit.
- Head covering and eye/face protection (if not part of the respirator).
- Chemical-protective boots.
- Suit openings sealed with chemical resistant tape.

All person(s) working in the Hospital Post-decontamination Zone (aka cold zone) will be trained in the use and operation of and will wear the following:

- Normal work clothes and PPE, as necessary, for infection control purposes (e.g., gloves, gown, appropriate respirator).

**B. Set Up - ER Decon Site (1 – 20 patients)**
Staffing

Staffing considerations will vary from a minimum of 2 people in Level C PPE to up to 5 people. The absolute minimum is 2 fully suited and trained personnel to operate this system. *At no time will a person enter the decon area without a buddy / partner to assist.*

The number of personnel assigned to the ER Decon area will be left to the discretion of the charge nurse. Guidelines for decision making are as follows:

(Job Action Sheets Located in Appendix C)

1 – 2 ambulatory patients or 1 non ambulatory – 2 Level C, 1 Level D

2 Level C will escort patient through stations 1-3 and hand off to Level D at station 4

3 – 10 Ambulatory or 2 or more non ambulatory – 4 Level C, 2 Level D

1 Level C Station 1, 2 Level C station 2, 1 Level C station 3, 2 Level D Station 4
> 11 Ambulatory or > 3 non Ambulatory – 5 Level C, 3 Level D

  1 Level C Floater, 1 Level C Station 1, 2 Level C station 2, 1 Level C station 3, 3 Level D Station 4

C. Community Decon Center (up to 120 patients per hour)

Note: Team Leaders will wear Blue Suits. Non Team Leaders will wear Yellow Suits.
1. Initial Triage Conducted. Patients sorted by gender and ambulatory status
2. Patient enters appropriate lane. Removes Clothing
3. 3-5 minute shower w/ soap and water.
4. Patient Dries Off, Covers up. If indicated Rad Test or PH test conducted. If Positive return patient to station 3
5. Secondary Triage – Determine injuries and receiving facility
6. Patient moves to facility
7. Command Center maintain communication with ICC & ECC and manages the decon site.
D. Personal Belongings

1. Decon Team

Before any member of the Decon Team suits up, he or she will secure all personal belongings at a location of their choosing. Any personal belongings taken into the warm zone will be subject to the same procedures taken for victim personal belongings and may result in the confiscation and destruction of property without reimbursement.

E. Water Capture

Both the ER Decon area and the Community Decon area are equipped with fixed drainage systems to capture contaminated water. Due to the size of these tanks and the time it may take for a Hazardous Waste vendor to respond, at the start of any decon event, the Liaison Officer (or appointee) will contact the vendor to remove contaminated water. It is possible that decon incidents time lines will exceed water containment.

   ER Decon area can hold 1,000 gallons contaminated water.
   Community Decon Center can hold an estimated 5,000 gallons of water.

Do not assume these tanks were empty at the start of the event.

Facility Services will need to monitor the water levels during the event.

Operational Periods

Unlike other environments, operational periods for personnel suited is encapsulating chemical barrier suits and PAPRs or SCBA’s is dependent on temperature, relative humidity at the decon site and the general health of the operator. Operational periods are defined as the period from which the suit is sealed until that seal is broken. Under no circumstance at any time should the operational period exceed 60 minutes.

The table below provides safe working times by temperature / relative humidity. The table assumes the operator is in good health and has been cleared by the Decon Medical Officer (DMO). Only the DMO can certify health status of the operator.

The DMO has final authority to determine Heat Class and operational periods.
Based on Level C PPE with an encapsulating Suit & PAPR

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Heat Class

Adopted from the recommendations of the American Conference of Governmental Industrial Hygenist, the National Fire Protection Agency, and the Canadian Occupational Health Services.

<table>
<thead>
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<td>Max suit time 1 hours</td>
<td>10 minutes</td>
<td>6</td>
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</table>

Revised: 10/06/2011

13
Regional Assistance
If one of the partnering medical facilities (Doctor’s Hospital of Augusta, Trinity, University Hospital, or VA or Augusta) feels they can not adequately decontaminate their patient load, they may request, per signed MOU, that Georgia Health Sciences Health System open the Community Decontamination Center (CDC). In this scenario, the Georgia Health Sciences Health System Decon Team would follow the same procedures for Mass Decontamination outlined above with the following additions:

1. The Decon Team may request augmenting members from the community hospitals.
2. In addition to the self transported patient, patients may be directed / transported from one of the 4 hospitals to the CDC.
3. Secondary Triage at the CDC will determine what facility the patient returns to based on injuries / illness.

Anytime the Community Decon Center is opened, the ICC will request additional personnel and equipment from neighboring hospitals using established ESF 8 communication procedures.

Source brought to the Facility
There have been recorded cases across the country in which a school bus or multi passenger vehicle contained the source of chemical release and was brought to the hospital ER entrance. This poses additional risk to the hospital as the Hot Zone is now on hospital property. Actions will depend on the type and amount of the substance. Hot Zone environments require Level A PPE to be used by certified Hazardous Material Technicians. Georgia Health Sciences Health System Decon Teams are not trained nor equipped for this level of response.

In all cases where the source or the release is brought to the hospital:

1. Dial 9-1-1.
2. Initiate Lockdown Procedures
3. Shut Down Air Handling Systems
4. No hospital personnel should enter the vehicle.
5. Liaison Officer will make contact with Responding Fire Department Scene Commander.
6. All Personnel should shelter in place. *
7. Establish containment areas at all entrances within 300 meters of source.
*Activation of Code Triage or Code Orange should be discouraged until Fire Department contains the source. Any action which would force personnel to move between buildings may endanger their lives.

Radioactive / Nuclear Emergencies – The Georgia Health Sciences University Radiation Safety Office has signed an MOU with Georgia Health Sciences Health System to provide all radiation related emergency responses. See the Georgia Health Sciences University Radiological Emergency Response Plan maintained by the Georgia Health Sciences University Radiation Safety Office for more information.

