Abu Dhabi EHSMS Regulatory Framework

(AD EHSMS RF)

EHS Regulatory Instrument

Code of Practice

EHS RI - CoP 6.0 – Emergency Management Requirements

Version 2.0

February 2012

ACKNOWLEDGEMENTS

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Preface

This Abu Dhabi EHS Regulatory Instrument was developed by the AD EHS Center as the primary Competent Authority for this topic to set the minimum mandatory requirements.

Every effort was made in developing this document so that it does not conflict with existing local or federal laws and regulations. In case of conflict, requirements of the existing local and federal laws and regulations shall prevail, and all concerned are obliged to bring the same to the attention of AD EHS Center for resolution.

This AD EHS Regulatory Instrument has been developed, reviewed and approved, following the process as described in *AD EHSMS Implementation Guideline: The Integration of EHS Requirements in the Emirate of Abu Dhabi*, by the following stakeholders:

- Abu Dhabi EHS Higher Committee;
- Abu Dhabi EHS Center;
- Environment Agency Abu Dhabi;
- Department of Municipal Affairs;
    - Abu Dhabi Municipality;
    - Al Ain Municipality;
    - Western Region Municipality;
- Department of Transport – Abu Dhabi;
- Abu Dhabi Water and Electricity Authority;
- Health Authority - Abu Dhabi;
- Higher Corporation for Specialized Economic Zones (ZonesCorp);
- Center for Waste Management – Abu Dhabi;
- Abu Dhabi Tourism Authority;
- Abu Dhabi Food Control Authority;
- Abu Dhabi Education Council
- Regulation and Supervision Bureau; and
- Other relevant Federal and Local Competent Authorities.

The AD EHSMS consists of the following hierarchy of documents:

- AD EHSMS RF Elements - Mandatory System Requirements

EHS Regulatory Instruments:

- Standards and Guideline Values - Mandatory EHS threshold and exposure levels
- Codes of Practice - Mandatory EHS technical requirements – subject specific
- Mechanisms - Mandatory system implementation processes and procedures

Guidelines:

- Technical Guidelines - Non-mandatory guidance on how to implement an EHS Regulatory Instrument
- AD EHSMS Guidance Documents - Non-mandatory guidance and interpretation of an *AD EHSMS RF* concept and/or principle

Further, this document is not intended to conflict with any contractual obligations in effect at the time of its issuance. However, all future contracts shall adhere to applicable requirements stated herein, and existing long term contracts shall be brought into compliance with its requirements as soon as reasonably practicable as stipulated by relevant subject authorities.

This document will be reviewed periodically as part of the continual improvement cycle.

1. Introduction

(a) This Code of Practice (CoP) provides minimum mandatory requirements for emergency management by entities applying Abu Dhabi Environment, Health and Safety Management System, commensurate with and in fulfillment of the general requirements outlined within *AD EHSMS RF – Element 06 – Emergency Response and Management,* until comprehensive regulations on emergency management are enacted at Emirate or Federal level (eg. National Crisis and Emergency Management Authority (NCEMA).

(b) The aim of Emergency Management is to minimize the effects of incidents to people, environment, property and business.

(c) For purposes of this CoP the following definitions shall apply:

- **Emergency**: An incident related to the entity that can cause death, significant injuries to employees or in the surrounding community, or significant negative impacts on the environment;

- **Emergency Management Program:** All the arrangements undertaken by the entity in support of emergency management, including the organizational structure, budget, resources, procedures and documentation; and

- **Emergency Response Plan:** A document identifying all the activities to be undertaken by the entity from notification of an emergency incident, through incident stabilization, up to recovery from negative impacts of the incident.

2. Training and Competency

(a) Employers shall ensure that EHS training complies with the requirements of:

(i) *AD EHSMS RF – Element 05 – Training and Competency;*

(ii) *AD EHS RI – Mechanism 7.0 – AD EHS Professional Entity Registration;* and

(iii) *AD EHS RI – Mechanism 8.0 – AD EHS Practitioner Registration.*

(b) Employers shall ensure that all employees are capable of undertaking roles and responsibilities assigned within this CoP.

(c) Employees shall receive the training and information necessary to recognize, report and respond to emergencies in the workplace.

(d) Employees identified and appointed by the employer to carry out specific roles and responsibilities in emergency management shall be trained to a level appropriate to carry out those roles and responsibilities in a safe, proficient and expedient manner.

