



## **Enhancing Chemical Security for the Hashemite Kingdom of Jordan and the Region**

**Development of Jordan as a regional hub in chemical safety and security**

**Introducing Chemical Safety and Security Confidence Building Measures for the Middle East**

# **TRAINING FRAMEWORK FOR CHEMICAL SECURITY AT THE JOINT CBRN TRAINING FACILITY IN AMMAN**

## **INTRODUCTION**

An effective chemical safety and security culture can result in a significant increase in the effectiveness of the safety and security of chemical material and associated facilities, storage, transport and use of toxic chemicals.

The development of the Training Framework For Chemical Security at the Joint CBRN Training Facility in Amman will focus on promoting capacity-building for safe and secure use of chemistry in research, development, storage, production, use and transportation of toxic chemicals.

The Training Framework will provide a basic awareness and understanding of chemical safety and security culture and practices. The course will give insight into the relevant international and national instruments that impact the chemical safety and security culture.

The Training Framework is intended to promote the goals of UNSCR 1540 (1540), the Chemical Weapons Convention and will provide continuity to the OPCW's focus on promoting national capacity-building for research, development, storage, production, and safe use of chemicals for purposes not prohibited by the Convention, WHO International Health Regulations.

The basic course is intended for Participants who are, or who will be, associated with the implementation or training in their home countries in the broad areas of chemical safety and security, including the implementation of the relevant international obligations, including European Union.

## **GENERAL OBJECTIVES**

The Training Framework will train the trainers.

The Training Framework will provide the participants with necessary know-how on procedures and practices in chemical safety and security.

Training on the proper techniques and practices in the areas of chemical safety and security will be offered followed by discussions.

The Training Framework aims to improve Participant's knowledge and experience in the prevention of, preparedness for and response to a misuse of toxic chemicals.

## **THE EXPECTED RESULTS OF THE TRAINING FRAMEWORK**

The Training Framework will bring more national institutions, organizations and stakeholders to participate in development of chemical safety and security issues. The Training Framework will assist to improve national capabilities in the prevention of, preparedness for and response to a misuse of toxic chemicals and provision of guidance and assistance to help establish chemical security culture.

The Training Framework will assist to build collaborative frameworks to address both national priorities in chemical safety and security as well as the implementation of CWC and UNSCR 1540 (2004).

The Training Framework will further develop concepts of the training and education scheme for rising awareness, teaching principles, required training skills and know-how and best practices transfer in areas of chemical safety and security, and will trigger training curricula preparation for specialized courses.

The Training Framework will increase awareness of Participants of requirements and best practices in chemical safety and security;

There will be a broad dissemination of best practices in chemical safety and security among Participants and their industries and other stakeholders; and

There will be a broad dissemination of training materials for National Authorities, scientists, laboratory managers, and chemical industry on best practices in chemical security and chemical safety.

## **TRAINING FRAMEWORK ORGANISATION AND PARTICIPATION**

The Training Framework is organised by the Joint CBRN Training Facility in Amman and the International Centre for Chemical Safety and Security (ICCSS) in Warsaw, and in cooperation with Vistula University in Warsaw

The Training Framework will involve lectures, presentations and practical training from different national and international agencies engaged in developing and implementing measures to strengthen safety and security at chemical facilities, as well as representatives from chemical industry and from international organisations capable of providing advice in the areas of facility and transportation security.

The Training Framework is open to the national authorities and government officials from other relevant ministries and agencies, representatives of the chemical industry and scientific communities, international organisations, agencies and relevant NGOs engaged in developing

and implementing measures to strengthen safety and security at chemical facilities and transportation security.

The Training Framework will be conducted in English and Arabic. All the relevant documents and supporting materials should be translated in advice and professional interpreters should be provided for the course.

## **RELEVANCE OF THE TRAINING FRAMEWORK TO THE ACTIVITIES OF INTERNATIONAL ORGANISATIONS and the CHEMICAL WEAPONS PROHIBITION**

The Training Framework responds to activities by international organisations which provide assistance for countries in need for expertise and material support to sound management of chemical threats;

The Training Framework will also will create an opportunity for national entities to join a network of international cooperation in the safe and secure handling of chemical agents, including toxic chemicals which engages all the stakeholders, including governments, international organisations, research centres and companies.

The Training Framework will assist the efforts of the international organisations to promote higher national and industry standards and practices for the safe and secure handling of chemical agents, including those on preventing their unauthorised access and misuse.

The Training Framework will assist the development of the concept how to efficiently assist to accomplish the goals of CW prohibition and work of the OPCW in relation to the national implementation, assistance and protection against chemical weapons.

The Training Framework will assist to develop guidance how the requirements for chemical safety and security should be incorporated into future national legal and administrative regulations and operational provisions, as well as under international technical assistance programmes, including those by the OPCW under Article VII (Support for National Implementation) and Article X (Assistance and Protection) of the Convention

## **SUSTAINABILITY**

The sustainability of the results of the Training Framework will require that its outcomes will eventually be incorporated into the permanent background course on chemical safety and security developed for the relevant stakeholders.

Sustainability will also be enhanced by continuing contacts with the participants and relevant national agencies to ensure sustainability of Training Framework.

The Training Framework will continue to strengthen national networks of chemical safety and security officers.

It will be ensured that materials and other resources will be are available to the relevant authorities and officers who continue to provide trainings at their institutions.

