

Capacity Development on Chemical Management Training Programme for Multipliers

Promotion of Sustainability in the Textile and Garment Industry in Asia-FABRIC

House Rules



Training programme for chemical management multipliers

Agenda of introductory workshop

24th June 2021, Time: 10:00 AM - 12:30 AM

Time	Agenda	Facilitation by
10:00 AM - 10:15 AM	Welcome and introduction of trainers and participants	Kamran Kashif, GIZ and adelphi experts
10:15 AM - 10:30 AM	Introduction to FABRIC programme and context of the master training program	Kamran Kashif, GIZ
10:30 AM - 11:00 AM	Presentation of on the master trainer program on chemical Management, including course objectives, course outline, course completion requirements and training modus and timelines	Arjmand
11:00 AM - 11:10 AM	Clarification of participants´ expectations and questions regarding the training course	adelphi / Espire experts and GIZ
05 Min Break		
11:15 AM - 11:45 AM	Introduction of the GIZ e-learning platform (atingi) <ul style="list-style-type: none"> • How to access and use the learning platform • How to enrol to the CM self-learning program • How to use the features of the CM self-learning program 	Dr. Benjamin Hoehne, evoltas
11:45 AM - 12:15 AM	Introduction of to GIZ self-learning program on Chemical Management <ul style="list-style-type: none"> • Overview of content of the CM self-learning course • How to complete the self-learning course • How to access technical support • Complete registration and enrolment into the self-learning course 	Dr. Benjamin Hoehne and Dr. Jürgen Hannak
12:15 am - 12:30 AM	Clarification of logistical arrangements <ul style="list-style-type: none"> • How to contact and interact with the master trainers • Outlook: Proposed date and time of interim facilitation workshop • Clarification of other participants´ issues 	adelphi / Espire experts
12:25 AM - 12:30 AM	Closing of workshop	Mudassar Adil, GIZ

Training programme for chemical management multipliers

Welcome and introduction

Training programme for chemical management multipliers

Purpose of today`s session

1. Familiarise with course objectives
2. Understand course structure and course completion requirements
3. Relate to timeline
4. Familiarise with training modus and materials used
5. Learn how to use and integrate the GIZ atingi e-learning platform
6. Register as trainer with the a-tingi platform
7. Clarify course logistics
8. Agree on next steps

I. Context of trainer programme

FABRIC - Objective and fields of work

Supporting the **textile and garment industry in Asia** with its transformation towards a **socially, economically and ecologically sustainable** production.



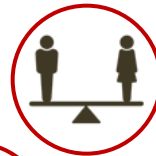
Regional dialogue and knowledge transfer



Cooperation with the private sector



Social and labour standards



Gender equality at the workplace



Resource and environmental management

Focus of implementation

Pakistan



Viet Nam



Cambodia



Bangladesh



Role of FABRIC: bundling and distributing knowledge about sustainable business practices across the region.
Thinktank function.

Myanmar



China



Levels of collaboration

FABRIC cooperates with ...

Governments

- to strengthen their ability to set legal frameworks and ensure compliance



industry

- to improve capacities for sustainable production and growth



employees and trade unions

- to enable them to know their rights and represent interests of the workers



civil society

- to support its efforts in ensuring good jobs and an intact environment



international buyers

- to foster cooperation between international brands and their suppliers.



Focus topics of FABRIC for environmental improvement

Chemical Management

- Capacity Building on procurement, storage, handling of chemicals.
- Improve the usage of chemicals by implementing required MRSL.
- Increase the efficiency by appropriate use of chemicals.
- Resource efficiency by recycling of chemicals.



Water

- Reduce water consumption by implementing production integrated in-house measures.
- Recycling and reuse of process water.
- Improve end-of-pipe treatment to comply with international standards and brands requirements (e.g. ZDHC).



Climate (Energy)

- Reduce GHG emissions.
- Implement energy managements systems to enhance the energy efficiency.
- Use renewable energy sources, e.g. photovoltaic, solar power, bio-based fuels



Programme objective & indicators

Socially, environmentally and economically sustainable approaches, being based on regional lessons learnt, are implemented by the Asian textile and garment industry.

For 100,000 employees of whom 70% are women, working conditions have improved in one of the following categories: a) access to legal advice, b) information on labour standards (including wages) and occupational health and safety, c) improvements in occupational safety (including the journey to work, COVID-19 Prevention), d) Protection against harmful chemicals, e) Access to information and advice on the prevention of COVID-19.

6 services (advice, information, training to improve working and living conditions) for women garment workers, newly introduced or adapted based on regional experience, are in demand by the target group.

At annual network meetings of producer associations, joint positions on relevant sustainability issues are discussed and at each meeting a joint measure for improving the sustainability in the textile and clothing sector in Asia is approved.

100 companies in the region have achieved a 10% improvement in scoring systems for sustainable management of water, energy or chemicals.

The applicability of newly imparted knowledge content or consulting services for the improvement of ecological sustainability in the textile and clothing sector by intermediaries (e.g. universities or providers of consulting services for companies) was confirmed by 80% of the surveyed users (public or private actors) by naming practical examples.

Programme objective & indicators

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Focus on Chemical Management!!!

