

WORKING WITH YOUR MAP

November 2017

Version 1.4

LEARNING OUTCOME & RESOURCES

Learning Outcome

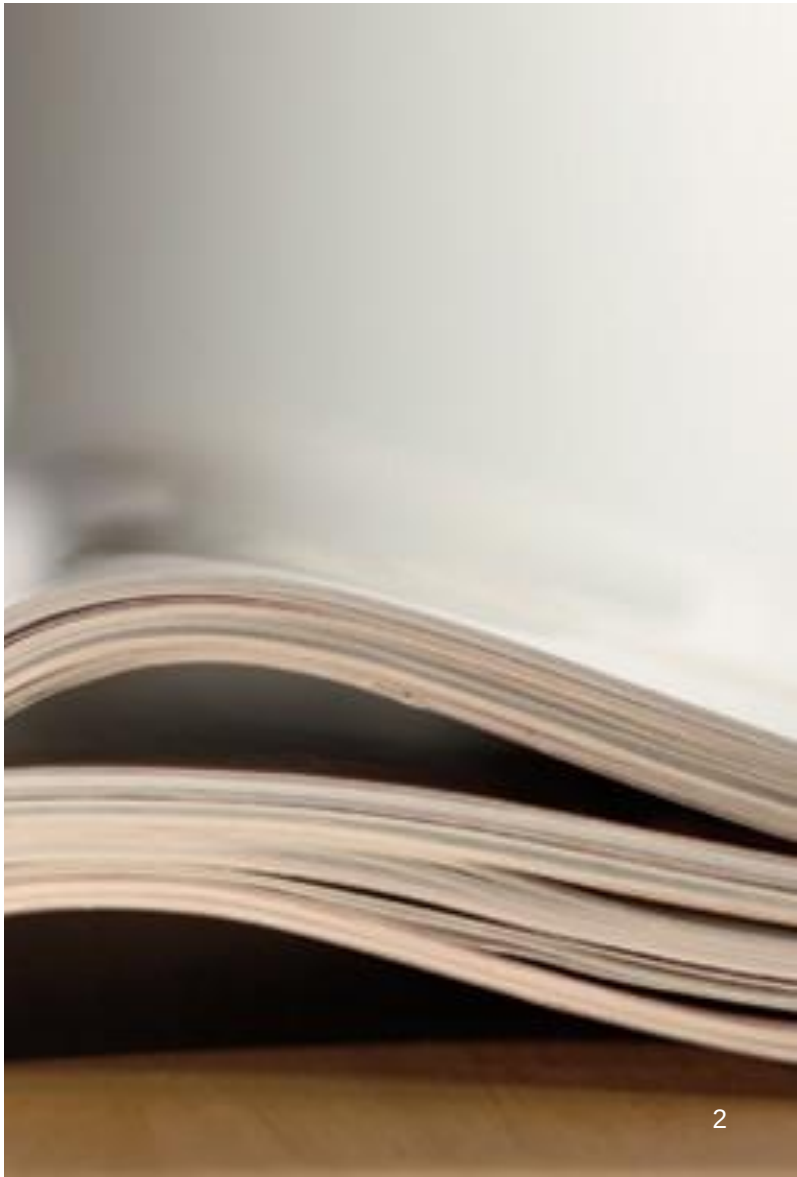
- Ability to improve your facility's chemical system by understanding the link between on-site assessment and a Management Action Plan.
- Ability to use the Management Action Plan as a tool to drive change towards environmentally-friendly production.

Resources

- REMC Company Handbook.
- ZDHC Chemical Management Systems Guidance Manual.

Workbook

Refer to complimentary excercises in your workbook.



ZDHC REQUIREMENTS

ZDHC CMS 4.4.2 - Corrective Action

- Procedure for Change Management and Corrective Action.

Establish, document and implement a process for dealing with actual and potential non-conformities or non-compliance. This process should include taking corrective and preventive actions, documenting the actions taken and verifying the effectiveness of the actions taken.