V. Recovery

Decon Site Clean Up

Upon notification from the ICC, the Decon Team will begin shutting down the site. All operators currently in the warm zone will Doff their equipment in accordance with established protocols (see Appendix D). All suits, gloves, and any disposable equipment with be double bagged and placed in a 55 gallon steel drum for Hazardous Waste Disposal. All PAPRs (used during operations) and boots as well as any non disposable equipment will be set aside for third party remediation by a licensed Hazardous Material Clean Up Vendor. In addition, the water capture tanks will need to be emptied by said vendor. The Decon Site will be closed and considered non operational until the appropriate third party vendor completes clean up and restores durable equipment.

Decon Personnel

Following the hotwash, all decon personnel will attend a Critical Incident Stress Debrief to be facilitated by personnel from the Department of Organizational Effectiveness – Human Resources.

Reporting

The Decon Site Commander will collect all Operational Logs from Team Leaders, Secondary triage personnel, and the DMO. These reports will be compiled with all operational logs maintained by the Decon Site Commander during the incident and filed with the ICC.

Re-Supply
An inventory of all supplies used will be logged by the Decon Site Commander and the Emergency Management Department. All consumed supplies must be replaced before the site can be used again. The ICC / Liaison Officer will notify Region G, GHA, and all appropriate partners that the Decon Site has shut down and the expected down time before clean up and re-supply can be executed.

VI. Mitigation

Hotwash
Immediately following all exercises and real activations, the Decon Team, ICC Staff, and Evaluators (in cases of exercises) will assemble to provide feedback on all actions that went well as well as those things that did not go so well. The Emergency Management Specialist (or designee) and the Decon Site Commander will record this discussion.

After Action Review / Improvement Plan
Within 14 days of an exercise or activation, the Emergency Manager will present all evaluations and Hotwash data to Team Leaders, Department Managers / Supervisors / Directors and ICC staff in the form of an After Action report which will detail all actions (positive and negative) highlighted during the hotwash(es). From this, an improvement plan and timeline will be created which assigns responsibility to individuals / departments. 90 Days after creation of the Improvement Plan, the Hospital Emergency Management Committee will review the Improvement Plan and actions taken. The HEMC will make recommendations for changes to this plan based on that review.

VII. Administration & Logistics
The Emergency Management Specialist, the Safety Supervisor, and the Director of Emergency Services will review this plan annually no later than August 30th of each year.

VIII. External Agency Review
A copy of this plan will be submitted to:
- The EMA’s of Burke, Columbia, Emanuel, Glascock, Jenkins, Jefferson, Lincoln, McDuffie, Richmond, Warren, Wilkes, and Taliaferro Counties.
- Doctor’s Hospital of Augusta, Georgia Health Sciences Health System, Trinity Hospital of Augusta, University Hospital, VA Hospital Augusta
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- East Central Health District – Public Health Emergency Preparedness
- Georgia Health Sciences University Emergency Preparedness, Public Safety, Environmental Services, and Radiation Safety.
- Georgia Public Health – Division of Emergency Preparedness
- Savannah River Site – Emergency Management
- Other partners upon origination and thereafter as revision occur.

IX. Authorities & Reference

OSHA 29 CFR 1910
OSHA 29 CFR 1910.120(q)(8)(i)

X. Appendices

A. Acronyms
B. Definitions
C. Decon Team Job Action Sheets
D. PAPR Don & Doff Procedures
E. Radiological Decontamination Procedures & Job Action Sheets
Appendix A

Acronyms

AAR – After Action Review
BLEVE – Boiling Liquid Expanding Vapor Explosion
CBRNE – Chemical, Biological, Radioactive, Nuclear, Explosive
CDC – Community Decontamination Center
EOC – Emergency Operations Center
EOP – Emergency Operations Plan
ERG – Emergency Response Guidebook
HAZWOPER – Hazardous Waste Operator
HICS – Hospital Incident Command System
HSEEP – Homeland Security Exercise and Evaluation Program
IC – Incident Commander
IAP – Incident Action Plan
IDLH – Immediately Dangerous to Life or Health
LC50 – Lethal Concentration, 50%
LD50 – Lethal Dose, 50%
LEL – Lower Explosive Limit
MOU – Memorandum of Understanding
MSDS – Material Safety Data Sheet
NDLS-D – National Disaster Life Support - Decon
NFPA – National Fire Protection Agency
NIOSH - National Institute for Occupational Safety and Health
OSHA – Occupational Safety & Health Administration
PAPR – Powered Air Purifying Respirator
PEL – Permissible Exposure Limit
PPE – Personal Protective Equipment
SCBA – Self Contained Breathing Apparatus
STEL – Short Term Exposure Limit
TLV – Threshold Limit Value
UEL – Upper Explosive Limit
Appendix B
Definitions

Absorption – 1) The process of “picking up” a liquid hazardous material to prevent spread of the contaminated area. 2) Movement of a toxicant into the circulatory system by oral, dermal, or inhalation exposure.

Access Control Point – The point of entry and exit which regulates access to and from the control zone.

Adsorption – When liquid or gas molecules adhere to a surface of a solid or liquid.

Air Purifying Respirator – PPE: A breathing mask with chemical cartridges and / or particulate filters absorb contaminants before they enter the workers respiratory system.

Asphyxiant – A vapor or gas that can cause unconsciousness or death by suffocation.

Biohazard – Infectious agents presenting a risk to living organisms through direct exposure or via environmental disruption.

Biological Agents – Microorganisms and toxins capable of causing acute or chronic damage to living organisms.

Breakthrough Time – The elapsed time between first contact of the hazardous material with the outside surface of a barrier, such as protective clothing, and when the material can be first detected on the inside of the barrier.

Buddy System – Organizing personnel into workgroups so that each person is observed by at least one other.

Clean-up operation - an operation where hazardous substances are removed, contained, incinerated, neutralized, stabilized, cleared-up, or in any other manner processed or handled with the ultimate goal of making the site safer for people or the environment.


**Cold Zone** – The area outside the warm zone, where resources are assembled, command centers are set up and where victims move to after decon has occurred.

**Command Post** – Point of command separated from the EOC with direct oversight of the operation.

**Contact** – Exposure to a substance which may have an adverse affect on health and safety.

**Contamination** – An uncontained substance or process that poses a threat to health, life or the environment.

**Decontamination (Decon)** - the removal of hazardous substances from employees and their equipment to the extent necessary to preclude the occurrence of foreseeable adverse health effects.