(e) Upon initial assignment to a job, employees shall be informed, as part of the induction process, of the hazards and associated risks to which they may be exposed. The entity shall review with each employee those aspects of the emergency management procedures necessary for self-preservation and assistance in the event of an emergency.

(f) Drills and exercises shall be conducted and refresher training shall be provided at appropriate intervals to assure that all employees can execute their roles and responsibilities.

(g) Retraining shall be offered when procedures are updated / revised or following an emergency event.

(h) Employers shall maintain a record of training. For each employee, the record shall contain:

   (i) employee's name and ID number;

   (ii) Emirates ID number;

   (iii) Identification of the type of training received and the topics covered;

   (iv) statement of authorization to perform relevant work;

   (v) name of person providing the training; and

   (vi) date of training.

(i) Where applicable, the employer shall extend training to cover other persons at the workplace, eg. consultants / contractors stationed on-site, tenants in case of multi-tenanted commercial buildings under its supervision, and students in case of schools.

3. Requirements

3.1 Roles and Responsibilities

(a) Employers shall develop, implement and maintain an appropriate Emergency Management Program (Section 3.2) that:

   (i) is commensurate with the employers scope of operations and risks;

   (ii) meets the minimum mandatory requirements of this CoP;

   (iii) meets the requirements of relevant Sector Regulatory Authority (SRA) and relevant Emirate and Federal emergency services; and

   (iv) meets the requirements of relevant Emirate and Federal Regulations (eg. UAE Fire and Life Safety Code of Practice 2011).

3.2 Emergency Management Program

(a) Emergency Management Program(s) (EMP's) shall:

   (i) aim to cover incidents that may result from activities carried out by the employer (internal risk) and, to the relevant extent, incidents beyond the control of the employer (external risk); and

   (ii) be linked with, and based on a risk management process covering the employers full scope of operations, as described in *AD EHSMS RF – Element 02 – Risk Management.* Although reasonable control measures to reduce risk may be implemented, there shall normally be some residual risk that may lead to emergencies, as a result of control failures associated with routine operations.

(b) EMP(s) shall address, at a minimum:

    (i)   overall accountability for the Program;

    (ii)   specific emergency management roles, responsibilities and resources;

    (iii) risk-based identification of potential emergency situations;

    (iv) appropriate risk-based and linked Emergency Response Plans (refer Section 3.3), complete with escalation tiers and procedures, including:

        1) own threat specific plans;

        2) own facility specific plans;

        3) own appropriate support / functional plans; and

        4) other plans (eg. of sector, contactor, mutual aid, or government) that are led, supported, relied upon, or triggered by own plans.

    (v)   provision of appropriate resources (human, facilities, equipment, training);

    (vi) arrangements for external stakeholder liaison, communications, requirements and support actions;

    (vii) arrangements for communications with local authorities and emergency services;

    (viii) periodic emergency response tests and exercises; and

    (ix) monitoring and review of plans and procedures.

(c) Employers shall identify and appoint competent persons to manage the Program and implement Emergency Response Plans. Such personnel shall be:

    (i)   fitted into an incident command and control structure;

    (ii)   competent to discharge their assigned roles;

    (iii) appropriately equipped to do their assigned work safely;

    (iv) forewarned of risks and their remedies (eg. through site risk assessments, toolbox talks, and Safety Data Sheets when handling hazardous materials);

    (v)   trained to carry out their duties safely;

    (vi) exercised in the relevant emergency response plans; and

    (vii) appropriately delegated to execute their roles and responsibilities.

(d) EMP's shall identify requirements for first aid kits and medical services centres, as outlined in *AD EHS RI – CoP 4.0 – First Aid and Medical Treatment*.

(e) EMP's shall include joint training, exercises and drills with the local emergency services as required facilitating effective preparedness. Close communication, cooperation and coordination with such services shall assist the entity in further developing and refining its Program and Emergency Response Plans. The following types of exercises shall be covered to the extent appropriate:

    (i)   notification exercises, which test the accuracy of call plans within a specified time frame and evaluate the quality of call handling;

(ii)   desk-top exercises, which involve the responders reacting to a simulated emergency across a table setting, usually in an Emergency Operations Centre (refer Section 3.4);

(iii)   equipment deployment exercises, which test the ability to combat a simulated emergency scenario with the equipment at disposal; and

(iv)   full incident management exercises, which simulate the real emergency. These exercises require advanced pre-planning, and shall include the stakeholders that are reasonably foreseeable to be involved in the real emergency.