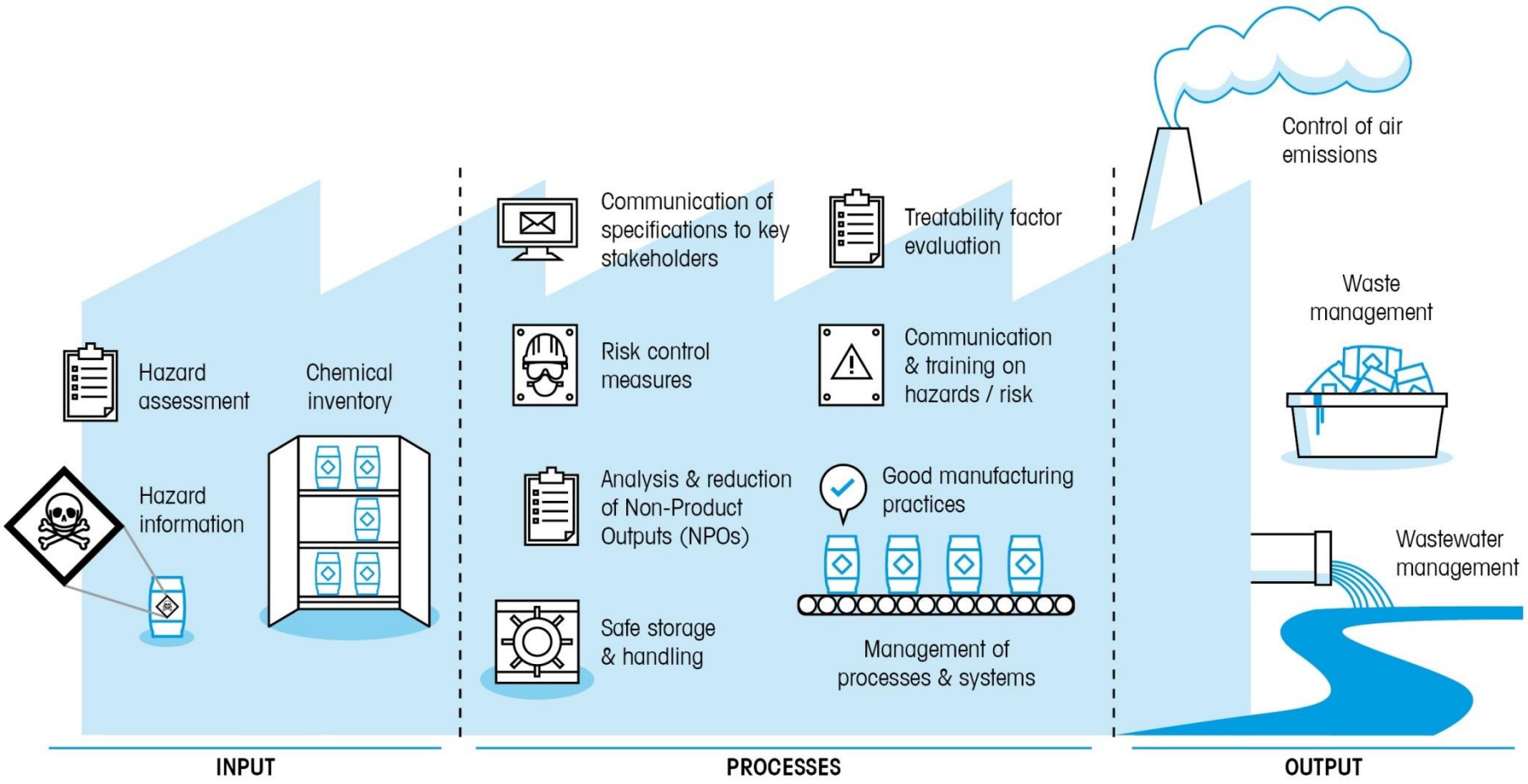
Reference: ZDHC Chemical Management Systems Guidance Manual

THE PROBLEM

What problems might occur if you are not improving your environmental management system?