**Decon Team** - A group of personnel and resources operating within and around a decontamination operation.

**Degradation** - The loss in physical properties of an item of protective clothing, due to exposure to chemicals, extended use, or ambient conditions.

**Delayed Toxic Exposure Effect** – A physical reaction during which time symptoms of toxicity are not present immediately afterward exposure, but are delayed for a short period (such as pulmonary oedema a few hours after an inhalation exposure).

**Dose** – The amount of substance ingested, absorbed, and/or inhaled per exposure period.

**Downwind** – In the direction in which the wind is blowing.

**Emergency Operations Center (EOC)** – A secured physical site where government and agency officials centrally coordinate an emergency. The EOC serves as a resource center and coordination point for additional field assistance.

**Evacuation** - Removing potentially endangered, but not yet exposed, persons from an area threatened by a hazardous materials incident.
Facility (1) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, storage container, motor vehicle, rolling stock, or aircraft, or (2) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any water-borne vessel.

First Receiver - The first trained person(s) to arrive at the scene of a hazardous material incident. First Receivers may be from the public or private sector of emergency services.

Flashpoint - The minimum temperature at which a liquid gives off vapors fast enough to form an ignitable mixture with air. It will flash when subjected to an external ignition source, but will not continue to burn.

Fume - Airborne dispersion of minute solid particles, arising from heating a solid material such as lead, as distinct from a gas or vapor. This physical change is often accompanied by a chemical reaction, such as oxidation. Fumes flocculate and sometimes coalesce. Odorous gases and vapors should not be called fumes.

Hazardous Material - A substance (or combination of substances) which, because of quantity, concentration, physical, chemical, or infectious characteristics, may cause (or significantly contribute to) an increase in deaths or serious illness; and/or pose a substantial present or potential hazard to humans or the environment.

Hazardous materials response (HAZMAT) team - an organized group of employees, designated by the employer, who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance. The team members perform responses to releases or potential releases of hazardous substances for the purpose of control or stabilization of the incident. A HAZMAT team is not a fire brigade nor is a typical fire brigade a HAZMAT team. A HAZMAT team, however, may be a separate component of a fire brigade or fire department.

Hazardous substance - any substance designated or listed under (A) through (D) of this definition, exposure to which results or may result in adverse effects on the health or safety of employees:

[A] Any substance defined under section 101(14) of CERCLA;

[B] Any biologic agent and other disease causing agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in
reproduction) or physical deformations in such persons or their offspring.

[C] Any substance listed by the U.S. Department of Transportation as hazardous materials under 49 CFR 172.101 and appendices; and

[D] Hazardous waste as herein defined.

Hot Zone - The area which immediately surrounds a hazardous materials incident. This area extends far enough to prevent adverse effects to personnel outside the zone. This is also referred to as the “exclusion zone”, the “red zone”, and the “restricted zone” in other documents.

IDLH - *Immediately dangerous to life or health* means an atmospheric concentration of any toxic, corrosive or asphyxiant substance that poses an immediate threat to life or would interfere with an individual's ability to escape from a dangerous atmosphere.

Incident Action Plan (IAP) - A plan developed at the field response level, containing objectives reflecting the overall incident strategy, specific tactical actions and supporting information for the next operational period. The plan may be oral or written.

Irradiation - The absorption by tissues or substances of ionizing radiation. This does not render the object radioactive.

LC50 (lethal concentration, 50%) - The amount of toxicant in air deadly to 50 percent of the exposed laboratory animal population, within a specified time.

LD50 (lethal dose, 50%) - The amount of toxicant administered by other than inhalation, which is deadly to 50 percent of the exposed laboratory animal population within a specified time.

Level of protection - Designated types of personal protective equipment:

- Level A - Vapor protective suit and Self Contained Breathing Apparatus (SCBA) for hazardous chemical emergencies.
- Level B - Liquid splash protective suit and SCBA for hazardous chemical emergencies.
- Level C - Limited use protective suit and Powered Air Purifying Respirator (PAPR) for hazardous chemical emergencies.
Level D - A work uniform affording minimal protection, used for “nuisance” contamination only.

Material Safety Data Sheet (MSDS) - A document containing information on the specific identity of hazardous chemicals, including information on health effects (limited), first aid, chemical and physical properties, and emergency phone numbers.

Mitigation - Any actions to contain, reduce, or eliminate the harmful effects of a spill or release of a hazardous material.

Operations - The coordinated tactical response of all field operations, in accordance with the Incident Action Plan.

Oxygen deficiency - that concentration of oxygen by volume below which atmosphere supplying respiratory protection must be provided. It exists in atmospheres where the percentage of oxygen by volume is less than 19.5 percent oxygen.

Permeation - Movement of vapor or gas molecules through chemical protective garment material.

Permissible Exposure Limit - Permitted exposure limit to any material listed.

Published exposure level - the exposure limits published in "NIOSH Recommendations for Occupational Health Standards" dated 1986, which is incorporated by reference as specified in § 1910.6, or if none is specified, the exposure limits published in the standards specified by the American Conference of Governmental Industrial Hygienists in their publication "Threshold Limit Values and Biological Exposure Indices for 1987-88" dated 1987, which is incorporated by reference as specified in § 1910.6.

Personal Protective Equipment (PPE) - Any device, equipment or clothing required by workers to protect themselves and mitigate the risk of injury from, or exposure to, hazardous conditions during the performance of their duties. PPE includes respirators, ear and eye protection, chemical protective suits, boots and gloves.

Radioactive - The spontaneous disintegration of unstable nuclei, accompanied by emission of ionizing radiation.
Radioactive Material - Any material, or combination of materials, that spontaneously emits ionizing radiation and has a specific activity greater than 0.002 micro curies per gram.

Short Term Exposure Limit - The value for an airborne toxic material that is to be used as a guide in the control of health hazards. It represents the concentration to which nearly all workers may be exposed 8 hours per day over extended periods of time, without adverse effects.

Staging Area - The area established for temporary location of available resources closer to the incident site, to reduce response time.

Toxic - Poisonous; relating to or caused by a toxic substance; able to cause injury by contact or systemic action to plants, animals or people.