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II. Course objectives, structure and timeline

Training programme for chemical management multipliers

Course objectives

At the end of this training, the participants will be able to...

1. Enhance their own knowledge and skills on chemical management
2. Relate to the ZDHC and other chemical management requirements and materials when engaging with textile factories in Pakistan
3. Integrate self-learning training into their face-to-face and virtual engagement with factory change management teams
4. Guide factory change management teams in effectively assessing their chemical management performance, identifying as well as plan for improvements
5. Enhance chemical management knowledge and skills of factory change management teams
6. Support factory change management teams in anchoring and rolling out in-house chemical management training
7. Taking the next steps towards qualifying as ZDHC certified trainers

Structure and timeline overview

Course Element	Step	Timeline	Mode
One half-day introductory workshop on the master trainer program	T1	24.06.2021	Virtual
e-learning course on chemical management (part 1)	T2	05.07.2021	Internet-based, self-learning (about 10 hours)
One half-day interim facilitation workshop to facilitate completion of eLearning course	T3	07.07.2021	Virtual
e-learning course on chemical management (part 2)	T4	15.07.2021	Internet-based, self-learning (about 10 hours)
Reflection workshop	T5	27.07.2021	Virtual
One 1 or 2-day (TBD) workshop on ZDHC requirements	T6	28.07.2021 – 29.07.2021	Virtual
One 1-day workshop on didactical and facilitation skills	T7	05.08.2021	Virtual
Practical factory level application, including <ul style="list-style-type: none"> two half-day training sessions for preparation and implementation of factory level support factory visits for providing CM training and guidance with coaching support from FABRIC long Term Expert (LTE) as well as Short Term Expert (STE) 	A1 – A5	After 05 August till 31 st December 2021	As part of the factory level application, each participant is required to conduct training to personnel of a textile factory and support the factory team in planning and implement measure for improving CM conditions and practices.
One 1-day closing workshop	T8	13.01.2022	Face-to-face or virtual, depending upon prevalent Covid Situation

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T1	Introductory workshop	<ul style="list-style-type: none">• To understand context, overall course outline, structure, timeline and course completion requirements• To get access and learn how to navigate the atingi platform and CM self-learning course• To relate to concept and structure of the self-learning program• To familiarise with reference materials used• To clarify course logistic issues	½ day	Virtual/blended	eLearning Toolkit on Chemical Management

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T2	CM self-learning – part 1	<ul style="list-style-type: none">• To familiarise with the chemical management reference materials (i.e. REMC toolkit and CM self-learning program)• To revive/upgrade one's knowledge on chemical management issues	2 weeks	Self-learning	At least: <ul style="list-style-type: none">• Review REMC toolkit• Complete self-learning modules 1 - 6

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T3	Interim workshop 1	<ul style="list-style-type: none">To reflect and clarify on structure and content issues of available reference materialsTo explore about possible ways of integrating the CM self-learning	½ Day After 14 Days 08 July 2021	Virtual	Based on the Questions posted in the Atingi Forum

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T4	CM self-learning – part 2	<ul style="list-style-type: none">• To familiarise with the chemical management reference materials (i.e. REMC toolkit and CM self-learning program)• To revive/upgrade one's knowledge on chemical management issues	2 weeks	Self-learning	Complete self-learning modules 7 – 11 Deadline:15 July 2021

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T5	Interim workshop 2	<ul style="list-style-type: none">• To reflect and clarify on structure and content issues of available reference materials• To explore about possible ways of integrating the CM self-learning	½ Day 27 July 2021	Virtual/blended	Back-to-back with T6

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T6	Workshop on ZDHC requirements under the Scope of Chemical Management	<ul style="list-style-type: none">• To familiarise ZDHC requirements• To linking existing knowledge of chemical management• To exchange experience with ZDHC implementation	1 or 2 days 28/&29 July 2021	Virtual	ZDHC Technical Industry Guide, ZDHC CMS, Inputs from ZDHC representative(s)

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T7	workshop on didactical and facilitation skills To improve effectiveness of Training and Advisory Services	<ul style="list-style-type: none">• To review skills for conducting training needs assessment• To integrate REMC and self-learning materials• To fine-tune training delivery and advisory skills in line with approach and ZDHC expectations• To prepare for factory application	1 day (05 August 2021)	Virtual	

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
A1	Factory Level Application (Training)	<ul style="list-style-type: none">To gain practical experience in conducting one-to-one or group training on chemical management and ZDHC in factoriesTo gain practical experience in assisting factories in conducting self-assessment, gap analysis and preparing factory action plans	August 2021	On-site	Support provided through on and off-site coaching and mentoring support from Experts

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
A2	Interim review meeting 1 of factory application	<ul style="list-style-type: none">• To reflect on and exchange experience on conducting factory level training• To clarify/fine-tune factory engagement and training delivery at factory level• To prepare for supporting factories in implementation process	1/2 days (August)	Virtual/ blended Or face- to-face	Training Feedback Factory reports on CM Preliminary factory action plans

