

مركز أبوظبي للصحة المهنية  
ABU DHABI OCCUPATIONAL SAFETY AND HEALTH CENTER

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# Abu Dhabi Occupational Safety and Health System Framework

**(OSHAD-SF)**

**Code of Practice**

**CoP 1.0 – Hazardous Materials**

**Version 3.1**

**June 2018**

ABU DHABI PUBLIC  
HEALTH CENTRE

مركز أبوظبي  
للصحة العامة



## Important Note:

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## 1. Introduction

- (a) This Code of Practice (CoP) applies to all duty holders within the Emirate of Abu Dhabi that import, store, transport, sell, or use hazardous materials.
- (b) The purpose of this CoP is to reduce associated risks to the health and safety of employees, and the community.
- (c) This CoP is not a substitute for any other laws or regulations mandated by the Federal Government or the Government of Abu Dhabi, or advisory guidance established by other Abu Dhabi government authorities. It is the responsibility of the Employers to ensure that this document is read and applied in conjunction with applicable laws, regulations and guidance relevant to the entity. If requirements of this document conflict with requirements set by another regulatory authority, employees are required to follow the more stringent requirement.
- (d) This CoP does not apply to radioactive sources (Class 7 of the United Nations Model Regulations, which are not included in Federal Law No. 24 of 1999). Of the materials classified as explosives (Class 1 in Regulations of the Federal Law No. 24 of 1999 and the UN Model Regulations), this CoP shall only apply to chemical substances that have explosive properties but are also used for other applications (e.g. ammonium nitrate as fertilizer).

## 2. Training and Competency

- (a) Employers shall ensure that OSH training complies with the requirements of:
- (i) *OSHAD-SF – Element 5 – Training, Awareness and Competency;*
  - (ii) *OSHAD-SF – Mechanism 7– OSH Professional Entity Registration; and*
  - (iii) *OSHAD-SF– Mechanism 8 – OSH Practitioner Registration.*
- (b) Employers shall train all employees on the general awareness/familiarization of hazardous materials prior to starting work.
- (c) Employers that import, store, transport, sell, or use hazardous materials shall train all employees and contractors that package, handle, store, or transport hazardous materials to a level that is commensurate with their responsibilities. At a minimum, training shall include:
- (i) use of Safety Data Sheets (SDS) (previously known as Material Safety Data Sheets, MSDS) and/or profile sheets;
  - (ii) required Personal Protective Equipment (PPE) when handling hazardous materials;
  - (iii) properties of and risks associated with hazardous materials;
  - (iv) storage, handling and decanting requirements;
  - (v) appropriate disposal requirements;
  - (vi) actions to take to prevent accidental exposures or releases of hazardous materials;
  - (vii) incompatible materials and segregation requirements;
  - (viii) appropriate labeling of hazardous materials and hazardous waste;
  - (ix) meaning of signs and placards;
  - (x) specialized training for specific hazardous material management requirements applicable to the responsibilities of their position; and
  - (xi) control measures to take if there is an incident involving hazardous materials.
- (d) Employers that transport hazardous materials shall train employees transporting hazardous materials on the following:
- (i) all training listed in Section 2(c);
  - (ii) safe driving techniques;
  - (iii) correct loading and unloading techniques;
  - (iv) correct techniques for securing loads;
  - (v) actions to take in the event of an incident;
  - (vi) actions to take if there is a release/spill of hazardous materials during transport;
  - (vii) any applicable journey management, reporting and logbook requirements; and
  - (viii) any transport pathways pre-assigned by the authorities.

- (e) Employers involved in classifying, labeling, packaging, preparation of transport documents for hazardous materials, offering or accepting hazardous materials for transport, carrying or handling hazardous materials in transport, marking / placarding / loading / unloading of hazardous materials into or from transport vehicles / bulk packaging / freight containers or are otherwise directly involved in the transport and handling of hazardous materials shall train contractors and employees on the following:
- (i) all training listed in Section 2(c);
  - (ii) requirements for labeling, marking, and placarding;
  - (iii) hazard classification criteria;
  - (iv) purpose and requirements for transport documentation; and
  - (v) use of emergency management documents.
- (f) Employers shall at a minimum train their managers and supervisors on the following elements of security awareness:
- (i) nature and recognition of security risks;
  - (ii) control measures to reduce identified security risks;
  - (iii) actions to be taken in the event of security breaches; and
  - (iv) notification systems to alert management about new security risks.
- (g) Training shall take into account literacy levels and be held in an appropriate language for the employees.