(f)   To be cost-effective, the investment in emergency management shall be commensurate with the potential risks and consequences of reasonably foreseeable emergencies:

(i)   the investment shall at least set response control measures to all credible emergency scenarios;

(ii)   worst-case scenario planning shall be considered and discussed with relevant SRA and emergency management services; and

(iii)   consideration shall be given to the establishment of on-site fire and emergency response services where:

1)   entity is located in an area where response times for local emergency services are considered excessively long; and

2)   investment is justified by the risk assessment.

3.3   Emergency Response Plans

(a)   Emergency Response Plans (ERPs) are action execute documents that are produced and maintained to safeguard people, environment, property or business from foreseeable emergency scenarios.

(b)   At a minimum, each employer shall develop:

(i)   a Fire Prevention Plan(s) (refer Section 3.6); and

(ii)   an Emergency Evacuation Plan(s) (refer Section 3.7).

(c)   Based on hazard identification, risk assessment and credible event analysis, response plans shall be developed for other foreseeable scenarios, which shall include, but are not limited to:

(i)   release of hazardous material;

(ii)   natural disaster (eg. storm, flood, earthquake);

(iii)   bomb threat / terrorism;

(iv)   marine pollution;

(v)   radiological incident;

(vi)   biological agent release; and

(vii)   transport incidents (air, marine, road or rail).

(d) In very small premises the Emergency Response Plan may be no more than a short action notice. However, in larger and more complex premises the ERP shall need to be more detailed and developed in consultation with relevant emergency services, external support agencies, and other stakeholders where required.

(e) Each ERP shall be :

  (i) appropriate to the size and nature of the employers activities and commensurate with the emergencies it intends to manage;

  (ii) based on examination of relevant emirate, national or international standards and recommended inclusions for emergency management;

  (iii) linked with other plans where appropriate (eg. plans of sector, contractor, mutual aid or government that are led, supported, relied upon, or triggered by this plan);

  (iv) flexible;

  (v) straightforward and easy to understand and follow;

  (vi) in place prior to any operations involving the underlying inherent risk;

  (vii) communicated to employees and other relevant parties / authorities;

  (viii) put in use when a corresponding emergency occurs; and

  (ix) well controlled and maintained.

(f) For control and execution purposes each ERP shall name and identify responsibilities and contact numbers of holders of the following roles:

  (i) ERP owner (single point of accountability);

  (ii) ERP custodian (single point of contact);

  (iii) emergency duty manager, who can call-out other required role holders; and

  (iv) any special response teams and command duties involved in plan execution, whether in the office or in the field.

(g) Employers shall recognise that no emergency task is so important as to risk the lives of emergency responders in the pursuit of protecting the people, the environment, property and business. To protect the health and safety of employees during on-scene incidents, each Emergency Response Plan shall consider and identify all the actions required when there is an emergency, including the following:

  (i) under what circumstances can first respondent persons isolate and contain the source of emergency (eg. fire or chemical release)? If the employer wants employees to attempt to isolate the source of and combat the emergency, the initial actions shall be planned and practiced in advance;

  (ii) respondent shall be appropriately trained and competent;

  (iii) when is it necessary to escalate response to mobilize / bring on-call resources to participate with a more significant emergency?; and

(iv) what alarm trigger scenarios shall require all employees and other persons (total head-count) to evacuate the danger area to a pre-planned safe area, and leave the emergency to be handled by the local emergency services? This is usually required when the hazards are unknown or the interactions on scene are so complex as to invalidate the pre-planning.