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
A3	Factory Level Application (Training)	To gain practical experience in guiding factory teams in <ul style="list-style-type: none">• fine-tuning action plans and defining performance indicators• implementing improvement measures in line with the factory action plans• Reviewing and recording progress• Carrying out roll-over planning	September 2021 till December 2021	On-site	Support provided through on and off-site coaching and mentoring support from master trainers Additional short-term expert support for guidance on technical issues

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
A4	Interim review meeting 2 of factory application	<ul style="list-style-type: none">• To reflect on and exchange experience with supporting the implementation process and dealing with related challenges• To compile of results and improved KPIs• To document results in form of case studies / business cases	1/2 day (September 2021)	Virtual/ blended Or face- to-face	Factory progress reports

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
A5	Factory Level Application (Training)	<ul style="list-style-type: none">• To finalise and review progress of implementation• To plan follow-up and further implementation• To document results in form of business cases, case studies	Oct 2021 – December 2021	On-site	<p>Support provided through on and off-site coaching and mentoring support from master trainers</p> <p>Additional short-term expert support for guidance on technical issues</p>

Training programme for chemical management multipliers

Step	Title	Purpose	Duration	Mode	Remarks
T8	Closing workshop	<ul style="list-style-type: none">• To present and exchange results of highlights of factory improvement• To reflect on overall engagement process• To plan next steps• To familiarize with next steps for pursuing accreditation as ZDHC trainers	1 day 13 January 2 022	Virtual/ blended Or face- to-face	

Training programme for chemical management multipliers

Question and answers

III. Using the GLZ atingi learning platform

What is atingi?

atingi means "to succeed" in Esperanto and is the **free-of-charge digital learning platform** which can be accessed from any **smartphone or desktop**.

atingi aims to serve learners in **South & East Asia, Sub-Saharan Africa, the MENA region and South America**.

Sponsored by the **BMZ** & developed by the **German Society for International Cooperation and Development (GIZ)** in cooperation with Smart Africa and the African Union.



Our offline solutions: atingi in a box!

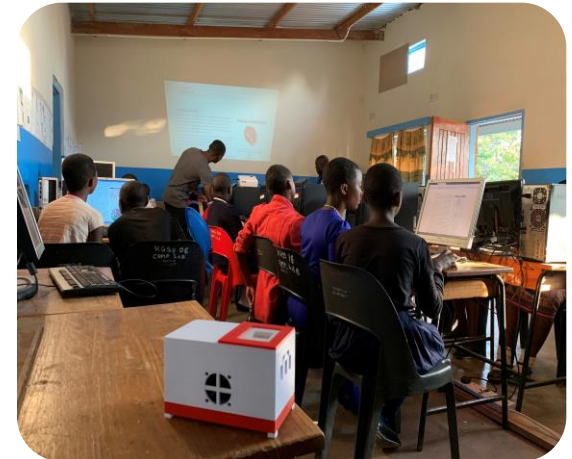
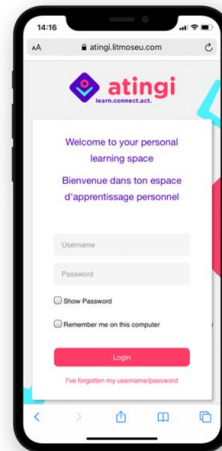


A **Raspberry-Pi based microserver solution**; creates a local wifi making the LMS and its content accessible from **any browser-enabled device** (tablet, desktop, smartphone) with minimal synchronization with the cloud required (e.g. once a month).



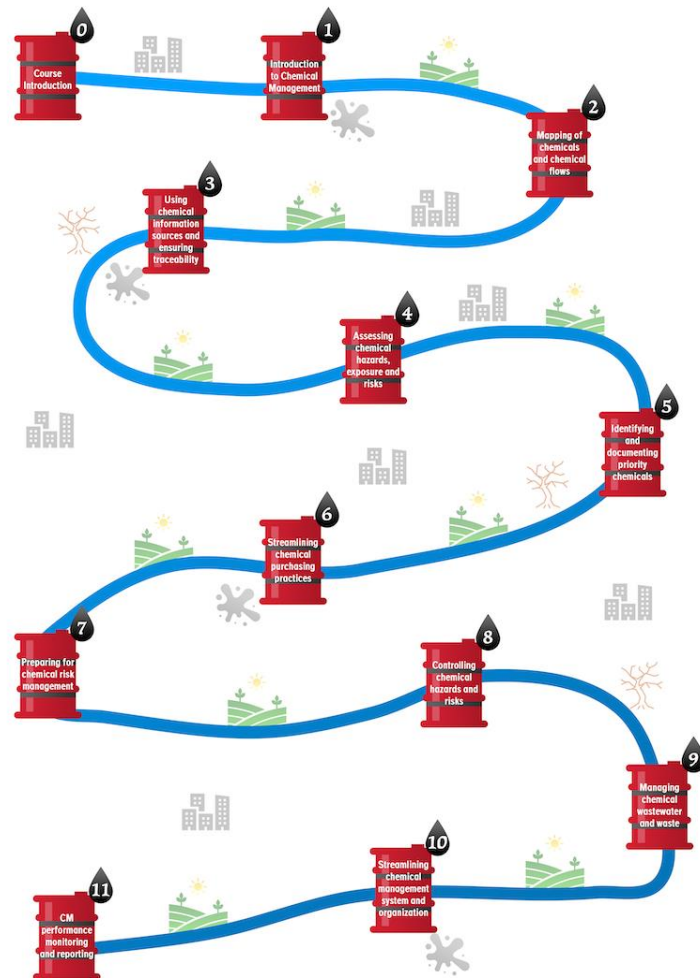
atingi in your pocket!