## 3. Requirements

### 3.1 Roles and Responsibilities

#### 3.1.1 All Employers that Handle Hazardous Materials

- (a) Employers that handle hazardous materials shall perform a risk assessment in accordance with *OSHAD-SF – Element 2 – Risk Management*. The assessment shall cover all activities, products and services to identify all hazardous materials that are present, stored or being handled at the worksite and the risks associated with them.
- (b) Employers shall familiarize themselves with the requirements of all Federal and Abu Dhabi Emirate laws and regulations applicable to the hazardous materials they handle, including but not limited to:
- (i) *Federal Law No. (24) of 1999 concerning Protection and Development of the Environment*;
  - (ii) *Federal Regulations for Handling Hazardous Materials, Hazardous Wastes and Medical Wastes, issued by Cabinet Decree No. 37 of 2001*;
  - (iii) *Environment Agency – Abu Dhabi procedures and guidelines applicable to hazardous materials*”;
  - (iv) current editions of international model regulations / codes of practice ratified by the United Arab Emirate and came into force;
  - (v) current editions of international model regulations prescribed by applicable federal or local laws and regulations or by federal or local Competent Authorities;
  - (vi) requirements of relevant Competent Authorities and/or SRA’s as identified through codes of practice, guidelines, permit conditions, notices, information bulletins and inspection and audit reports; and
  - (vii) Safety Data Sheets issued by manufacturers of hazardous materials.
- (c) Employers shall familiarise themselves with the lists of hazardous materials that are banned or restricted by applicable laws and regulations. Employers shall ensure they:
- (i) do not import, produce, store, export or otherwise handle any banned materials;
  - (ii) obtain any import permits / approvals required by the relevant Competent Authorities before proceeding to import any restricted materials; and
  - (iii) comply in the handling of each restricted material with the corresponding special requirements and conditions set by the relevant Competent Authorities.
- Note: For information on lists of banned and restricted hazardous materials and their relevant Competent Authorities, visit [www.hazmat.ae](http://www.hazmat.ae)**
- (d) Employers shall ensure they have the permits, licenses, approvals, and other necessary documentation required by the relevant Competent Authorities and/or SRA’s to undertake their activities.
- (e) Employers shall appoint competent persons to oversee the storage, use and disposal of hazardous materials within the workplace.

- (f) Employers shall implement all reasonably practicable control measures to reduce the harmful effects of hazardous materials on human health by preventing and/or minimizing emissions, exposure and hazardous waste generation at source.
- (g) Employers shall conduct routine inspections of hazardous materials in storage / use and replace expired or damaged materials. Expired or damaged materials shall be handled in accordance with applicable Federal and Local regulations. Unclear or damaged labels shall be replaced.
- (h) Employers shall ensure that expired and waste chemicals and hazardous materials are disposed of through methods or contractors that are approved / permitted by the Center of Waste Management – Abu Dhabi, as per *OSHAD-SF – CoP – 54.0 – Waste Management*.
- (i) Employers shall implement appropriate programs for protecting safety and health of employees working with or near hazardous materials.
- (j) Employers shall develop an emergency response plan for incidents involving hazardous materials. Refer to Section 3.3.

### **3.1.2 Manufacturers of Hazardous Materials**

- (a) Manufacturers of hazardous materials shall assess and classify materials by reference to applicable international model regulations (e.g. Globally Harmonized System of Classification And Labelling of Chemicals), laboratory analysis, expert judgment, and/or weight of evidence to determine if materials create a:
  - (i) physical hazard;
  - (ii) health hazard;
  - (iii) biological hazard; or
  - (iv) other hazard.
- (b) Manufacturers of hazardous materials shall:
  - (i) use the data obtained during the classification process to create a Safety Data Sheet (SDS) in accordance with applicable international model regulations;
  - (ii) provide a copy of the SDS with any shipment of the hazardous material offsite;
  - (iii) as far as reasonably practicable, make an electronic copy of the SDS available to end users;
  - (iv) maintain appropriate inventory records;
  - (v) review and update the SDS on an annual basis; and
  - (vi) ensure all individual containers or bulk packaging of hazardous materials are labelled as required by applicable federal and local laws and regulations and / or applicable international model regulations.