Vapor - An air dispersion of molecules of a substance that is normally a liquid or solid, at standard temperature and pressure.

Warm Zone - The area where personnel and equipment decontamination and hot zone support takes place. It includes control points for the access corridor, thus reducing the spread of contamination. This is also referred to as the “decontamination”, “contamination reduction”, “yellow zone”, or “limited access zone” in other documents.
The following pages detail the various positions required within the decon operations in both the Emergency Room Decon Facility and the Community Decon Center. As with all emergency responses the number of personnel required is dependent on the overall size of the response and the needs of the incident commander and site commanders. **ALL POSITIONS MAY NOT BE ACTIVATED ALL THE TIME.**

Anytime a decon activation occurs a Decon Technical Expert must report to the ICC of whom is fully versed and experienced of all aspects of the Georgia Health Sciences Health System decon process and can provide the Incident Commander with all appropriate information. In the absence of a technical expert the Liaison Officer will fulfill this role.

*Above Organization Chart reflects full activation of the CDC with maximum throughput. Organization will expand or contract as designated by the Decon Site Commander*
Decon Site Commander

Date: ________ Start: _______ End: _______

Name: _________________________________________________________

Location: (Circle One) CDC Forward Command Center  or  ER Decon Area

Radio Title: _______________ Radio #:_____________ Mobile#_______________

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders. Reports to the Operations Chief.

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet asks Decon Site Commander (or designee) to clarify any points of confusion.
☐ Assume role of Decon Site Commander.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Read this entire Job Action Sheet and put on position identification.
☐ Insure the appropriate notifications have been made
☐ Establish communications with ICC and ECC
☐ Initiate and maintain communications with the Incident Commander,
☐ Initiate a Critical Incident Log
☐ Brief Decon Team Leaders of situation and duties.
☐ Assign Decon Team Members to duty locations
☐ Review Emergency Procedures
☐ Monitor and supervise Decon Operations
☐ Initiate pre-determined flow plan of hospital personnel and equipment through the decon corridor.
☐ Track the suit time of all decon members / teams. (May delegate)
☐ Monitor and determine resources. Communicate request with ICC
☐ Anticipate needs 6, 12, and 24 hours into event and relay those request to ICC.
☐ Initiate, maintain, and update communications with ICC on the number and status of patients entering and exiting Decon Area.
☐ Coordinate the handling and storage of patient personal belongings
☐ Monitor Hazardous water capture rate. Coordinate draining of tank.
☐ Monitor the number and types of medical needs of patients coming through Decon
☐ Coordinate the transfer and transition of patients from warm to cold zone.
☐ Coordinate the handling, storage, and transfer of equipment and contaminants in the warm zone.
☐ Insure the maintance of the chain of custody wherever possible.
☐ Supervise the de-activation of the Decon Team.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Coordinate the disposal of hazardous waste
☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Coordinate Demobilization of Decon Team Members
☐ Insure all Decon Team Members attend CISM brief before being dismissed.
☐ File all report with ICC
☐ Arrange for the appropriate disposition of all contaminated items
☐ The Decon Site Commander will be responsible for all contaminated items in the Warm Zone until properly transfer is completed and recorded in the Critical Incident Log.
Demobilization/System Recovery Time Initial Documents/Tools

- Incident Action Plan
- Hand / Arm Signals Chart
- Decon Flow chart
- Critical Incident Stress Log
- Incident message form
- HICS Form 201 – Incident Briefing Form
- HICS Form 204 – Branch Assignment List
- HICS Form 207 – Incident Management Team Chart
- HICS Form 213 – Incident Message Form
- HICS Form 214 – Operational Log
- HICS Form 252 – Section Personnel Time Sheet
- HICS Form 261 – Incident Action Plan Safety Analysis
Decon Safety Officer

Date: ________ Start: _______ End: _______

Name: _________________________________________________________

Location: (Circle One) CDC Forward Command Center or ER Decon Area

Radio Title: _______________ Radio #:_____________ Mobile#_______________

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders. Reports to Decon Site Commander. Duties may be stand alone or added to that of the Decon Medical Officer.

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet asks Decon Site Commander (or designee) to clarify any points of confusion.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Initiate and maintain Safety Plan.
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Provide technical support to the Decon Site Commander and Team Leaders
☐ Coordinate pre and post event medical screenings for all operational team members.
☐ Insure all PPE is properly inspected before use.
☐ Insure PPE is properly donned.
☐ Inspect each team member before they enter warm zone.
☐ Track Suit Time and team assignments
☐ Monitor Decon Team members for stress and exposure. Report all changes to the Decon Medical Officer.
☐ Establish communications with technical experts
☐ Establish communication with Poison Control. Verify Decon procedures for chemical agent.
☐ Make recommendations to Decon Site Commander.
☐ Advise Decon Site Commander of any variations or deviations from safe working practices.
☐ Insure all operational members of Decon team maintain full protection from agent(s).
☐ Assess resource inventory and report to Decon Site Commander.
☐ Coordinate Safety break and rest cycles for team members.
☐ Coordinate supplies for re-hydration and meals.
☐ Establish safe rest area for workers that will not be contaminated by operations
☐ Monitor all Decon Operators for proper Work / Rest Cycles
☐ Establish Safety Standards, Messages, and Precautions for all personnel in area
☐ Continuously evaluate and recommend facility and staff protective action options to Decon Site Commander
☐ The Decon Safety Officer has the authority to alter, suspend, or terminate any action which may be judged unsafe.
☐ Coordinate ongoing medical assessment of Decon Members pre, post event and during all rest cycles.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ File report Site Safety Report with Decon Site Commander before leaving post.
☐ File Safety Plan with Incident Commander.

Forms

☐ Critical Incident Stress Log

Revised: 10/06/2011
ANNEX F
Chemical
Updated 09/2011
- Incident message form
- Decon Flow chart
- Hand / Arm Signals Chart
- Decon Suit Log
- HICS Form 201 – Incident Briefing Form
- HICS Form 261 – Incident Safety Analysis
Decon Communications Officer

Date: ________ Start: _______ End: _______

Name: __________________________________________________________________________

Location: (Circle One) CDC Forward Command Center  or  ER Decon Area

Radio Title: _______________ Radio #: _______________ Mobile#: _______________

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders. Reports to Decon Site Commander.