Our **mobile Android & iOS app** works on smartphones and tablets. The app also enables offline access to learning contents!



III. Using the GIZ “atingi” learning platform

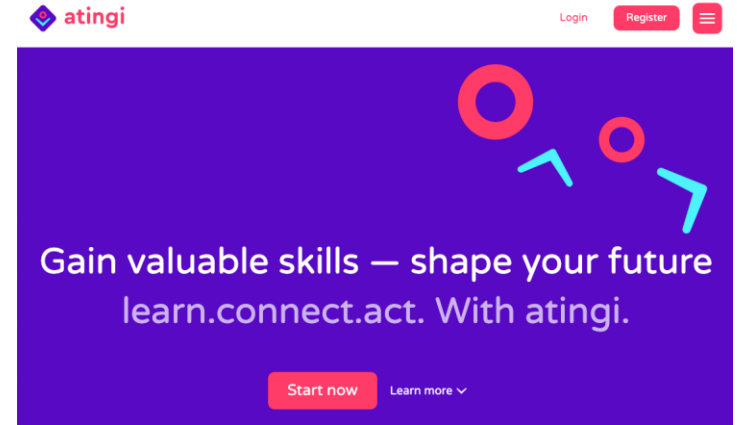
- 11 modules with 2 to 4 learning units each
- Each learning unit contains
 - A **self-directed presentation** with voiceover and notes
 - A **self-test quiz** with instant feedback
 - Links, literature and references for **further reading**
- Additionally, every module offers at least one **case-study** or broader **assignment**
 - Can be used as part of a blended learning course with feedback from a remote trainer
 - Or as part of a training program as preparation or debriefing



III. Using the GIZ “atingi” learning platform

Platform and courses

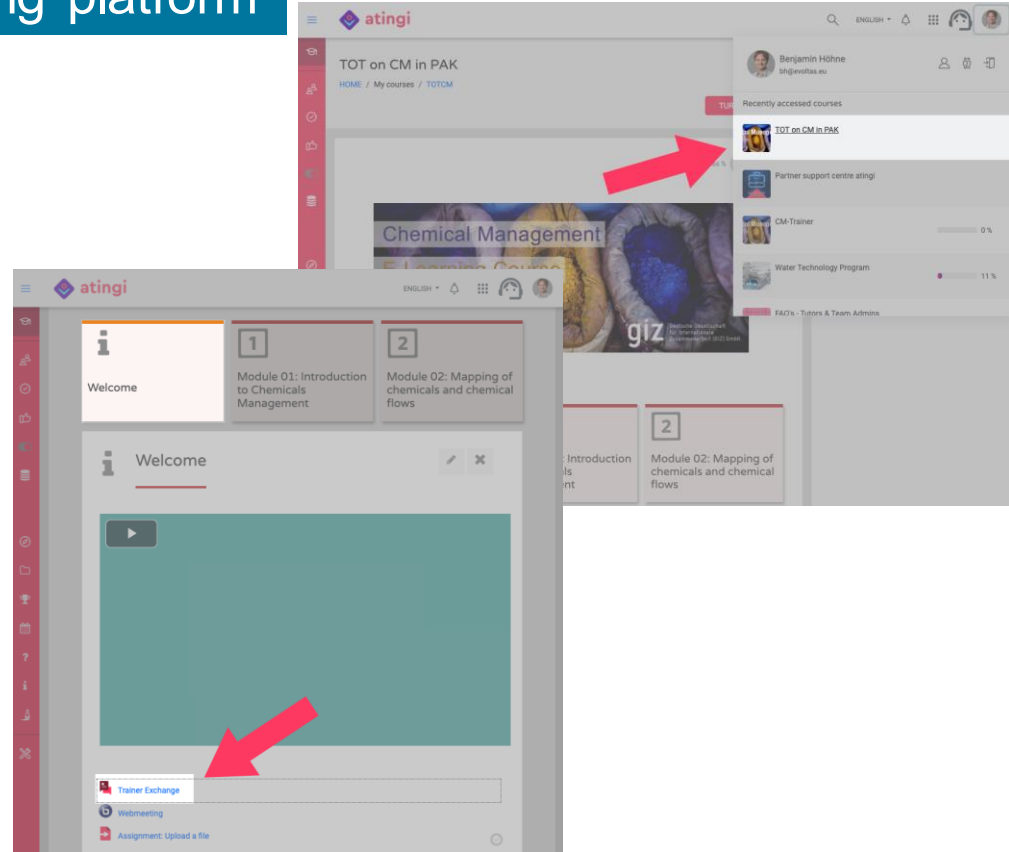
- All learning units will be hosted on the giz learning platform **atingi**
- Interested parties can self-register on the platform and enroll in the offered courses by writing the trainers
- Two courses will be offered
 1. A **self-directed learning course** which can be accomplished on the learner’s own pace
 2. A **blended learning course** which uses case-studies, assignments and remote trainers to create a feedback loop between learners and trainers (restrictions apply)
- All learning material is **modular** in nature and can also be used to create a **tailor-made course** for a specific program.
 - Please contact Benjamin Höhne (bh@evoltas.de) for further information



III. Using the GIZ “atingi” learning platform

Exercise: Post a welcome message

1. Please go to <https://atingi.org> and login to your account.
2. Then go to the CM-Trainer course found by clicking on your profile on the top right
3. After you have navigated to the course, find the **“Trainer Exchange Forum”** in the “Welcome” section and write a welcome message in the forum.