### 3.1.3 Importers and Distributors of Hazardous Materials

- (a) To the extent required by applicable federal and local laws and regulations and /or concerned federal or local Competent Authorities and / or SRA's, Importers and Distributors of hazardous materials:
- (i) shall not import any restricted material unless in possession of required import permit(s) / approval(s);
  - (ii) shall not store, transport, dispense, sell, or dispose of any hazardous material unless it is appropriately packaged and labelled and accompanied by a SDS or equivalent;
  - (iii) shall maintain appropriate inventory records; and
  - (iv) shall inform manufacturer's or suppliers of hazardous materials of local relevant requirements.

### 3.1.4 Transporters of Hazardous Materials

- (a) For each mode of transport in use, transporters must comply in the receipt, handling, packaging, labelling, documentation, transport and delivery of hazardous materials shipments with the requirements stipulated by:
- (i) applicable Federal and Local laws and regulations;
  - (ii) current editions of international model regulations / codes of practice ratified by the United Arab Emirate and came into force;
  - (iii) current editions of international model regulations prescribed by applicable federal or local laws and regulations or by federal or local Competent Authorities;
  - (iv) requirements of relevant Competent Authorities and/or SRA's as identified through codes of practice, guidelines, permit conditions, notices, information bulletins and inspection and audit reports;
  - (v) Safety Data Sheets issued by manufacturers of hazardous materials; and
  - (vi) any special instructions for handling any specified hazardous materials.

- (b) To the extent required by the applicable laws and regulations and / or relevant Competent Authorities and / or SRA's, transporters shall ensure that hazardous materials are transported:
- (i) in compatible and appropriately labelled containers, packages, vehicles or tankers;
  - (ii) in appropriate packages or containers that are secured (blocked and braced) in the vehicle to prevent damage during transportation;
  - (iii) using vehicles constructed to an approved specification;
  - (iv) using vehicles equipped with appropriate fire extinguishers, flash lights and/ or other emergency management equipment and information;
  - (v) using vehicles that are appropriately maintained and in good condition;
  - (vi) using vehicles equipped with Global Positioning System (GPS) devices;
  - (vii) using appropriately permitted vehicles;
  - (viii) using a manifest based journey management system to document transport and delivery operations;
  - (ix) by qualified drivers / persons;
  - (x) with appropriate security escort; and
  - (xi) through roads pre-assigned for this purpose within the Abu Dhabi Emirate.
- (c) Transporters shall develop an Emergency Response Plan for incidents during transportation of hazardous materials. Refer Section 3.3.

### **3.1.5 Entities Using or Storing Hazardous Materials**

- (a) Employers that mix hazardous materials or produce hazardous waste shall:
- (i) assess and classify the material / waste as described in clause 3.1.2(a);
  - (ii) use the data obtained during the classification process to create a profile sheet equivalent to an SDS. However, this document shall be identified as a "Mixed Material Profile" or a "Waste Material Profile" and not as a SDS;
  - (iii) provide a copy of the "Mixed Material Profile" or "Waste Material Profile" with any shipment of hazardous material / waste offsite;
  - (iv) as far as reasonably practicable, make an electronic copy of the "Mixed Material Profile" or "Waste Material Profile" available to end users / handlers;
  - (v) review and update the "Mixed Material Profile" or "Waste Material Profile" on an annual basis;
  - (vi) maintain appropriate inventory records; and
  - (vii) ensure all individual containers and bulk packaging of hazardous materials / wastes are labelled as required by applicable federal and local laws and regulations and / or applicable international model regulations.
- (b) When not in operational use, all hazardous materials shall be stored in an appropriate storage facility, ensuring appropriate compatibility risk assessments have been undertaken.