Brainstorm as a group and make notes in your workbook, exercise (2-1)

ASSESSING THE CHEMICAL MANAGEMENT SYSTEM IN YOUR FACILITY



5 Assessment Areas – 40 Questions

Management System – Water Use – Chemical Management –
Wastewater Treatment & Waste Management – Sustainability & Process Optimisation

ASSESSMENT QUESTIONNAIRE

Assessment Questions

Area	Code	Assessment Questions	Baseline Visit	Improvement Area (When not fully implemented please explain)	Validation Visit	Status Validation Visit (When not fully implemented please explain)
			Please select the alternative that represents the current status of your InPU		*Please select the alternative that represents the current status of your InPU*	
Management Systems	MS 1.0	Does the facility have an effective environment management system?	Not applicable		Not applicable	
	MS 2.0	Does the facility conducts periodical training, that includes air / water quality, chemical management processes with hazardous material / waste management, considering usage of PPEs and spillages?	Not applicable		Not applicable	
	MS 3.0	Does the facility have a management representative, who is responsible for coordinating the site*s efforts to improve environmental performance, reporting to senior	Not applicable		Not applicable	
	MS 4.0	Has the facility established environmental targets and reduction plans for freshwater use, waste minimisation,	Not applicable		Not applicable	
Water Use	WU 1.0	Has the facility identified its primary water sources (e.g. municipal, surface water, groundwater (e.g. pond / well), recycled water, etc.)? And is there a system for measuring the water use?	Yes - Fully Implemented		No - Not Implemented	
	WU 2.0	Does the facility have the capability to measure or evaluate water usage for various processes?	Yes - Fully Implemented		No - Not Implemented	
	WU 3.0	Is the water recycling plan fully implemented and practiced?	Yes - Fully Implemented		Not applicable	
	CM 1.0	Does your company have a proper chemical inventory management system?	Not applicable		Yes - Fully Implemented	
	CM 2.0	Does your company have a documented and implemented procurement policy?	Not applicable		Yes - Fully Implemented	
	CM 3.0	Does the facility have established procedures or alternative systems to ensure that only quality control approved chemicals are used?	Not applicable		Yes - Fully Implemented	
	CM 4.0	Does the facility has updated Safety Data Sheet in GHS format or other format with adequate and accurate information's necessary in section 2 , 3, 9, 11 and 12?	Yes - Fully Implemented		Yes - Fully Implemented	
	CM 5.0	Are retention samples of chemicals (risky) & non-compliance materials retained for one year or for the shelf life period whichever is earlier?	Yes - Fully Implemented		Yes - Fully Implemented	
	CM 6.0	Is there a dyes and chemicals traceability template, in which all the information regarding name of the suppliers, manufacturers, lot number and quantity of the chemical products are mentioned?	Yes - Fully Implemented		Yes - Fully Implemented	
	CM 7.0	Are the chemicals being stored (with individual accessories, secondary containment, ventilation, isolation, segregation, separation, incompatibility) transported and handled at the facility appropriately?	Yes - Fully Implemented		Yes - Fully Implemented	
	CM 8.0	Is there a process of checking the labels and eco labels for all incoming chemicals at the store?	Yes - Fully Implemented		Yes - Fully Implemented	
	CM 9.0	Are incoming chemicals segregated from working stock prior to acceptance for use and stored in well ventilated space?	Yes - Fully Implemented		Yes - Fully Implemented	

FROM ASSESSMENT QUESTIONNAIRE TO MANAGEMENT ACTION PLAN (MAP)

Code	Assessment Questions	Baseline Visit	Improvement Area (When not fully implemented please explain)
		Please select the alternative that represents the current status of your WPU	
CM 1.0	Does your company have a proper chemical inventory management system?	Partial - Implementation Just Started	Facility files information on chemicals procured in a physical folder, however has no chemical inventory system established.

Example Mill		MANAGEMENT ACTION PLAN				
Code	Improvement Area	Management Action	Deadline	Responsible	Consultancy During Improvement Visit	Pictures
Management Systems						
CM 1.0	Facility files information on chemicals procured in a physical folder, however has no chemical inventory system established.					
CM 2.0	0					

DEFINE THE BEST POSSIBLE MANAGEMENT ACTION

Example Mill		MANAGEMENT ACTION PLAN				
Code	Improvement Area	Management Action	Deadline	Responsible	Consultancy During Improvement Visit	Pictures
Management Systems						
CM 1.0	Facility files information on chemicals procured in a physical folder, however has no chemical inventory system established.					

MANAGEMENT ACTION PLAN				
Management Action	Deadline	Responsible	Consultancy During Improvement Visit	Pictures
An effective chemical inventory should be developed to ensure the full control of operations and activities where chemicals are involved within the facility.				