Immediate (Operational Period 0-2 Hours) Time Initial

- Read this entire Job Action Sheet asks Decon Site Commander (or designee) to clarify any points of confusion.
- Request and receive incident briefing
- Put on appropriate identification (vest, ID, etc)
- Read this entire Job Action Sheet.
- Initiate and maintain communications with the Decon Site Commander.
- Retrieve Radios from ICC.
- Assign Radios to Decon personnel as designated by Site Commander.
- Maintain log of all radios
- Establish 2 lines of communication with ICC (cell phone, radio, email, etc)
- Provide SITREPS to ICC as directed by Site Commander
- Monitor Radio Traffic and record significant events / SITREPS in Communication Log

Intermediate (Operational Period 2-12 Hours) Time Initial

- Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
- Insure all Decon Team Members attend CISM brief before going home

Forms

- Critical Incident Stress Log
- Incident Action Plan
- Incident message form
- Decon Organization chart
- Decon Suit Log
- HICS Form 201 – Incident Briefing Form
- HICS Form 214 – Operational Log
- HICS Form 252 – Section Personnel Time Sheet
Primary Triage Team Leader

Date: ________ Start: _______ End: _______

Name: _________________________________________________________

Location: (Circle One) CDC Forward Command Center or ER Decon Area

Radio Title: _______________ Radio #:_____________ Mobile#_________

Mission: Lead Triage team in the Warm Zone. Assemble team, insure proper fit & wear of Level C PPE. Move team as one unit to Warm Zone. Reports to Decon Site Commander

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet asks Decon Site Commander (or designee) to clarify any points of confusion.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Read this entire Job Action Sheet.
☐ Acquire radio from Decon Communications Officer.
☐ Check & Test Radio
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Assemble Warm Zone Triage Team
☐ Insure all Team members (as designated by Site Commander) receive Medical Clearance before sealing suits.
☐ Monitor Level C Suit Up of all team members
☐ Suit up in Level C w/ PAPR
☐ Conduct Safety Inspection of all team members before entering warm zone
☐ Assign buddy system within team.
☐ Review hand & Arm Signals with team members
☐ Move team to warm zone.
☐ Assume position between Triage Nurse(s) & Decon Lanes.
☐ Fullfill role of coordinating traffic to each lane while maintaining oversight & supervision of triage / security.
☐ Review hand & Arm Signals with team members.
☐ Confirm boundries are in place to funnel traffic toward decon lanes. Coordinate with Decon Site Commander any changes needed.
☐ Assist Triage Nurses as needed.
☐ Triage Arriving patients – Ambulatory / Non-Ambulatory, Male / Female, Symptomatic / Non – Symptomatic.
☐ Insure all arriving patients go through Decontamination lanes regardless of absences of obvious contamination.
☐ Alert Secondary Triage (via radio) of all Air Problems coming through.
☐ Anticipate & Request additional resources before they are needed.
☐ Communicate with all team members in clear and concise language.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ Verbally and physically guide patients through Triage area into Decon lanes
☐ May Assist Bagger / Washer if Decon census allows.
☐ Insure all Team members exit Warm Zone through Decon Lane.
☐ Insure all Team Members perform self decon before exiting warm zone.
☐ Team Leader will be last member of team to exit warm zone.

Revised: 10/06/2011
ANNEX F
Chemical
Updated 09/2011

Forms

- Critical Incident Stress Log
- Incident message form
- Decon Organization chart
- Decon Suit Log
Primary Triage Nurse

Date: ________ Start: _______ End: _______

Name: _________________________________________________________

Location: (Circle One) CDC Forward Command Center  or  ER Decon Area

Radio Title: _______________    Radio #:_____________    Mobile#_______________

Mission: Lead Triage team in the Warm Zone. Assemble team, insure proper fit and wear of Level C PPE. Move team as one unit to Warm Zone. Reports to Primary Triage Team Leader.

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Read this entire Job Action Sheet.
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Assemble Warm Zone Triage Team
☐ Insure all Team members (as designated by Site Commander) receive Medical Clearance before sealing suits.
☐ Monitor Level C Suit Up of all team members
☐ Suit up in Level C w/ PAPR
☐ Conduct Safety Inspection of all team members before entering warm zone
☐ Assign buddy system within team.
☐ Move team to warm zone.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ .

Forms
Primary Triage – Security

Date: ________ Start: _______ End: _______

Name: _________________________________________________________

Location: (Circle One) **CDC Forward Command Center** or **ER Decon Area**

Radio Title: _______________ Radio #: _______________ Mobile#: _______________

**Mission:** Provide security for Primary Triage Team in the Warm Zone. These duties may include collection of personal belongings until such time that dedicated personnel can be assigned. Reports to Primary Triage Team Leader.

**Immediate (Operational Period 0-2 Hours) Time Initial**
- Read this entire Job Action Sheet.
- Request and receive incident briefing.
- Put on appropriate identification (vest, ID, etc).
- Initiate and maintain communications with the Decon Site Commander.
- Assemble with Warm Zone Triage Team.
- Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
- Obtain Level C PPE from Supply.
- Inspect PAPR an all Level C PPE per standard.
- Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
- Conduct Safety Inspection of buddy.
- Move with team to warm zone.
- Maintain Incident Log.
- Insure Chain of custody is maintained on all collected personal belongings.
- Verbally and visually guide patients through Decontamination area.

**Intermediate (Operational Period 2-12 Hours) Time Initial**
- Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
- Insure all Decon Team Members attend CISM brief before going home.
- Insure all Team members exit Warm Zone through Decon Lane.
- Perform Self Decon.
- Report to Decon Medical Officer for Post Event / Rest Cycle Medical check.

**Forms**
Ambulatory Lane Team Leader (Male)

Date: ________ Start: _______ End: _______

Name: _________________________________________________________

Location: (Circle One) CDC Forward Command Center  or  ER Decon Area

Radio Title: _______________ Radio #: _______________ Mobile#: _______________

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders. Reports to Decon Site Commander.

