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Promoting Chemical Safety Management in Ports and along Transport Routes of Dangerous Goods:

Case Studies from Africa

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Acknowledgements

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List of Acronyms

APELL . . . . . Awareness and Preparedness for Emergencies at Local Level

BRIICS . . . . . Association of emerging national economies: Brazil, Russia, India, Indonesia, China and South Africa

CFS . . . . . Cargo Freight Station

CIQUIME . . . . . Argentinian Chemistry Information Centre for Emergencies (Centro de Información Química para Emergencias de Argentina)

CSR . . . . . Corporate Social Responsibility

EMP . . . . . Emergency Preparedness Plan

EPA . . . . . Ghana Environment Protection Agency

FEAT . . . . . Flash Environmental Assessment Tool

GCLA . . . . . Government Chemist Laboratory Agency of Tanzania

GHS . . . . . Globally Harmonized System of Classification and Labelling of Chemicals

GNCPC . . . . . Ghana National Cleaner Production Centre

GPA . . . . . SAICM Global Plan of Action

GPHA . . . . . Ghana Ports and Harbours Authority

GPS . . . . . Global Product Strategy

HSE . . . . . Health, safety and environment

ICCA . . . . . International Council of Chemical Associations

ICCM . . . . . International Conference on Chemicals Management

ICD . . . . . Inland Clearance Depot

ICMM . . . . . International Council on Mining and Metals

KMA . . . . . Kenya Maritime Authority

KNCPC . . . . . Kenya National Cleaner Production Centre

KPA . . . . . Kenya Ports Authority

LRI . . . . . Long-Range Research Initiative

MoU . . . . . Memorandum of Understanding

NCPC . . . . . National Cleaner Production Centre

NEMA . . . . . National Environment Management Authority of Kenya

OCHA . . . . . Office for the Coordination of Humanitarian Affairs

OECD . . . . . Organisation for Economic Co-operation and Development

PHMSA . . . . . US Pipeline and Hazardous Materials Safety Administration

SAICM . . . . . Strategic Approach to International Chemicals Management

RECP . . . . . Resource Efficiency and Cleaner Production

SME . . . . . Small and Medium sized Enterprise

TBT . . . . . Tema Bonded Terminal (at Port of Tema)

UN . . . . . United Nations

UN Environment . . . United Nations Environment

Executive Summary

UN Environment and the International Council of Chemical Associations (ICCA) have collaborated since 2009 to build capacities in Small and Medium Sized Enterprises (SMEs) on implementing effective chemicals management approaches. As part of this partnership and within the context of a Memorandum of Understanding (MoU), UN Environment and ICCA implemented a project between 2013 and 2015, in collaboration with regional and national partners, entitled "Promoting Chemical Safety in the African Region". According to priorities identified in the region, the project aimed to promote safe handling of hazardous chemicals and appropriate emergency preparedness and response practices in ports and along cross-border transport routes.

The project was implemented in two main ports of Africa - as key entry points of imported chemicals to the region - and the cross-border transport routes to neighbouring land-locked countries. The two sites involved were the Port of Tema in Ghana and the transport routes serving Burkina Faso, Mali, and Niger in West Africa; and the Port of Mombasa in Kenya and the transport routes serving Burundi, DR Congo, Ethiopia, Kenya, Rwanda, Southern Sudan, Northern Tanzania, and Uganda in East Africa. Project activities included four capacity-building and training workshops on safe handling and transport of dangerous goods, a mapping of main stakeholders relevant to chemical safety practices in both sites, a mapping of hazards and hotspots in both ports and along cross-border transport routes, assessment of current emergency response plans, and two sub-regional events to disseminate project results and best practices.

Activities were implemented in collaboration with the National Cleaner Production Centres of Ghana and Kenya and involved environmental, port and maritime authorities, as well as specific SMEs providing services on storage

Specific methodologies such as UN Environment Responsible Production and the Awareness and Preparedness for Emergencies at Local Level (APELL), as well as ICCA Responsible Care Framework and Global Product Strategy (GPS), were used as the main methodologies for capacity building throughout the project.

Outcomes of the project include a clear understanding of the chemical hazards present in the demonstration sites and transport routes and assessment of the current emergency response plans, enhanced capacities of national authorities and SMEs on handling and transport of dangerous goods, and promotion of regular improvements and stakeholder consultations on chemical safety and emergency preparedness in both ports.

This publication compiles case studies of the project's activities. It is complemented by a package of resource materials on improving chemical safety that were used in the context of the project. The publication aims at providing valuable insights and lessons learned that can be of use to other countries and regions when replicating capacity-building activities on chemical safety in port areas and transport practices. It also provides recommendations for potential future activities.

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