## **COSTS OF PARTICIPATION**

The costs in the participation in the course are 5000 EURO per participant. This includes the costs of accommodation, meals and incidentals, local transportation, training materials and secretariat services /Internet, reproduction of materials and printing/.

The costs of travel, medical insurances and costs of obtaining visas have to be covered by the participants or sponsoring organisations.

The International Centre on Chemical Safety and Security and cooperating partners/organisations will cover the costs of preparing the course materials, provide for free conference rooms and offices, and offer practical training.

# MODEL TRAINING BASIC COURSE ON CHEMICAL SAFETY AND SECURITY IN THE TRAIN THE TRAINERS FORMAT

The proposed General training on safety and security of chemicals, discussed and agreed at Amman-Warsaw International Seminar on 9-11 April, 2019, is a background course which will offer the trainees a modern training on the most recent challenges in process safety, sustainable chemistry and environmental protection, conducted by the recognized international experts from the developed world and the international organizations.

## General training course on safety and security of chemicals (5 days)

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### *Introduction*

1. Chemicals are present in the everyday's life having impact on individuals and communities, both as the means of production, useful components of everyday life but also abandoned objects, or tools of crime against health and public order.
2. Human and his environment has thus to be protected against emission of chemicals or products of their reaction. Emission may accompany chemical process in regular operations and during accidents, handling, regular use a result of misuse and in global processes. Regardless of emission's origin, its limiting is a core of chemical safety.
3. The proposed course offers a holistic approach where ultimate safety is a result of safe process, use and secure keeping and trade of chemicals.
4. Our program includes thus elements of teaching process safety, safe use, hazard communication and substance security
5. The course introduces an integrated approach based on recommendations of OECD and UN agencies. In practical aspects our programme is however based on European approach.
6. Our trainings also employs resolutions from Chemical Conventions and Aarhus convention.
7. This training programme is tailored for entrepreneurs, industry managers and logistic managers. The training is dedicated to all who develop, produce, process, use chemicals and dispose them in their activities.
8. This training contains knowledge and skills associated with most important subsets of safety and environmental protection at industry sites. The particular skills such as performing process hazard analysis, creating documentation for internal emergency planning, creating

safety data sheets, classifying mixtures, assessing vulnerability or preparing chemical safety reports are subjects of separate trainings.

9. Creating and promoting safety and security culture are inherent part of this training.

### ***Goals***

1. Promote approach of “safety as unity”
2. Provide general training in major subsets of chemical safety and security;
3. Create a framework training programme
4. Build chemical safety and security culture

### ***Objectives***

1. To present legislation regulating the following domains of safety
  - a. Hazard identification
  - b. Risk management
  - c. Hazard communication
  - d. Accident prevention
  - e. Chemical security
  - f. Chemicals as hazardous goods in transport
  - g. Management of emissions
  - h. Management of hazardous waste
2. To present obligations levied by the legislation
3. To present skills required in every company manufacturing, processing, handling or using chemicals
4. To present safety and security culture as a fundament of company safety and security

### ***Expected results***

After completion of the course:

1. Trainee gains comprehensive understanding of chemical safety as it is required by law
2. Trainee is able to organize and plan management of safety activities at a company level
3. Trainee is able to work with external partners towards safety and security in transport;
4. Trainee will be able to organise building of chemical safety and security culture.

### ***FRAMEWORK TRAINING PROGRAMME***

No.	Title	Hours			Remarks
		l	ex.	w.	
<b>Title I</b>					
<b>Hazard identification and communication</b>					
1	Chemical hazards description	1	0	0	
2	Regulations on hazardous chemicals	1	0		
3	Information requirements	0	2		
4	Data bases on hazardous properties	1		1	
5	Principles of classification	1	2	2	
6	Safety data sheets	1	2	2	
		5	6	5	
<b>Title II</b>					
<b>Accident prevention</b>					

7	Rules, laws and regulations pertaining to accidents prevention	2			
8	Components of accident prevention policy	2	2		
9	Process hazard analysis	2	4	2	
10	Safe distances	1	1		
11	Information sharing	1		1	
		8	7	3	
<b>Title III</b>					
<b>Chemical security</b>					
12	Concept of dual use and security hazards	1			
13	Chemical security regulations	1			
14	Non-listed chemicals	1			
15	Chemical security vulnerability	2	2	1	
16	Chemical security culture	1			
		6	2	1	
<b>Title IV</b>					
<b>Transport of dangerous goods</b>					
17	Model UN regulations	2			
18	Security of dangerous goods in transport	1		2	
19	Hazard communication in transport	1		2	
20	Packaging of dangerous goods	1			
		5		4	
<b>Title V</b>					
<b>Hazardous wastes management</b>					
20	Hazardous wastes regulations	2			
21	Hazardous wastes storage	2			
22	Hazardous wastes transportation	2			
23	Hazardous wastes under REACH	1		1	
24	Land cleanup	2			
		9		1	
<b>Title VI</b>					
<b>Hazardous emissions</b>					
25	Regulations on hazardous emissions	2			
26	Integrated permit	2	2	2	
27	Best available techniques	1	2		
28	Public participation	1		1	
		6	4	3	

No.	Title	Hours			Remarks
		l	ex.	w.	

	<b>Total hours:</b>	<b>39</b>	<b>19</b>	<b>17</b>	<b>76</b>
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