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet asks Decon Site Commander (or designee) to clarify any points of confusion.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Initiate and maintain communications with the Decon Site Commander.
☐

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ .

Forms
Self Decon Instructor (Male)

Date: ________ Start: _______ End: _______

Name: _______________________________________________________

Location: (Circle One) CDC Forward Command Center or ER Decon Area

Radio Title: _______________ Radio #: _______________ Mobile# _______________

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders. Reports to Ambulatory Team Leader (Male).

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Assemble with Warm Zone Ambulatory Lane Team (Male).
☐ Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
☐ Obtain Level C PPE from Supply.
☐ Inspect PAPR an all Level C PPE per standard.
☐ Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
☐ Conduct Safety Inspection of buddy.
☐ Move with team to warm zone.

Showers:

☐ Instruct patients to stand in designated area
☐ Provide for privacy if achievable
☐ Instruct patient(s) to remove clothing while protecting face / airway from further exposure
☐ Instruct patient(s) to place personal items in plastic zip lock bag
☐ Instruct patient(s) to remove outer layers of clothing (jackets, layers, etc)
☐ Instruct patient(s) to place clothing into large bag (or steel drum if available).
☐ Instruct patient(s) to remove remaining clothing.
☐ Instruct patient(s) to place remaining clothing in large plastic bag (or steel drum if available)
☐ Instruct patient(s) to move forward to shower.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home

Forms
Decon Stripper / Bagger (Male)

Date: ________ Start: _______ End: _______

Name: _________________________________________________________

Location: (Circle One) CDC Forward Command Center or ER Decon Area

Radio Title: _______________ Radio #:_____________ Mobile#_______________

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders. Reports to Ambulatory Team Leader (Male).

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Assemble with Warm Zone Ambulatory Lane Team (Male).
☐ Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
☐ Obtain Level C PPE from Supply.
☐ Inspect PAPR an all Level C PPE per standard.
☐ Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
☐ Conduct Safety Inspection of buddy.
☐ Move with team to warm zone.

Decon Lane:

☐ Instruct patient(s) to remove clothing while protecting face / airway from further exposure
☐ Instruct patient(s) to place personal items in plastic zip lock bag
☐ Instruct patient(s) to remove outer layers of clothing (jackets, layers, etc)
☐ Instruct patient(s) to place clothing into large bag (or steel drum if available).
☐ Instruct patient(s) to remove remaining clothing.
☐ Instruct patient(s) to place remaining clothing in Large plastic bag (or steel drum if available)
☐ Instruct patient(s) to move forward to shower.

Shower:

☐ Identify Soap dispenser
☐ Demonstrate Soap Dispenser
☐ Insure water temperature is tepid. If water temp rises or becomes too hot communicate to Decon Safety Officer
☐ Instruct / demonstrate to patient(s) wash and rinse from scalp down for 30 seconds
☐ Instruct patient(s) to use soap dispenser
☐ Instruct patient(s) to cleanse hair back from face
☐ Instruct patient(s) to use soft brush; scrub lightly but thoroughly from top to bottom for 4 minutes. Insure patient scrubs every part of body.
☐ Instruct patient to rinse starting with scalp and working down.
☐ Instruct patient to move to Gate Keeper
☐ After Rinsing Decon Gate Keeper shall assess patient(s) (Note – Decon Gatekeeper and / or Decon Safety Officer have ultimate authority to deny or allow access of patient(s) / Decon Members to cold zone
Intermediate (Operational Period 2-12 Hours) Time Initial

- Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
- Insure all Decon Team Members attend CISM brief before going home

Forms
Decon Dryer / Dresser / Gate Keeper (Male)

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders. Reports to Ambulatory Team Leader (Male).

Date: ________ Start: _______ End: _______ Position Assigned to: ____________________________
Signature: ____________________________________________ Initial: _____________
Hospital Command Center (HCC) Location: _____________________ Telephone: ___________________
Fax: ___________________ Other Contact Info: ___________________ Radio Title: ___________________

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Assemble with Warm Zone Ambulatory Lane Team (Male).
☐ Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
☐ Obtain Level C PPE from Supply.
☐ Inspect PAPR an all Level C PPE per standard.
☐ Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
☐ Conduct Safety Inspection of buddy.
☐ Move team to warm zone.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ .

Forms
Ambulatory Lane Team Leader (Female)

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders.

Date: ________ Start: _______ End: _______ Position Assigned to: ____________________________
Signature: _________________________________________________________ Initial: _____________
Hospital Command Center (HCC) Location: _____________________ Telephone: ___________________
Fax: ___________________ Other Contact Info: _________________________ Radio Title: ___________________

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Assemble with Warm Zone Ambulatory Lane Team (Female).
☐ Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
☐ Obtain Level C PPE from Supply.
☐ Inspect PAPR an all Level C PPE per standard.
☐ Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
☐ Conduct Safety Inspection of buddy.
☐ Move team to warm zone.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ 

Forms
Decon Stripper / Bagger (Female)

**Mission:** Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders.

Date: ________ Start: _______ End: _______ Position Assigned to: ____________________________
Signature: _________________________________________________________ Initial: _____________
Hospital Command Center (HCC) Location: _____________________________ Telephone: ___________________
Fax: ___________________ Other Contact Info: ____________________ Radio Title: ___________________

**Immediate (Operational Period 0-2 Hours) Time Initial**

- [ ] Read this entire Job Action Sheet.
- [ ] Request and receive incident briefing
- [ ] Put on appropriate identification (vest, ID, etc)
- [ ] Initiate and maintain communications with the Decon Site Commander.
- [ ] Assemble with Warm Zone Ambulatory Lane Team (Female).
- [ ] Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
- [ ] Obtain Level C PPE from Supply.
- [ ] Inspect PAPR an all Level C PPE per standard.
- [ ] Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
- [ ] Conduct Safety Inspection of buddy.
- [ ] Move team to warm zone.

