



Responsible Production - Safe management of chemicals

Background

The management of chemical hazards in industry is a crucial aspect to move towards a green economy and address important safety challenges such as chemical accidents and chemical exposure. In a growing global economy, Small and Medium Sized Enterprises (SMEs) in developing countries are becoming an important segment of the global industrial sector where chemicals are manufactured, transported, re-packaged, and used. While these SMEs struggle to remain competitive, chemicals management becomes a challenge to them due to lack of resources and knowledge to address these issues. In addition, SMEs find it difficult to deal with the many approaches and requirements that national authorities, industrial associations, and technical institutions develop to promote the sound management of chemicals. In this context, UNEP recognises that reaching out to small chemical producers in developing countries is essential.

As a response, and as part of its Responsible Industry and Value Chain initiatives, UNEP designed the Responsible Production package to offer SMEs an integrated and systematic approach to understand hazards, control exposure, and reduce accident risks. Drawing upon various well known and piloted programmes, such as Safer Production (Responsible Care, ILO-OSH 2001, etc.), the Awareness and Preparedness for Emergencies at Local Level Framework (APELL) and Corporate Social Responsibility (CSR),

Responsible Production is designed for those companies that do not have sophisticated safety management systems in place, helping SMEs to understand the benefits of improved chemical hazard management and how to increase overall safety and reduce chemical emergencies.

Approach

The Responsible Production approach aims at supporting SMEs in tailoring their responses to chemical safety issues along the value-chain, taking into account limited resources. It is a continuous improvement approach that involves understanding hazards, controlling chemical exposure, reducing accident risks, engaging stakeholders, and promoting chemical product stewardship. This is achieved through risk planning, management and communication aimed at preventing exposure to hazardous substances.

It helps managers and safety officers to address not only chemical hazards at site, but also to promote chemical safety with business partners, suppliers, clients, and local communities, by fostering risk communication and information along the value-chain.

The Responsible Production Approach works through five steps that provide a systematic approach to managing the risks and impacts associated with chemical hazards.





Activities undertaken

In cooperation with key partners such as Accountability, the International Council of Chemical Associations and the International Council on Mining and Metals, UNEP developed the Responsible Production approach comprising an introductory Booklet, a Toolkit, and a Training Package.

The *Booklet* introduces the overall framework of the Approach. Building on the case studies and lessons learnt from capacity building and pilot projects (presented in the booklet), it also contains sets of indicators for easy monitoring of companies' performance after implementing Responsible Production.

The *Toolkit* includes a wide range of tools that can be used to operationalise the Responsible Production approach according to the needs and context of each company. It is divided into basic and advanced tools, and includes a detailed checklist to assist companies in identifying the main gaps to be addressed.

The *training package* provides an adaptable base for capacity building. It includes a set of 18 thematic training sessions, supporting documentation, and comprehensive and adaptable presentations.

An interactive website was developed to support self-learning and training activities of SMEs, as well as to disseminate the Responsible Production approach to industries, local authorities, technical institutions, academia, large companies and other relevant audience. It is available in 7 languages: Arabic, Chinese, English, French, Spanish, Thai and Vietnamese. <http://www.unep.org/responsibleproduction/>

The guidance was firstly introduced to UNEP-UNIDO National Cleaner Production Centres (NCPCs) during four Regional Responsible Production Training Workshops that took place in

2010, and tested in Peru and in Thailand. UNEP and ICCA are currently implementing a project on promoting chemical safety in the African Region based on the Responsible Production approach (2013-2015).

Overview of results

Since the introduction of the Responsible Production approach, UNEP has supported NCPCs and other stakeholders in countries such as Brazil, China, Egypt, El Salvador, Ghana, Jordan, Kenya, Peru, Sri Lanka, Thailand, Vietnam, and Zimbabwe to undertake Responsible Production trainings and pilot projects.

The participating companies identified potential hazards and successfully implemented corresponding risk reduction and accident prevention measures tailored to their needs and resources. The projects show that, in many cases, initial risk reduction strategies can be realised at little or no cost. In addition, it has been found that implementation of Responsible Production provides synergies with similar initiatives and programmes (such as Corporate Social Responsibility and Resource Efficient and Cleaner Production).

Outlook

UNEP continues to support multi-stakeholder projects on the Responsible Production approach and will seek opportunities to promote a closer collaboration between companies and the relevant stakeholders along the value chain. As part of this effort, UNEP aims to enhance the capacities of national experts to provide technical support to Responsible Production implementation and to encourage additional NCPCs and other intermediaries to incorporate Responsible Production in their portfolio of services.