- (c) Hazardous wastes shall be identified, handled / stored on site, pre-treated, transported off site, and disposed of according to any guidelines issued by the Centre for Waste Management – Abu Dhabi:
- (d) Prior to storing hazardous material / waste, storage facilities shall comply with location, construction and design with requirements, specifications, guidelines and approval / permitting requirements of applicable laws and regulations and / or relevant Competent Authorities and / or SRA's; including at a minimum:
  - (i) *Federal Regulations for Handling Hazardous Materials, Hazardous Wastes and Medical Wastes, issued by Cabinet Decree No. 37 of 2001;*
  - (ii) *Environment Agency – Abu Dhabi - Guidelines for storage of chemical and hazardous materials;*
  - (iii) *Requirements of the Supreme Petroleum Council with regards to materials, products and wastes related to the petroleum industry; and*
  - (iv) *requirements of the Directorate General of Civil Defence (including latest edition of the UAE Fire and Life Safety Code).*
- (e) Employers using hazardous materials, generating hazardous waste, and / or storing hazardous materials or waste shall have a hazardous materials / waste management system that includes, at a minimum:
  - (i) a schematic / plan of any store showing locations of the hazardous materials / wastes stored, locations of emergency and fire-fighting equipment, and access and escape routes;
  - (ii) appropriate storage compatibility risk assessments undertaken;
  - (iii) limitations on quantities of the materials / wastes stored;
  - (iv) storage conditions / procedures to be implemented;
  - (v) an updated and accurate inventory of the materials / wastes stored, including the following:
    1. name of the hazardous material / waste;
    2. manufacturer of the hazardous material;
    3. location of the hazardous material / waste;
    4. quantity of the hazardous material / waste onsite (can be an average); and
    5. if applicable, expiration date of the hazardous material.
  - (vi) copies of current SDS's / profile sheets for all hazardous materials / wastes stored, such that the SDS / profile sheets are available:
    1. in hardcopy or electronic copy for access by employees and emergency responders; and
    2. in language/s understood by the workforce.
  - (vii) an emergency response plan for any store of hazardous materials / wastes (see 3.3).

### 3.2 Employees Health and Safety

- (a) Employers shall ensure, as far as reasonably practicable, that employees and other persons are not exposed to the health and safety risks from hazardous materials.
- (b) Employer shall implement the Occupational Health and Safety Hierarchy of Controls when developing and implementing hazardous material control measures, as per *OSHAD-SF – Element 2 – Risk Management*.
- (c) Employees in areas where hazardous materials are being used or stored must be protected through effective programs for:
  - (i) prevention of overexposure to hazardous substances - refer *OSHAD-SF – Occupational Standards and Guideline Values*;
  - (ii) personal protection – refer *OSHAD-SF – CoP 2.0 – Personal Protective Equipment*;
  - (iii) First aid and medical facilities – refer *OSHAD-SF – CoP 4.0 – First Aid and Medical Emergency Treatment*;
  - (iv) vaccination or prophylaxis; and
  - (v) medical surveillance – refer *OSHAD-SF – CoP 5.0 – Occupational Health Screening and Medical Surveillance*.
- (d) Appropriate Personal Protection Equipment shall be available, including but not limited to:
  - (i) protective helmets and or caps;
  - (ii) safety spectacles, goggles or face shields;
  - (iii) respiratory protection;
  - (iv) gloves;
  - (v) rubber or plastic aprons for handling materials;
  - (vi) coveralls; and
  - (vii) safety boots.
- (e) Eating or changing of clothes shall not be allowed within areas where hazardous materials are being stored or used. Eating and changing facilities shall be segregated by at least 10m away from the storage / use areas.
- (f) To protect their health and safety, employees in areas where hazardous materials are being used or stored must, at a minimum:
  - (i) never use smell, taste or touch as means for material identification;
  - (ii) refrain from smoking;
  - (iii) refrain from any practice that is risky or incompatible with the hazardous materials, eg, welding or use of lighters in areas where flammable materials are being stored;
  - (iv) avoid mixing of unknown or incompatible materials;
  - (v) always use compatible and appropriately identified portable containers for transporting even small quantities of hazardous materials;

- (vi) use colors, tags or both to identify at least the following when using equipment including liquid hazardous materials:
  - 1. tanks, control valves, and pumps;
  - 2. fill and discharge openings; and
  - 3. content and direction of flow in pipelines.
- (vii) clean and decontaminate any used PPE after use; and
- (viii) observe all precautions stated in safety data sheets of the relevant materials.