(h) To facilitate linkage of Emergency Response Plans, it is recommended that each ERP shall:

(i) evaluate its relevant emergency scenarios into Tiers as follows:

1) Tier 1: Events are typically of localized significance and can be handled using resources immediately available within / to the employer;

2) Tier 2: Events are typically of regional or Emirate significance and may require involvement of specialized emergency services; and

3) Tier 3: Events are typically of international significance and may require access to national / international resources and emergency response services;

(ii) include an incident command and control structure that can expand / contract according to incident tier;

(iii) cover the scope of Tier 1 scenarios, and contain appropriate content to recognise Tier 2 or Tier 3 scenarios and mobilise required support resources and plans; and

(iv) Consider the following as minimum generic content:

0.0   Document Control

(Including authorization, distribution, revision record, and glossary of terms & abbreviations)

1.0   Introduction

1.1 Aim / Objectives
1.2 Scope
1.3 Roles and Responsibilities

2.0   Linkage with Other Plans

2.1 Key Stakeholders (and their roles and responsibilities)
2.2 Linked plans and linkage guidelines

3.0   Risk Assessment

3.1 Credible Scenarios
3.2 Worst case Scenario
3.3 Tiered Response Definitions

4.0   Organisation

4.1 Tier 1 Organisation
4.2 Tier 2 Organisation
4.3 Tier 3 Organisation

5.0   Emergency Response Activities

5.1 Alerts and Notifications
5.2 Immediate Reactions
5.3 Combat Operating procedures

5.4 Communications System/s

6.0   Post Incident Activities

6.1 Site restoration / remediation / waste management
6.2 Post incident evaluation

7.0   Training & Exercises

7.1 Training plan and matrix
7.2 Exercise and Drill Plan

8.0   Checklists / Aide-Memoirs

9.0   Reporting Requirements

10.0   Appendices
(Including essential data , eg. equipment inventories, critical vendors, emergency contacts, Safety Data Sheets, etc.)

(i) ERP(s) shall be subject to exercises, tests and/or drills at a frequency necessary to assure that all participants are aware of and able to perform required duties under the Plan. Following each exercise, test or drill:

    (i) performance of the exercise, test or drills shall be reviewed and documented; and

    (ii) the Plan shall be modified as necessary to resolve deficiencies noted in the review.

(j) ERP(s) shall be reviewed at least annually, or whenever significant operational changes or conditions in the workplace necessitate additional review. When the plan is reviewed:

    (i) all affected persons shall be informed of significant changes in duties, actions and obligations under the Plan; and

    (ii) all controlled copy holders of the Plan shall receive exact revision updates.

3.4   Emergency Personnel

(a) Employers shall ensure appropriate emergency personnel are provided / allocated based on the results of emergency planning and risk assessment.

(b) Employers shall ensure emergency personnel receive and maintain appropriate training and competency levels.

(c) Employers shall ensure clearly documented emergency personnel duties and responsibilities, refer to Appendix A.

3.5   Identification of Emergency Personnel

(a) All members of the entities emergency team / personnel shall be identifiable in accordance with the following:

    (i) shall be identifiable by the use of coloured vest;

(ii)   in-house first aid personnel shall be identified by a white cross / crescent on a green background;

(iii)   identification apparel shall be prominently marked with the wearer's emergency role / title;

(iv)   the specific floor, area or building may also be identified;

(v)   the type of identification used for each designation shall be consistent throughout the facility / entity;

(vi)   if there is a specific emergency response team to support the EOC they shall be clearly identified; and

(vii)   the identification colours white, yellow and red shall approximate the RGB or CMYK colors listed in Table below.

Emergency Role / Position	Color	RGB	CMYK
Lead Emergency Officer (Incident Controller)	White	255, 255, 255	0,0,0,0
Deputy Emergency Officer	White	255, 255, 255	0,0,0,0
Area Fire Warden	Yellow	255, 215, 0	0, 16, 100, 0
Emergency Response Team Member	Yellow	255, 215, 0	0, 16, 100, 0
Fire Warden	Red	227, 66, 52	0, 71, 77, 11
First Aid Personnel	Green	14, 171, 114	62, 0, 22, 33

Table 1: Color Code for Emergency Personnel Vests

3.6   Emergency Operations Center (EOC)

(a) To enhance coordination and communication during emergencies, an area shall be assigned where decision makers gather during an emergency. This area would serve as the main communication link between the on-scene team, the business line managers, any incident support teams, and with local emergency services where required. For purposes of this CoP this area shall be referred to as an Emergency Operations Centre (EOC) regardless of its size, complexity of equipment and operations, or assigned name.

(b) The EOC shall be:

(i)   of a size, design, equipment, manning level, and leadership structure that is commensurate with the size and potential risks of the entity;

(ii)   located in a safe area so that command and control is maintained throughout the duration of an emergency. If warranted by risk assessment, an alternate location shall also be identified and fitted to serve as a temporary or alternate EOC; and

(iii)   ready for and capable of activation at short notice.