**Intermediate (Operational Period 2-12 Hours) Time Initial**

- [ ] Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
- [ ] Insure all Decon Team Members attend CISM brief before going home

**Forms**
Self Decon Instructor (Female)

**Mission:** Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders.

Date: __________ Start: _______ End: _______ Position Assigned to: ____________________________
Signature: ____________________________________________________ Initial: ________________
Hospital Command Center (HCC) Location: _____________________ Telephone: ___________________
Fax: ______________ Other Contact Info: ____________________ Radio Title: ___________________

**Immediate (Operational Period 0-2 Hours) Time Initial**

- [ ] Read this entire Job Action Sheet.
- [ ] Request and receive incident briefing
- [ ] Put on appropriate identification (vest, ID, etc)
- [ ] Initiate and maintain communications with the Decon Site Commander.
- [ ] Assemble with Warm Zone Ambulatory Lane Team (Female).
- [ ] Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
- [ ] Obtain Level C PPE from Supply.
- [ ] Inspect PAPR an all Level C PPE per standard.
- [ ] Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
- [ ] Conduct Safety Inspection of buddy.
- [ ] Move team to warm zone.

**Intermediate (Operational Period 2-12 Hours) Time Initial**

- [ ] Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
- [ ] Insure all Decon Team Members attend CISM brief before going home
- [ ]

**Forms**
Decon Stripper / Bagger (Female)

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders.

Date: ________ Start: _______ End: _______ Position Assigned to: ____________________________________________
Signature: _________________________________________________________ Initial: _____________
Hospital Command Center (HCC) Location: _____________________ Telephone: ___________________
Fax: ___________________ Other Contact Info: ________________ Radio Title: ___________________

Immediate (Operational Period 0-2 Hours) Time Initial

☐ Read this entire Job Action Sheet.
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Assemble with Warm Zone Ambulatory Lane Team (Female).
☐ Obtain Pre-Operation Medical Clearance from Decon Medical Officer.
☐ Obtain Level C PPE from Supply.
☐ Inspect PAPR an all Level C PPE per standard.
☐ Suit up in Level C w/ PAPR – Do not seal hood until instructed to do so by Team Leader.
☐ Conduct Safety Inspection of buddy.
☐ Move team to warm zone.

Decon Lane
☐ Instruct patient(s) to remove clothing while protecting face / airway from further exposure
☐ Instruct patient(s) to place personal items in plastic zip lock bag
☐ Instruct patient(s) to remove outer layers of clothing (jackets, layers, etc)
☐ Instruct patient(s) to place clothing into large bag (or steel drum if available).
☐ Instruct patient(s) to remove remaining clothing.

☐ Instruct patient(s) to place remaining clothing in Large plastic bag (or steel drum if available)
☐ Instruct patient(s) to move forward to shower.

Intermediate (Operational Period 2-12 Hours) Time Initial

☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ .

Forms
Decon Liaison Officer

**Mission:** Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders.

Date: ________ Start: _______ End: _______ Position Assigned to: ____________________________
Signature: _________________________________________________________ Initial: _____________
Hospital Command Center (HCC) Location: ___________________ Telephone: ___________________
Fax: ___________________ Other Contact Info: ________________ Radio Title: ___________________

**Immediate (Operational Period 0-2 Hours) Time Initial**

- Request and receive incident briefing
- Put on appropriate identification (vest, ID, etc)
- Read this entire Job Action Sheet.
- Initiate and maintain communications with the Decon Site Commander.

**Intermediate (Operational Period 2-12 Hours) Time Initial**

- Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
- Insure all Decon Team Members attend CISM brief before going home

**Forms**
Decon Staging Officer

Mission: Organize and direct the Decon Operations. Achieve optimal throughput of casualties while insuring safety of all responders.

Date: ________ Start: _______ End: _______ Position Assigned to: ____________________________
Signature: _________________________________________________________ Initial: _____________
Hospital Command Center (HCC) Location: ____________________________ Telephone: ___________________
Fax: ___________________ Other Contact Info: ________________ Radio Title: ___________________

Immediate (Operational Period 0-2 Hours) Time Initial
☐ Request and receive incident briefing
☐ Put on appropriate identification (vest, ID, etc)
☐ Read this entire Job Action Sheet.
☐ Initiate and maintain communications with the Decon Site Commander.
☐ Establish area for incoming personnel and resources
☐ Establish, record, maintain, and update records of all incoming and outgoing personnel, resources and assignments
☐ Communicate with ICC to identify resource needs and assignments.
☐ Receive Volunteers and direct to appropriate area
☐ Establish communications with Decon Site Commander. Identify shortages and asset needs
☐ Track and maintain accountability logs of all activity

Intermediate (Operational Period 2-12 Hours) Time Initial
☐ Provide updates to team members, ICC, ECC, and Secondary Triage Staff as needed.
☐ Insure all Decon Team Members attend CISM brief before going home
☐ .

Forms
Appendix D
Donning & Doffing Procedures

Donning Procedure:
1. Secure all personal belongings prior to suiting up. Any item taken into the contaminated zone is subject to seizure and hazardous disposal.
2. Persons needing to wear glasses should be certain they will not fall off inside the Powered Air Purifying Respirator (PAPR) hood by using retaining band
3. Medical Screening must occur prior to suiting up.
4. Obtain appropriate sized PPE ensemble pak or pieces, PAPR, battery and appropriate cartridges (3)
5. Layout PPE pieces and confirm they are right size and in working order
6. While sitting remove shoes and place on foot covers (foot protection should not present tear risk to the suit nor be heal less)
7. Pull on chemical/biological protective suit to waist
8. Place outer booties/boots on over the foot portion of the suit
9. Put on latex or plastic inner glove-consider light circular band to lessen premature removal during doffing
10. Using a chemical resistant tape, seal top of booties to protective coverall (use a flap of tape at the end and placed facing front to ease removal)
11. If using PAPR with hood pull up but do not pull over the hood- tuck inside the suit; avoid bunching up inside the suit
12. For chemical incident place 1 set of nitrile gloves on hands and one set of butyl rubber gloves
13. Seal seam of protective suit and gloves with duct tape (use a flap of tape at the end to ease removal of tape)
16. Place PAPR around the waist. Cinch up belt to snug fitting around suit with motor riding above the buttocks. Secure battery to the belt (side of the dominant hand is suggested) and plug in the PAPR. The air hose should come over the shoulder not under the arm
17. Zip up protective suit to neck, leaving protective coverall hood off
18. Remove protective towel and place protective hood on head using an up and over motion. Position face piece to ensure full visibility. Tuck inner hood liner completely into protective coverall
19. Turn PAPR on also making sure that all cartridge tabs are removed to allow airflow
20. Zip up suit tightly to the neck and ensure proper seal
21. Ensure outer hood covers top of both shoulders
22. Have someone place 3in. piece of velcro or tape across shoulders with staff members last name and function (ex. Jones RN) written with magic marker
23. Have second person perform safety check before proceeding to assigned work area
24. Note time personnel left the dress out area