III. Using the GIZ “atingi” learning platform

Exercise: Get to know the material

1. Go to module 2, complete the **Quiz 2.2.** and **submit your answers.**
2. Go to **Learning Unit 9.2** and download the file “Presentation (Download version)”
3. Go to the “Welcome” section and upload the file you just downloaded as a submission in **“Assignment: Upload a file”**

The image displays two overlapping screenshots of the 'atingi' learning platform. The background screenshot shows a 'Summary' page for a quiz with 5 questions, all marked 'No interactions'. A green notification bar at the top states 'Your answers are submitted for review!' with a 'Restart' button. The foreground screenshot shows the main course interface with a sidebar on the left and a main content area. The main content area includes a 'Welcome' message, a video player, and a bottom navigation bar with options: 'Trainer Exchange', 'Webmeeting', and 'Assignment: Upload a file'. A red arrow points to the 'Assignment: Upload a file' button.

IV. Course materials and references

Training programme for chemical management multipliers

Course materials and references used

Training references

- REMC Toolkit (including REMC Company Guide, REMC Trainer handbook, DSHC training materials) www.sia-toolbox.net/solution/resource-efficient-management-chemicals-textile-and-leather-sector-companies
- Chemical management self-learning programme on atingi platform
- ZDHC reference materials
- SAC Higg FEM 2.0

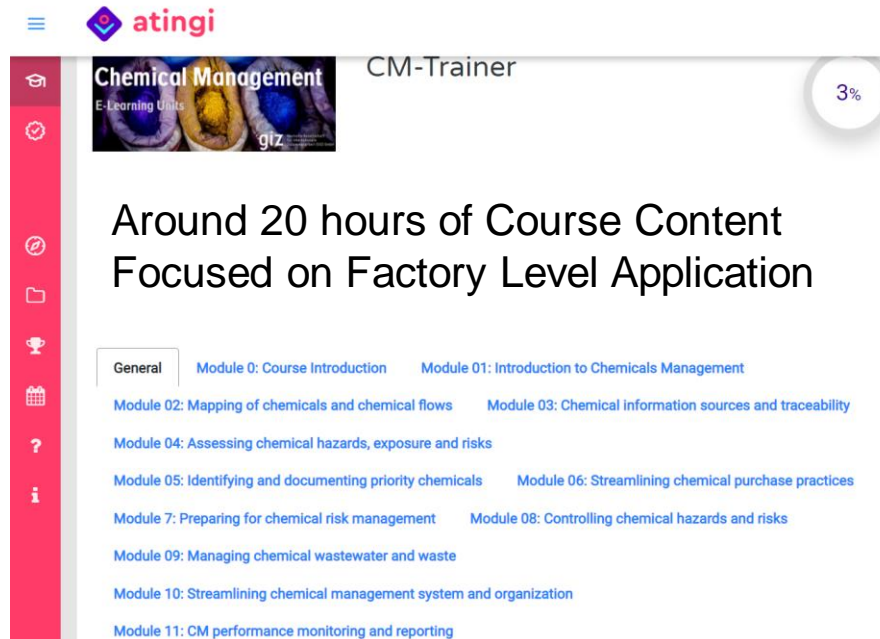
Instruments

- GIZ atingi learning platform
- Miro board

Training programme for chemical management multipliers

Course materials and references used

CM self-learning programme



The screenshot displays the 'Chemical Management' e-learning platform. The interface includes a sidebar with navigation icons (home, search, folder, trophy, calendar, question mark, info) and a main content area. The main content area features the title 'Chemical Management' and 'CM-Trainer' with a progress indicator showing 3% completion. Below the title, the text reads 'Around 20 hours of Course Content Focused on Factory Level Application'. A list of 11 modules is provided, starting with 'General' and followed by 'Module 0: Course introduction' through 'Module 11: CM performance monitoring and reporting'.