### 3.3 Emergency Management and Notifications

- (a) Employers / facilities importing, exporting, producing, storing, or managing chemicals or hazardous materials shall comply with any inventory / record keeping, notification and incident planning requirements prescribed by applicable laws and regulations and / or relevant Competent Authorities and / or SRA's.
- (b) Hazardous materials storage and handling facilities must perform a risk based identification of potential emergency scenarios and develop corresponding emergency management programs and response plans in consultation with emergency management authorities and other stakeholders. At a minimum, the program and plans thus developed must comply with requirements of:
  - (i) *OSHAD-SF – Element 6 – Emergency Management;*
  - (ii) *National Crisis and Emergency Management Authority;*
  - (iii) *The Directorate General of Civil Defence; and*
  - (iv) *Local emergency services, including Abu Dhabi Police and Department of Health – Abu Dhabi;*
- (c) In particular, the emergency management program and plans thus developed must identify and ensure provision of the following, as required:
  - (i) arrangements to prevent build-up of static electricity, occurrence of sparks, and consequent potential for fire or explosion, e.g., near the outlet of a fill pipe or opening of a liquid container where flammable materials may be present in air;
  - (ii) arrangements for grounding or bonding of flammable material containers;
  - (iii) alarms, detectors or tests, e.g. for presence of flammable or toxic mixtures in air;
  - (iv) arrangements for informing employees of parties to be contacted in case of emergency (names, telephone numbers, etc.);
  - (v) emergency response kits, e.g. adsorbent materials and PPE;
  - (vi) arrangements for containment of spilled materials, and for preventing them from reaching groundwater, sewerage network or storm-water pipes. Containment measures shall, at a minimum, be 110% of the maximum storage capacity;
  - (vii) arrangements for site decontamination and for disposal of waste and contaminated materials;
  - (viii) types and numbers of fire extinguishers, sprinklers, fire hose reels, fire hydrants, fire pumps and other control measures; and

- (ix) inspection and surveillance requirements.
- (d) Incidents of hazardous materials at entities or during transport shall be reported to the relevant emergency services, Competent Authorities and/or SRA's in accordance with the reporting requirements of *OSHAD-SF – Element 7 – Monitoring, Investigation and Reporting*.
- (e) Employers shall disclose the ingredients of hazardous materials on request by emergency responders responding to an incident, licensed medical practitioners treating patients exposed to the hazardous material, enforcement agencies, and authorized members of the Competent Authorities and / or SRA's.

## 4. References

- OSHAD-SF – Element 1 – Roles, Responsibilities and Self-Regulation
- OSHAD-SF – Element 2 – Risk Management
- OSHAD-SF – Element 5 – Training and Competency
- OSHAD-SF – Element 6 – Emergency Management
- OSHAD-SF – Element 7 – Monitoring, Investigation and Reporting
- OSHAD-SF – Element 8 – Audit and Inspection
- OSHAD-SF – Occupational Standards and Guideline Values
- OSHAD-SF – CoP 2.0 – Personal Protective Equipment
- OSHAD-SF – CoP 4.0 – First Aid and Medical Treatment
- OSHAD-SF – CoP 5.0 – Medical Surveillance
- OSHAD-SF – CoP 17.0 – Safety Signage and Signals
- OSHAD-SF – CoP 54.0 – Waste Management
- Federal law No. 39 of 1992 Concerning Production, Import and Handling of Fertilizers
- Federal law No. 41 of 1992 Concerning Regulation of Pesticides and Fertilizers
- Federal law No. 24 of 1999 Concerning Development and Protection of the Environment – UAE, as amended
- Federal Law No. 40 of 2006 Concerning Prohibition of the Synthesis, Production, Storage and Use of Chemical Weapons, as amended by Federal Law No. 12 of 2009
- Federal Law No. 13 of 2007 Concerning Goods Subject to Import and Export Control
- Federal Law No. 3 of 2009 Concerning Arms, Ammunition and Explosives
- Federal Regulation for Handling Hazardous Materials, Hazardous Wastes and Medical Wastes, issued by Cabinet Decree No. 37 of 2001
- Law No. 21 of 2005 Concerning Waste Management in Abu Dhabi Emirate
- Ministerial Decision No. 554 of 2009 Concerning Banned and Restricted Pesticides in the United Arab Emirates
- UAE Fire and Life Safety Code





## 5. Document Amendment Record

Version	Revision Date	Description of Amendment	Page/s Affected
3.0	1 <sup>st</sup> July 2016	Change of Logo	All
		Change from AD EHS Center to OSHAD	throughout
		Change of document title: AD EHSMS RF to OSHAD-SF	Throughout
		Acknowledgements deleted	2/3
		Preface Deleted	4
		EHS changes to OSH	Throughout
3.1	3 <sup>rd</sup> June 2018	Minor editorial changes throughout the document without changing requirements.	Throughout
		Clause 3.1.1(b)(iii) deleted	6
		New clause 3.1.1(b)(iii) updated	6
		Clause 3.1.1(k) deleted	7
		Clause 3.1.2(a) updated	7
		Clauses 3.1.5(c)(i), (ii) & (iii) deleted	10
		Clause 3.3(c)(vii) updated	12