(c) For small sized entities and/or those with low risk levels, a conventional EOC may not be required but some asset shall be identified for coordination purposes such as an office, a portable building or a vehicle.

(d) For large sized entities and/or those having high risk levels, a typical EOC with full emergency management functionality shall be equipped with:

  (i) space and seating large enough to accommodate the core required emergency role members, which conventionally may include an Incident Commander, Liaison Officer, Safety Officer, Operations Chief, Logistics Chief, Planning Chief, Board Keeper, Log Keeper;

  (ii) required equipment and supplies, which conventionally may include:

    1) uninterrupted power supply;

    2) communication devices to receive and transmit voice and data (telephone, e-mail and fax as minimum, satellite, UHF and VHF as options);

    3) backup communication network / arrangements in case one communication means fails;

    4) computer(s) for information management;

    5) decision aid software eg. computer models for predicting fate and movement of oil, chemical and gas release;

    6) intranet and internet access to useful relevant data, eg. news services, weather services and information centres;

    7) information management forms, eg. sign-in / sign-out, initial incident facts, situation report, and log sheet; and

    8) situation displays / boards (to report / present incident facts, maps/ charts/ diagrams, problems, proposed solutions, tasks, etc).

  (iii) required reference documentation, which conventionally may include:

    1) contact directories of all concerned parties;

    2) ready access and scenario specific call plans;

    3) controlled issues of linked Emergency Response Plans (internal or external) that shall be consulted / relied on;

    4) mutual aid plans / agreements;

    5) relevant manuals / guides;

    6) relevant maps, charts, diagrams;

    7) equipment inventories; (i) own, (ii) contract, (iii) mutual aid, (iv) other; and

    8) relevant Safety Data Sheets (in case of handling hazardous materials);

(e) Emergency management personnel and other concerned stakeholders shall be fully aware of work procedures for the activation, operation and deactivation of the EOC.

(f) In an emergency ERG takes over until restoration and normal management control is handed over until restoration.

3.7 Communication and Reporting

(a) The emergency management communications system shall address at a minimum:

  (i) dissemination of relevant information;

  (ii) issuing of alarms;

  (iii) issuing and receiving of notifications of potential or actual emergencies;

  (iv) activation of the appropriate commensurate response plan(s);

  (v) reporting of incidents and outcomes of their investigation and post incident evaluation; and

  (vi) any required communications with the media.

(b) To ensure comprehension and understanding by all affected persons, emergency contact information, notification and reporting procedures, evacuation plans and other pertinent information shall be communicated:

  (i) to all employees and occupants of the workplace;

  (ii) in an appropriate manner; and

  (iii) in Arabic and English, as well as in other languages where necessary.

(c) Alarm systems in the workplace shall:

  (i) be appropriate to the nature, size and complexity of the entity's operations and its risks;

  (ii) comply with applicable Abu Dhabi Building Codes and / or applicable international standards;

  (iii) ideally combine audible alarm and public address systems; and

  (iv) provide for alternate arrangements (eg. manual alarm systems) for cases when the principal alarm systems fail to operate;

(d) Entity shall have procedures in place to assure that notifications of emergencies are received quickly, and that appropriate actions are executed in a timely manner.

(e) Emergency incidents involving employees, members of the community, or affecting the environment shall be:

  (i) recorded;

  (ii) notified to the relevant SRA;

  (iii) notified to other relevant competent authorities where required;

  (iv) notified to local emergency services if external support is required to control the incident, including the following as / where necessary:

    1) Ambulance Services – to administer first aid, and provide medical and transport services;

    2) Local Fire Services (Civil Defence) – to manage and control a fire situation (potential or otherwise);

3) Police Services – to control traffic, offsite exclusion zones and public evacuations; and if incident is suspected to be a deliberate and potentially criminal act;

4) Health Authority - Abu Dhabi – regarding incidents involving biological health hazards, and medical coordination of disasters and major incidents in Abu Dhabi;

5) Federal Authority for Nuclear Regulation – regarding incidents involving radiological hazards;

6) Environment Agency – Abu Dhabi – regarding pollution of the environment;

7) Municipality – to inform, advise, or assist local populations during the incident; and

8) Media – to inform, advise or warn local populations of the nature of the incident, as allowed by the entity's emergency management communication system.