Chemical Management
E-Learning Units
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CM-Trainer 3%

Around 20 hours of Course Content
Focused on Factory Level Application

General | [Module 0: Course introduction](#) | [Module 01: Introduction to Chemicals Management](#)

[Module 02: Mapping of chemicals and chemical flows](#) | [Module 03: Chemical information sources and traceability](#)

[Module 04: Assessing chemical hazards, exposure and risks](#)

[Module 05: Identifying and documenting priority chemicals](#) | [Module 06: Streamlining chemical purchase practices](#)

[Module 07: Preparing for chemical risk management](#) | [Module 08: Controlling chemical hazards and risks](#)

[Module 09: Managing chemical wastewater and waste](#)

[Module 10: Streamlining chemical management system and organization](#)

[Module 11: CM performance monitoring and reporting](#)

Using the Chemical Management Self-Learning Program

Standardised module and learning unit descriptions

- Description
- Module content
- Learning materials
- Duration
- Factory application
- Link to additional learning materials



Using the Chemical Management Self-Learning Program

Module	Title	Details
	Navigating the learning platform	
Module 1:	Introduction to chemical management	Overall framework and context as well as business case of chemical management
Module 2:	Mapping of chemicals and chemical flows	LU2.1 Using eco-mapping and flow-charts LU2.2 Preparing a chemical inventory
Module 3	Using chemical information sources and ensuring traceability	LU3.1 Using safety data sheets and labels LU3.2 Tracking chemicals
Module 4	Assessing chemical hazards, exposure and risks	LU4.1 Carrying out hazard assessment LU4.2 Understanding exposure and effects LU4.3 Assessing chemical risks
Module 5	Identifying and documenting priority chemicals	LU5.1 Identifying priority chemicals LU5.2 Looking into VOC in footwear manufacture

Using the Chemical Management Self-Learning Program

Module	Title	Details
Module 6:	Streamlining chemical purchase practices	Purchase policy; chemical supplier selection/deselection
Module 7:	Preparing for chemical risk management	Root-cause analysis, action planning
Module 8:	Controlling chemical hazards and risks	LU8.1 Referring to control hierarchy and selecting engineering controls + LU8.1.1 Controlling VOC LU8.2 Selecting and using personal protection LU8.3 Ensuring safe storage and transport LU8.4 Preparing for chemical emergencies
Module 9	Managing chemical wastewater and waste	LU9.1 Managing chemical waste LU9.2 Managing waste water and sludge LU9.3 Assessing load factor
Module 10	Streamlining chemical management system and organization	LU10.1 Establishing a chemical management organisation LU10.2 Creating awareness and conducting CM training
Module 11	Monitoring and reporting chemical management performance	LU11.1 Approach to integrating CM into management system LU11.2 Monitoring and reporting CM performance

Using the Chemical Management Self-Learning Program

Standardised module and learning unit descriptions

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- Factory application
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Module 3: Using chemical information sources and ensuring traceability		
Description	Module content	Learning materials
<p>Learning Units 3.1.1 and 3.1.2, provide guidance on how to employ safety data sheets and container labeling as two different sources of chemical information. These learning units explain the key types of information which can be retrieved. Furthermore, the corresponding requirements are outlined in accord with the Globally Harmonized Systems of Classification and Labelling of Chemicals (GHS).</p> <p>Learning Unit 3.2 outlines the concept of traceability in the context of chemical management and explains the basic requirements as per ZDHC and Higg FEM.</p>	<p>Learning Unit 3.1.1</p> <ul style="list-style-type: none"> • Content and structure of safety data sheets • Requirements as per GHS <p>Learning Unit 3.1.2</p> <ul style="list-style-type: none"> • Overview of hazard pictograms • Concept and system of hazard statements • Content and format requirements of container labels as per GHS <p>Learning Unit 3.2</p> <ul style="list-style-type: none"> • Concept of chemical traceability • Requirements as per ZDHC and Higg FEM 	<p>Learning Unit 3.1.1</p> <ul style="list-style-type: none"> • Presentation of LU 3.1.1 with 32 slides and 14 pages of voiceover (30 min.) • Quiz 3.1.1 (5 min.) • Assignment 3.1.1 (30 min.) <p>Learning Unit 3.1.2</p> <ul style="list-style-type: none"> • Presentation of LU 3.1.2 with 18 slides and 7 pages of voiceover (15 min.) • Quiz 3.1.2 (5 min.) • Assignment 3.1.2 (30 min.) <p>Learning Unit 3.2</p> <ul style="list-style-type: none"> • Presentation with 18 slides and 7 pages of voiceover (15 min.) • Quiz 3.2 (5 min.)
Duration	Recommended factory-level applications	Link to additional reference/training materials
<p>Total time required: 135 min.</p> <ul style="list-style-type: none"> • Learning Unit 3.1.1: 65 min. • Learning Unit 3.1.2: 50 min. • Learning Unit 3.2: 20 min. 	<p>Learning Units 3.1.1 and 3.1.2</p> <ul style="list-style-type: none"> • Verify availability and quality of safety data sheets (i.e. GHS conformance). • Verify availability and quality of container labels (i.e. GHS conformance). <p>Learning Unit 3.2</p> <ul style="list-style-type: none"> • Check and update current internal chemical traceability practices. 	<p>REMC Trainer guideline</p> <p><i>Learning Units 3.1.1 and 3.1.2</i></p> <ul style="list-style-type: none"> • LU 1300, SP 1302 <p><i>Learning Unit 3.2</i></p> <ul style="list-style-type: none"> • not available <p>DSHC</p> <ul style="list-style-type: none"> • Module 3 – Information management of chemicals

Using the Chemical Management Self-Learning Program

Standardised module and learning unit descriptions

- Description
- **Module content**
- Learning materials
- Duration
- Factory application
- Link to GIZ REMC materials