Define Management Actions:

- Short-term actions to address hotspots.
- Medium-/long-term actions to address root causes identified.

SET A DEADLINE FOR EACH MANAGEMENT ACTION

Example Mill		MANAGEMENT ACTION PLAN				
Code	Improvement Area	Management Action	Deadline	Responsible	Consultancy During Improvement Visit	Pictures
Management Systems						
CM 1.0	Facility files information on chemicals procured in a physical folder, however has no chemical inventory system established.					

MANAGEMENT ACTION PLAN				
Management Action	Deadline	Responsible	Consultancy During Improvement Visit	Pictures
An effective chemical inventory should be developed to ensure the full control of operations and activities where chemicals are involved within the facility.	30/06/2018			

Set a realistic deadline:

- Close enough to not get moved back.
- Long enough to leave sufficient time for implementation.

ASSIGN A RESPONSIBLE PERSON FOR EACH MANAGEMENT ACTION

Example Mill		MANAGEMENT ACTION PLAN				
Code	Improvement Area	Management Action	Deadline	Responsible	Consultancy During Improvement Visit	Pictures
Management Systems						
CM 1.0	Facility files information on chemicals procured in a physical folder, however has no chemical inventory system established.					

MANAGEMENT ACTION PLAN				
Management Action	Deadline	Responsible	Consultancy During Improvement Visit	Pictures
An effective chemical inventory should be developed to ensure the full control of operations and activities where chemicals are involved within the facility.	30/06/2018	1.EHS Manager 2.Process Manager 3.Store Manager 4.Procurement Manager 5.Lab Manager 6.ETP Manager		

Assign a person, who:

- Has the necessary expertise or the opportunity to obtain such expertise.
- Has been provided with the necessary authority.
- Has required resources allocated.

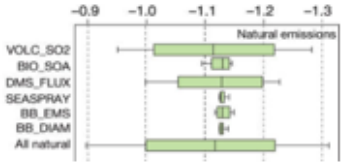
DEFINE THE MOST APPROPRIATE MANAGEMENT ACTION

Measure

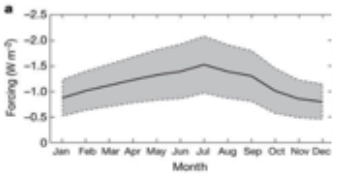
1) Describe the Problem

	IS	IS NOT
What		
Where		
When		
Extent		

2) Measure the Magnitude of a Problem



3) Determine when the problem started



Analyse

4) Identify the Root-Cause

5) Analyse Existing Data

6) Construct List of Verified Facts

Facts
Fact 1
Fact 2
Fact 3
Fact 4

7) Compare Causes to Facts

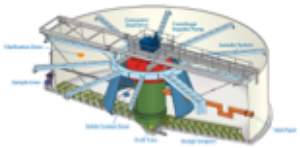
	Fact 1	Fact 2	Fact 3
Cause 1	o	x	o
Cause 2	o	o	o
Cause 3	x	x	o

8) Collect additional data until root cause is identified

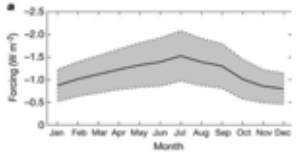
Improve

9) Determine Best Solution

10) Pilot Solution

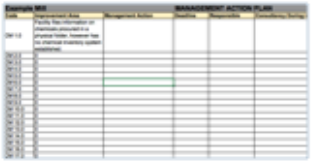


11) Verify Solution Works



Control

12) Control Plan



BENEFITS OF A MANAGEMENT ACTION PLAN

- Management buy-in, work towards more environmentally-friendly production.
- Prioritisation of actions.
- Create internal commitment to continuous improvement.
- Achieve measurable improvements.
- Enhanced risk management.
- Anticipate proposed regulatory requirements.
- Identify the most cost-effective actions that can be implemented to correct errors.
- Eliminate repeated deficient practices.

ACTIVITY

Q&A

Take notes.
Workbook, exercise (2-2)

Do you have any questions about the on-site assessments?

Do you have any questions regarding Management Action Plans?

OPEN TO QUESTIONS

SUMMARY

Every participant to feedback one key learning from this session.

Take notes in your workbook, exercise (2-3).