(v) investigated by the entity and / or the relevant SRA to assess causes, examine lessons learnt, and agree improvement actions to prevent recurrence;

(vi) the subject of formal collective debriefing and discussion with all other parties involved if the incident required external support to be controlled;

(vii) reported, following investigation and any debriefing, to the Sector Regulatory Authority as soon as practicable after the emergency. The report shall identify:

1) the root cause(s) of the incident;

2) how that emergency might have been prevented;

3) what actions are to be taken to avoid the same, or a similar, emergency from occurring again;

4) what actions are to be taken to decontaminate, or clean-up any pollution of land or water; and

5) the time frame for implementation of those actions.

(viii) reported, where required, to the lead emergency or other support services involved.

(f) Emergency incidents involving employees, members of the community, or affecting the environment shall be recorded, notified, investigated and reported within the time frames and following procedures outlined in *AD EHS RI – Mechanism 6.0 – EHSMS Performance and Incident Reporting*.

3.8 Fire and Explosion Prevention Plan

(a) Each employer shall have:

(i) a fire prevention plan to minimize the risk of fire, facilitate prompt detection of fire, allow for combating fire incidents to the extent reasonably practicable by local resources without endangering lives of employees / occupants, and facilitate calling of the local emergency services to handle the fire if it escalates; and

(ii) prevention and mitigation control measures to avoid the occurrence of explosions where the possibility for them exists (eg. due to the presence of liquid, solid or gas).

(b) The fire and / or explosion prevention plan shall be developed as outlined in *AD EHS RI – CoP 7.0 – Fire Prevention Planning and Control*.

3.9 Emergency Evacuation Plan

(a) Each employer shall have an Emergency Evacuation Plan to ensure the prompt and orderly evacuation of employees and other occupants (including visitors, customers, etc) when a pre-defined emergency threat or an actual emergency situation occurs.

(b) The Emergency Evacuation Plan shall be appropriate to the premises and shall include:

  (i)   the duties and identity of staff who have specific responsibilities in evacuation;

  (ii)   identification of key escape routes, and how people can gain access to them and escape to a place of total safety;

  (iii)   how people shall be warned if there is need to evacuate;

  (iv)   how the evacuation of the premises shall be carried out and any arrangements for phased evacuation (where some areas are evacuated while others are alerted but not evacuated until later);

  (v)   where people shall assemble after they have left the premises and what procedures shall be used to account for employees / occupants and confirm full evacuation;

  (vi)   arrangements for the safe evacuation of people with special needs, such as those with disabilities, lone employees and young persons;

  (vii)   arrangements for the evacuation of any special risk areas;

  (viii) arrangements to deal with people once they have left the premises;

  (ix)   procedures for meeting rescue service on their arrival and notifying them of any special risks or any staff that could not be evacuated;

  (x)   training needs and arrangements for ensuring this training is given; and

  (xi)   guidance to employees / occupants on how to safely exit the building and assemble, stressing that preservation of life requires individuals reacting immediately to the evacuation alarm.

(c) The evacuation routes shall be selected, equipped and managed such that they:

  (i)   lead to emergency exits that are appropriate for the risks and size of the premises / workplace and the number of occupants that may be present at any one time;

  (ii)   lead to emergency exit doors that open in the direction of escape (sliding or revolving doors shall not be used as emergency exits) and are not locked or fastened;

  (iii)   lead as directly as reasonably practicable to a place of safety;

  (iv)   are marked by signs and with appropriate illumination to guide occupants to a place of safety; and

  (v)   are kept clear of obstructions at all times.

(d) The Emergency Evacuation Plan shall cover any special equipment and arrangements that are justified by risk assessment, including but not limited to the following:

  (i)   wind direction indicator, such as a windsock or pennant, for outdoor processes where wind direction is important for selecting the safe route to a safe area. The indicator shall be placed at a high point that can be seen throughout the process area, so that

employees can assess the wind direction and move upwind or cross wind to gain safe access to the safe area;

    (ii)   alternative assembly stations for large or complex premises; and

    (iii)   safe refuge locations for premises that cannot guarantee safe evacuation access to all scenarios. These locations shall be fitted with any supplies that may be required to provide a guaranteed length of survivability, eg. water, food and medical supplies.

