

# Principles of Chemical Management in the Textile and Garments Industry in Bangladesh to be considered

1. Good chemical management practices
  - 1.1 Inventory of chemicals - General Principles
  - 1.2 Establishing and maintaining chemical inventory
2. Using reliable information sources on chemical substances and mixtures
  - 2.1 General Principles
  - 2.2 Chemical labeling and marking
  - 2.3 Using safety data sheets
- 3 Identifying and assessing chemical hazards and risks
  - 3.1 General principles
  - 3.2 Assessing, classifying, and mapping chemical hazards and risks
  - 3.3 Monitoring chemicals and exposure in the workplace
  - 3.4. Medical and health surveillance
- 4 Selecting and purchasing chemicals with consideration of sustainability aspects
  - 4.1 General information:
  - 4.2 Referring to lists and requirements of regulated and restricted substances
  - 4.3 Establishing and maintaining chemical procurement and purchasing policy and practices
  - 4.4 Tracing chemicals in production process
- 5 Managing and controlling chemicals risks
  - 5.1 Substitution of hazardous substances
  - 5.2 Elimination of hazardous substances
  - 5.3 Using measures for controlling chemical hazardous to health
  - 5.4 Control measures for flammable, dangerously reactive or explosive chemicals
    - 5.4.1. Good design and installation practice
    - 5.4.2. Use of safe work systems and practices
  - 5.5 In-process measures for reducing the environmental impact of chemicals
- 6 Ensuring safe storage and transport of chemicals
  - 6.1 Applying good chemical storage practices
  - 6.2 Applying practices in onsite and offsite transport of chemicals and chemical waste
- 7 Preparing and responding to chemical emergencies
  - 7.1 Planning and preparing for chemical emergencies
  - 7.2 Dealing with fire and explosions
  - 7.3 Dealing with chemical spills and leaks
  - 7.4 Dealing with medical emergencies involving chemicals
8. Managing chemical waste and residues

- 8.1 General Principles
- 8.2 Managing chemical containing wastewater and treatment sludge
- 8.3 Managing solid chemical waste
- 8.4 Controlling releases of chemicals into the air
9. Establishing chemical management system and organisational structure
  - 9.1 Defining roles and responsibilities
  - 9.2 Developing chemical policy and management system
  - 9.3 Planning and implementing chemical improvement measures
  - 9.4 Using a quality assurance programme and monitoring performance of chemical
  - 9.6 Investigation and reporting of accidents, occupational diseases and other incidents
  - 9.7 Auditing, monitoring and reporting on chemical management system performance
10. Other
  - ✓ Relevant national legislation, regulations, guidelines and standards pertaining to various aspects of chemical management
    - The Bangladesh Environment Conservation Act, 1995
    - The Environment Conservation Rules, 1997
    - Ozone Depleting Substances (Control) Rules, 2004 including amendment in 2014
    - Hazardous waste and ship breaking waste management rules 2011
    - Bangladesh Standards and Guidelines for Sludge Management
    - National 3R Strategy for Waste Management
    - Bangladesh National Building Code 2015 (draft)
  - ✓ Relevant international reference standards
    - European Integrated Pollution Prevention and Control Bureau (EIPPCB) - Best Available Techniques (BAT) reference document in the textile industry
    - Umweltbundesamt (Germany) - Environmental standards in the textile and shoe sector – A Guideline on the Basis of the BREFs – Best Available Techniques Reference Documents of the EU
    - BAUA (German Federal Institute for Occupational Safety and Health) - Technical Rules for Hazardous Substances (TRGS)
    - United Nations Economic Commission for Europe (UNECE) - Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
    - Chemical Risk Assessment: Overview and Examples
    - OECD Due Diligence Guidance for Responsible Supply Chains in the Garment & Footwear Sector
    - Sustainable Apparel Coalition (SAC) Higg FEM 3.0 – Chemical management
    - International Labour Organisation (ILO) - C170 - Chemicals Convention, 1990 (No. 170)
    - International Labour Organisation (ILO) - R177 - Chemicals Recommendation, 1990 (No. 177)
    - International Labour Organisation (ILO) - Safety in the use of chemicals at work. An ILO code of practice
    - Zero Discharge of Hazardous Chemicals (ZDHC)
    - ZDHC Chemical Management System
    - ZDHC Manufacturing Restricted Substances List (MRSL)
    - ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan (SAP)
    - ZDHC Technical Industry Guide
    - ZDHC Wastewater Guidelines version 1.1

- bluesign SYSTEM SUBSTANCES LIST (BSSL)
  - European Chemical Agency (ECHA) - REACH
  - Stockholm Convention on Persistent organic Pollutants (POPs)
  - Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
  - Strategic Approach to International Chemicals Management (SAICM)
- ✓ Relevant guidance references and training materials
- COSHH e-tool
  - Easy-to-use Workplace Control Scheme for Hazardous Substances (EMKG) – Federal Institute for Occupational Safety and Health, Germany
  - European Union DG for the Environment - EMAS "easy" for small and medium enterprises
  - Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
  - GIZ Basic Training Module for Chemical Management in textile wet processes
  - GIZ Advanced Training Module for Chemical Management in textile wet processes
  - GIZ Digital Solutions for Substitution of Hazardous Chemicals in the Fashion Supply Chain initiative materials
  - GIZ Resource Efficient Management of Chemicals in textile and leather sector companies (REMC), 2017
  - Substitution Support Portal
  - The International Chemical Secretariat (ChemSec) -
  - ChemcSec SIN List
  - ChemSec Textile Guide
  - International Labour Organisation (ILO)
  - Chemical Safety Training Modules
  - Safety and health in the use of chemicals at work