Selecting and using personal protective equipment

Managing chemical risks

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Outline

- I. Basic principles and scope of personal protection
- II. Selecting respiratory protection
 - Air purifying respirators (APRs)
 - Atmosphere-supplying respirators or supplied-air respirators (SAR)
 - Calculating required protection factor
 - Selecting the type of respirator filter
 - Respirator protection program
- III. Selecting skin/eye protection
- IV. Promoting good personal protection practices



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Learning Outcomes

- Relate to the basic principle and scope of personal protection
- Select exposure control using personal protection suitable to exposure situation
- Apply good practices in use of personal protective equipment

Resources

- GIZ REMC Company Handbook, section 6.3
- ZDHC Chemical Management System Guidance-Personal Protective Equipment, section: 3.5.8

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I. Basic principles and scope of personal protection

Scope of personal protection

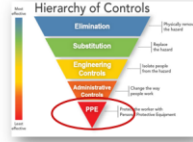
- Application of personal hygiene practices
- Use of personal protective equipment (PPE)

Important to remember:
PPE is the last protective barrier between the contaminant and you!

Consider PPE as an **immediate but temporary** solution if the contaminants cannot be controlled otherwise.

Personal protection against the following forms of chemical exposure

- inhalation
- skin contact
- absorption through the eyes



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Using the Chemical Management Self-Learning Program

Standardised module and learning unit descriptions

- Description
- **Module content**
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Key takeaways

- A factory's purchasing policy provides overall guidance on what can and cannot be ordered. It is meant to support the factory in its overall efforts towards reducing the negative impacts on the environment and the health & safety of its operations in line with regulatory requirements and international supply chain obligations.
- Apart from a chemical purchasing policy, factories are also expected to develop and use a procedure and mechanism for selecting and deselecting chemical suppliers. This process needs to be based on transparent chemical supplier performance criteria.



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Next steps

(1) Test your newly acquired knowledge by taking the module quiz as plus carry out the exercise of this module.

(2) In your factory practically apply your newly acquired knowledge

- Review your purchasing policy or try drafting one along the line of the example provided.
- Develop/Update your supplier approval and removal procedure.
- Collect and maintain a record of the chemical supplier conformity declaration and related documents.
- Review/Update the chemical inventory with regard to compliance with applicable MRSLS and RSL.
- Consider setting specific targets for the purchase of less or non-hazardous substances.
- Review your existing procurement orders and include your updated requirements for your next purchases (e.g. requesting GHS-conform safety data sheets and container labels).

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Using the Chemical Management Self-Learning Program

Standardised module and learning unit descriptions

- Description
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Resource Efficient Management of Chemicals (REMC)

Module 4

Submodule 4.2 – Quiz

Questions	Answer
1. How do you define the term "chemical hazard"?	
<i>Possible answer</i> <i>Hazard is the intrinsic property of a chemical substance to potentially cause harm.</i>	
2. "Risk of a chemical having an effect is a combination of hazard and exposure." Is this statement....?	
<input type="checkbox"/> True <input type="checkbox"/> False	<input checked="" type="checkbox"/> True <input type="checkbox"/> False
3. What is the most frequent type of exposure to chemicals in the workplace, according to the International Labor Organization (ILO)?	
<input type="checkbox"/> inhalation <input type="checkbox"/> ingestion <input type="checkbox"/> radiation <input type="checkbox"/> skin contact	<input checked="" type="checkbox"/> inhalation <input type="checkbox"/> ingestion <input type="checkbox"/> radiation <input type="checkbox"/> skin contact
4. Which types of health effects may result from (usually long-term) exposure to chemicals having systemic health hazards?	
<input type="checkbox"/> Cause cancer <input type="checkbox"/> Develop genetic mutation <input type="checkbox"/> Cause interference with hormones <input type="checkbox"/> Damage nervous system	<input checked="" type="checkbox"/> Cause cancer <input checked="" type="checkbox"/> Develop genetic mutation <input checked="" type="checkbox"/> Cause interference with hormones <input checked="" type="checkbox"/> Damage nervous system
5. Looking at possible starting points for chemical risk control management, which of the following measures directly address the exposure angle?	
<input type="checkbox"/> Reduce hazard level of chemical <input type="checkbox"/> Use enclosed processes <input type="checkbox"/> Provide local exhaust ventilation <input type="checkbox"/> Provide general ventilation <input type="checkbox"/> Use personal protective equipment <input type="checkbox"/> Rotate workers	<input type="checkbox"/> Reduce hazard level of chemical <input checked="" type="checkbox"/> Use enclosed processes <input checked="" type="checkbox"/> Provide local exhaust ventilation <input checked="" type="checkbox"/> Provide general ventilation <input checked="" type="checkbox"/> Use personal protective equipment <input checked="" type="checkbox"/> Rotate workers

Resource Efficient Management of Chemicals (REMC)



Module 3.1.2 - Exercise (Labelling)

The following picture is a drum of liquid ammonia without any GHS Label.



Tasks:

1. Select those key pieces of information from the table below which are necessary to put together a GHS compliant label for the container. For your information, the table includes more elements than actually required for the label.
2. Using the chosen key pieces of information, create a GHS compliant label for the above container.