(e)   Evacuation route maps, complete with locations of emergency exits and assembly points, shall be posted throughout the facility in a manner and quantity that assures the availability of the information to all occupants.

3.10   Hazardous Materials

(a)   Each employer shall have management, security and containment control measures in place to avoid loss of containment and potential uncontrolled release of:

    (i)   potentially toxic materials, whether liquid, solid or gas;

    (ii)   materials that may lead to adverse reactions when in contact with other incompatible materials;

    (iii)   radioactive materials, whether liquid, solid or gas; and

    (iv)   biologically hazardous materials or disease-causing agents which, after release into the environment and upon exposure, ingestion, inhalation, or absorption;

        1)   can be assimilated into any person or animal, either directly from the environment or indirectly by ingestion through the food chain; and

        2)   shall or may reasonably be anticipated to cause death, disease, behavioural abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunction in reproduction), or physical deformation in such persons, animals, or their offspring.

(b)   Any employer that houses a material as described in this CoP shall have one or more Emergency Response Plans that cover, to the extent warranted by risk assessment:

    (i)   potential employee and public exposure scenarios, and personal protective equipment and evacuation requirements thus required;

    (ii)   potential environmental release scenarios, and control measures required to avoid or mitigate pollution of the air, water or land;

    (iii)   isolation and quarantine requirements;

    (iv)   medical surveillance of exposed and potentially exposed personnel;

    (v)   decontamination procedures and other required control measures to control, combat and remedy the consequences of the incident;

    (vi)   required control measures regarding on-scene command, site safety, source control, perimeter isolation, rescue, first aid, equipment staging, welfare and liaison;

    (vii)   requirements of applicable laws and regulations, and international best practice; and

    (viii)   links with relevant Emergency Response Plans of competent authorities and local emergency services, including:

1) pandemic Emergency Response Plans of local / federal health authorities, and any required immunization programs, public assembly restrictions, and requirements for the management and disposal of bio-hazardous wastes; and

2) Emergency Response Plans of the Federal Authority for Nuclear Regulation, Plans of emergency management services and authorities in charge of incidents of radioactive sources in Abu Dhabi Emirate, and any requirements therein.

(c) It is recommended that employers train their staff to cordon off the scene of a hazardous material incident into HOT, WARM and COLD Zones, whereby:

(i) the HOT Zone is the contaminated area, which may be entered only by trained responders;

(ii) the WARM Zone is the decontamination corridor where responders and equipment are cleaned to avoid secondary contamination;

(iii) the COLD Zone is the safe upwind locations used for the command post, first aid station, emergency evacuation assembly point, equipment staging area, rest area, refreshments ,etc; and

(iv) appropriate zone control (tape, signage), assessment equipment (binoculars, monitors, etc) and personal protective equipment (respiratory, eyes, head, hands, feet etc) shall be provided, used and maintained.

4. References

- *AD EHSMS RF – Element 02 – Risk Management*

- *AD EHSMS RF – Element 06 – Emergency Response and Management*

- *AD EHS RI – CoP 4.0 – First Aid and Medical Treatment*

- *AD EHS RI – CoP 7.0 – Fire Prevention Planning and Control*

- *UAE Fire and Life Code of Practice 2011 – Civil Defence*

- *The Guideline for Hotel Emergency Management Plans – ADTA – Version 1.0 – 2011*

- *Peer review and input by emergency management professionals at the Sector Regulatory Authorities and at competent authorities with emergency management responsibilities, including National Crisis and Emergency Management Authority, Critical National Infrastructure Authority, and Environment Agency – Abu Dhabi*

Appendix A: Emergency Personnel Roles and Responsibilities

The following list of emergency personnel roles and responsibilities has been provided as guidance.

1. Pre-Emergency:

The actions to be undertaken by the ECO prior to an emergency event shall be as set out in the emergency response procedures and may include the following:

Emergency Officer:

1. Maintain a current register of ECO members.
2. Replace ECO members when a position becomes vacant.
3. Conduct regular exercises.
4. Ensure the emergency response procedures are kept up-to-date.
5. Attend meetings, as appropriate.
6. Attend training and emergency exercises, as required.
7. Ensure personal ECO identification is available.