Doffing Procedure:
1. After completion of the technical decon process, proceed to edge of warm/cold zone and prepare to remove protective ensemble
2. While sitting or assisted by second person remove tape from booties/boots, and remove the booties/boots. Place booties in biohazard bag or leave boots out for re-cleaning and use by additional personnel
3. Remove tape from outer gloves, remove ONLY outermost glove(s), - place in biohazard bag. The inner gloves must remain in place
4. Unzip protective coveralls, and unstrap PAPR but do not turn off or remove – place PAPR on chair or carefully on the ground
5. Unzip and remove protective suit using an inside out roll down manner and place in biohazard bag
6. Turn PAPR off and remove hood ensemble pulling it forward and over the head-leave in the area to be reconditioned. If disposable battery is being used update the hour chart on the side
7. Using a glove-in-glove procedure, carefully remove inner layer of gloves and dispose in biohazard bag
8. Proceed to cold zone and rehydrate and undergo medical monitoring
9. The PAPR is to be rewashed with soap and water, disinfected and towel dried before next use. The cartridges should be replaced if they are wet, are approaching 8 hour time expiration limit or work environment is believed to be near or exceeds permissible exposure limits
APPENDIX F
Monthly Inspection Form
for:
3M Breathe Easy™ Powered Air Purifying Respirator with Tychem® QC or Butyl Rubber Hood

Please see the User Instructions for complete information on proper use and limitations of this PAPR

IMPORTANT! Read the ENTIRE document before filling out the data.
Initial each box in the left column as you perform the inspection.

Inspector: ___________________________ Unit Serial No.: ___________________________ Date: ___________________________

Cartridge Part # and Exp. Date
(applies to chemical cartridges only): ___________________________ / ___________________________ No. of months to expiration: ___________________________

Lithium Battery Exp. Date: ___________________________ No. of hours to expiration: ___________________________

NiMH Battery Life in Hours: ___________________________ No. of hours needed: ___________________________

☐ Butyl Rubber Hood: Take care in inspecting the hood for any rips or tears or seam separation
☐ Face Shield: Examine the face shield for any scratches or visual distortion
☐ Butyl Rubber Hood: Ensure that the Over-Pressure Valve is intact
☐ Breathing Tube: Inspect for flexibility, holes or cracks
☐ Belt: Inspect for flexibility. Ensure that the belt is complete and intact and free of tears or cracks
☐ Motor Blower: Examine for housing for cracks
☐ Motor Blower Port Gaskets: Ensure that the three (3) gaskets are in place and not damaged
☐ Cartridges: Ensure that they are not damaged. Ensure that the caps and plugs are in place

Write in the cartridge expiration date above
Note above, the number of months left to cartridge expiration date

☐ Lithium Battery (520-04-57R01): This battery has a ten (10) year shelf life. It cannot be charged
   The manufacture date code (MM/YY) is printed on the side of the battery
   As this battery is used, mark off the number of hours spent in operation
   Note the number of hours left to Lithium Battery charge expiration

☐ NiMH Battery (BP-15): Check for cracks. Using flow meter, check for required airflow rate
   This battery can be re-charged using the BC-210 Smart Charger
   The date of mfr is denoted with color tape around bottom of battery (see below)

☐ Ni-Cad Battery (520-01-02): Check for cracks. Using flow meter, check for required airflow rate
   This battery MUST be charged with the 520-03-73 battery charger
   The date of mfr is denoted with color tape around bottom of battery (see below)

PAPR Battery Management:
☐ The purpose of a correct PAPR battery management system is to assure a reliable source of fully charged and fully functioning batteries to respirator users and to maximize the service life of the batteries through proper maintenance procedures.
☐ Correct battery management increases user productivity, and reduces battery replacement costs.
☐ Battery management system should be tailored to the specific battery user instructions.

Revised: 10/06/2011
To ensure that the Lithium battery has not been used, place a piece of tamper-resistance tape over the plug.
5M Breathe Easy™ Powered Air Purifying Respirator with Tychem® QC or Butyl Rubber Hood

! Warning! Quick reference guide only. Before using this product, you must read the User Instructions for further information and warnings that if not followed could cause injury, sickness or death.

1. Connect the charger to the NiMH battery. Lights on the charger will indicate status of the charging cycle. NiMH batteries should be stored on the charger. If using the non-rechargeable lithium battery, a manufacturing date code (MM/YY) is printed on the side of the label. Make sure the 10 year shelf life has not been exceeded. Check that there are enough hours remaining as marked on the battery usage matrix label (boxes numbered 1 to 12).

2. Perform a visual inspection of the:
   - Head Gear
   - Breathing Tube
   - Motor Housing / Blower
   Ensure that cartridges haven’t been opened or expired. Remove filter or cartridge caps and plugs, and attach to blower.

3. Perform a flow check. Insert airflow indicator into blower and turn PAPR on. Middle of ball in flow indicator must rise up to at least the "6 CFM" location on flow meter. If not, check the breathing tube, battery and filter. Repeat test.

4. Connect breathing tube to the blower and secure with screw clamp. Inspect the head cover or hood for damage. Attach the unit to your waist and turn PAPR on. Push the slotted end of the breathing tube into the connector in the rear of the head cover or hood until it snaps into place. Pull the head cover (A) or hood over (B) your head and adjust it so the headband wraps around your head under your chin.

   (B) For the hood, tuck the inner shroud under your protective clothing and allow the outer shroud to hang outside your clothing.

5. After use and decontamination, remove other personal protective clothing and then the PAPR.

Return the NiMH battery to the charger.
If using a non-rechargeable lithium battery, mark the number of hours used on the side of the battery.

Do not attempt to recharge the lithium battery.