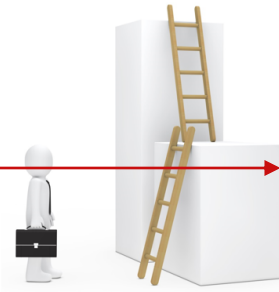
Sl. No.	Information available
1	Signal word: Danger
2	Hazard band: 3/C
3	Product identifier: Ammonia
4	Hazard statement: Toxic if ingested
5	NFPA Scale diamond  NFPA SCALE (G-4)
6	Control band: 2
7	Supplier information: ABC Chemicals-123 Main Street-AB, OH-www.abcchem.com-800-733-5252
8	Chemical composition: Ammonium hydroxide, ACS=12.32%, Deionized water=87%
9	Precautionary statements: Wash hands thoroughly after handling. Keep container tightly closed when not in use. Keep away from heat, sparks and open flames- may explode when exposed to high heat. Use in an open area that is well-ventilated. Breathing in ammonia is irritating and corrosive. Wear protective gloves and safety goggles to prevent burns and irritation. If swallowed: Immediately call Poison Control or doctor/physician. Drink water or milk to dilute ammonia.
10	Hazard pictograms: 

Using the Chemical Management Self-Learning Program

Standardised module and learning unit descriptions

- Description
- Module content
- Learning materials
- Duration
- **Factory application**
- Link to GIZ REMC materials

Next steps



(1) Test your newly acquired knowledge by taking the module quiz as plus carry out the exercise of this module.

(2) In your factory practically apply your newly acquired knowledge

- Review your purchasing policy or try drafting one along the line of the example provided.
- Develop/Update your supplier approval and removal procedure.
- Collect and maintain a record of the chemical supplier conformity declaration and related documents.
- Review/Update the chemical inventory with regard to compliance with applicable MRSL and RSL.
- Consider setting specific targets for the purchase of less or non-hazardous substances.
- Review your existing procurement orders and include your updated requirements for you next purchases (e.g. requesting GHS-conform safety data sheets and container labels).

giz

Training programme for chemical management multipliers

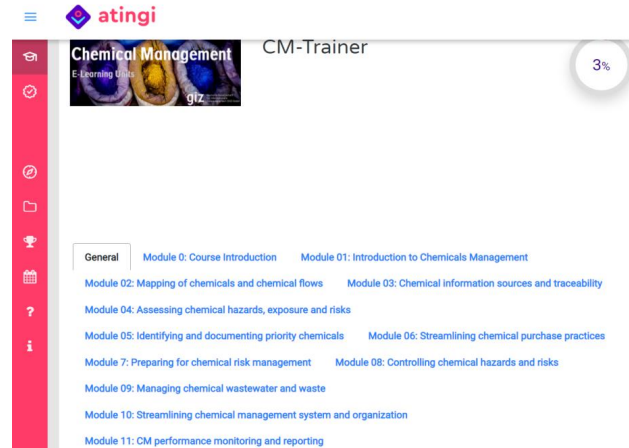
Course materials and references used

ZDHC References

www.roadmaptozero.com

1. The ZDHC Manufacturing Restricted Substances List
2. Performance InCheck Guidelines
3. ZDHC Chemical Management System Framework – Guidance
4. ZDHC Technical Industry Guide (TIG)
5. Chemical Inventory List
6. ZDHC Wastewater Guidelines

Training programme for chemical management multipliers



The screenshot displays the 'atingi' logo at the top left. Below it, the course title 'Chemical Management' is shown with a '3%' progress indicator. The main content area lists the following modules:

- General
- Module 0: Course Introduction
- Module 01: Introduction to Chemicals Management
- Module 02: Mapping of chemicals and chemical flows
- Module 03: Chemical information sources and traceability
- Module 04: Assessing chemical hazards, exposure and risks
- Module 05: Identifying and documenting priority chemicals
- Module 06: Streamlining chemical purchase practices
- Module 07: Preparing for chemical risk management
- Module 08: Controlling chemical hazards and risks
- Module 09: Managing chemical wastewater and waste
- Module 10: Streamlining chemical management system and organization
- Module 11: CM performance monitoring and reporting

Let finalise your enrollment into the chemical management course!

Where can you get further support

V. Course logistics

Training programme for chemical management multipliers

Course logistics

Logistical arrangements (e.g. Travel)

1. The complete training program is free of any charge
2. To move to next session satisfactory completion of initial step is required
3. During the course the technical support and coaching from Adelphi will be available to all the Multipliers
4. Factory level application is the critical part of the course and only travel cost will be reimbursed to multipliers for their field day activities during factory application
5. Expert will be available during the field visits to provide technical support in factory application

Contact Points During the Course



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<https://www.facebook.com/gizprofile/>

VI. Next steps

Training programme for chemical management multipliers

Next steps

#	Activity	Deadline
1	Complete atingi registration	22.06.2021
2	Review REMC company toolkit	30.06.2021
3	Complete CM self-learning programme part 1	06.07.2021
4	Join session T3	07.07.2021
5	Complete CM self-learning programme part 1	15.07.2021

Training programme for chemical management multipliers

Question and answers

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