Area Fire warden:

1. Confirm appropriate wardens for area of responsibility.
2. Report on deficiencies of emergency equipment.
3. Ensure that wardens have communicated the emergency response procedures to all occupants within their nominated areas.
4. Ensure that occupants are aware of the identity of their wardens.
5. Coordinate safety practices (eg. clear egress paths, access to first-attack equipment and disposal of rubbish) by wardens throughout their area of responsibility.
6. Attend training and emergency exercises, as required.
7. Ensure personal ECO identification is available.

Fire Warden:

1. Ensure that all occupants are aware of the emergency response procedures.
2. Carry out safety practices (eg. clear egress paths, access to first-attack equipment and disposal of rubbish).
3. Ensure personal ECO identification is available.
4. Attend training and emergency exercises, as required.

Emergency Response Team:

1. Attend regular training.
2. Practice use of specialized equipment.
3. Maintain specialized equipment as per manufacturers' specifications.

4. Ensure that personal protective equipment is maintained and available.

5. Ensure personal ERT identification is available.

6. Pre-emergency planning.

7. Attend training and emergency exercises, as required.

2.   During Emergency

The actions to be undertaken by the ECO in the event of an emergency shall include, but not be limited to, the following:

Emergency Officer:

On becoming aware of an emergency, the emergency officer shall take the following actions:

1. Respond and take control, as appropriate.

2. Ascertain the nature of the emergency and implement appropriate action.

3. Ensure that the appropriate Emergency Service has been notified.

4. Ensure that (Area) fire wardens are advised of the situation, as appropriate.

5. If necessary, after evaluation of the situation and using all of the information, and resources available, initiate an action plan in accordance with the emergency response procedures and control entry to the affected areas.

6. Monitor the progress of the evacuation and record any action taken in an incident log.

7. Brief the Emergency Services personnel upon arrival on type, scope and location of the emergency and the status of the evacuation and, thereafter, act on the incident commander's instructions.

8. Any other actions as considered to be necessary or as directed by Emergency Services.

Deputy Emergency Officer:

The deputy emergency officer shall assume the responsibilities normally carried out by the emergency officer if the emergency officer is unavailable, and otherwise assist as required.

Area Fire Warden:

On hearing an alarm or on becoming aware of an emergency, the Area fire wardens shall take the following actions:

1. Implement the emergency response procedures for their area.

2. Ensure that the appropriate Emergency Service has been notified.

3. Direct fire wardens to check the floor or area for any abnormal situation.

4. Commence evacuation if the circumstances on their floor or area warrant this.

5. Communicate with the emergency officer by whatever means available and act on instructions.

6. Advise the emergency officer as soon as RP of the circumstances and action taken.

7. Co-opt persons as required to assist a fire warden during an emergency.

8. Confirm that the activities of fire wardens have been completed and report this to the emergency officer or the incident commander of the attending Emergency Services if the emergency officer is not contactable.

Fire Warden:

Persons selected as fire wardens shall carry out activities as set out in the emergency response procedures and as directed by the Area fire warden. Wardens' activities may include the following:

1. Act as Area fire wardens.

2. Operate the communication system(s) in place.

3. Check that any fire doors and smoke doors are properly closed.

4. Close or open other doors in accordance with the emergency response procedures.

5. Search the floor or area to ensure all people have evacuated. This function is of greater importance than a later physical count of those evacuated.

6. Ensure orderly flow of people into protected areas, for example, stairways.

7. Assist guests with disabilities.

8. Act as leader of groups moving to nominated assembly areas.

9. Report status of required activities to the Area fire warden on their completion.

Emergency Response Team:

Members of the emergency response team shall carry out activities as set out in the emergency response procedures and the following:

1. Respond to the emergency as directed by the emergency officer.

2. Communicate the status of the situation with the emergency officer.

3. Hand over and brief Emergency Services on arrival.

3.   Post-Emergency

The actions to be undertaken by the ECO after an emergency shall include, but not be limited to, the following:

Emergency Officer:

1. When the emergency incident is rendered safe or the Emergency Service returns control, notify the ECO members to have occupants return to their facility, as appropriate.

2. Organize debrief with ECO members and, where appropriate, with any attending Emergency Service.

3. Compile a report for the management.

Area Fire Warden:

Compile a report of the actions taken during the emergency for the debrief.

Emergency Response Team:

1. Clean and service used specialized equipment.
2. Replace specialized equipment as necessary.

Taken from "The Guideline for Hotel Emergency Management Plans (ADTA), 2011.