

## Chemical Management System

Agility Consultants

## Chemical Management System

Why do we need Chemical Management System?

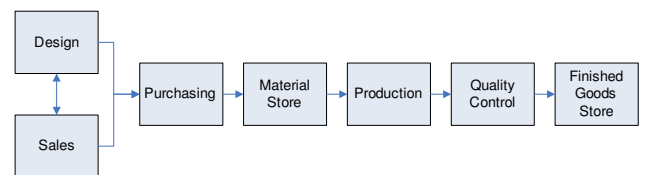
Your partner for management solution

## Benefits

- Enhance chemical control and monitoring in product
- Improve consistency of processes
- Ensure employee awareness
- Prevent claims / penalties
- Increase operational efficiency
- Reduce operation errors
- Enhance communications and job satisfaction
- Increase competitive advantage

Your partner for management solution

## Typical manufacturing processes



Your partner for management solution

## Step 1 Organisational Structure

- Form a Management Committee
- Comprising of top management and representatives from different functional departments
- Appoint a Management Representative
- Establish System Development Plan

Your partner for management solution

## Example of System Development Plan

Step 1	Formation of Organisation Structure	WK1
Step 2	Competence and Training	WK2 – WK3
Step 3	Materials Specification Review	WK3 – WK9
Step 4	Procurement Controls	WK10 – WK11
Step 5	Production Processes Controls	WK12 – WK13
Step 6	CMS Documentation	WK14 – WK16
Step 7	System Implementation	WK17 – WK21
Step 8	Internal Assessment	WK22
Step 9	CPAR Mechanism	WK23 – WK24
Step 10	Management Review and Improvement	WK25

Your partner for management solution

## Step 2 Competence and Training

- Ensure staff have sufficient competence
- Proposed trainings
  - Overview of REACH Regulation
  - Detail requirements of Registration and Notification
  - Concepts of Management System
  - Skills for documentation preparation
  - Internal Assessment Process

Your partner for management solution

## Step 3 Materials Specification Review

Facilitate the control and monitoring of chemical composition and usage by:

- Identifying products exported to EU markets
- Identifying and analysing substances used
- Determining registration and notification requirements
- Deciding if substitutes are required

Your partner for management solution

## Review Substance Details

- Analyse the use of chemical substance
- Prepare a Bill of Substances for each product
- Review if classified as substances of very high concern
- Review if intended to be released
- Collect MSDS and / or Chemical Safety Reports (CSR)
- Prepare substance specifications
- Refine the Bill of Substances if necessary
- Estimate the usage of each substance
- File all information in a product file

Your partner for management solution

## Substance Database

- Calculate the total amount of substances used in all products exported to EU markets
- Proposed contents
  - Substance name
  - CAS number / EINECS number
  - Weight
  - Intended to be released
  - Weight Percentage
  - Substance of very high concern

Your partner for management solution

## Step 4 Procurement Controls

- Establish a material approval system
- Ensure substances are correctly defined in Substance Database
- Evaluate if procurement affects registration and notification status
- Determine if exceed pre-defined usage levels
- Consider to source alternative substitutes
- Collect material details such as specification, chemical ingredients, MSDS, CSR, etc.
- Maintain records

Your partner for management solution

## Step 5 Production Processes Controls

- Produce products according to Bill of Substances (BOS)
- Notify Engineer of any change in use of substance
- Segregate materials, chemicals and products for different markets
- Clear identification throughout production
- Ensure no contamination or mix up
- Assign unique lot number from incoming to finished products
- Check product before release to customer
- Update Substance Database after delivery

Your partner for management solution

## Handling of Non-conforming Material and Product

Identify and segregate

Record details

Review and dispose of by authorised party

If any ambiguity, send to laboratory for testing

- Inform management to determine remedial actions if detected after delivery
- Trace the lot numbers and inform customer or relevant authority if product recall is required

Your partner for management solution

## Step 6 CMS Documentation

- Documentation structure
  - Chemical Management Policy and Objectives
  - Chemical Management Manual
  - Product related documents
  - Substance Database
  - Registration documents
  - Chemical Safety Report
  - Notification documents
- Approved by management
- Communicated to all staff
- Can be incorporated into the existing QMS

Your partner for management solution

## Example of CMS Policy

- We are committed to providing good quality products that are **environmentally friendly** and **minimize human risks** that meet the REACH Regulation and related customer, legal and other requirements related to product chemical composition.
- This is accomplished through the development, implementation and maintenance of the **Chemical Management System**.
- We are committed to **controlling usage** of product **chemicals** especially those of very high concern and replacing them with substances of less human and environmental impact.
- We are also committed to **continual improvement** of our Chemical Management System to seek opportunities in improving our products and services.

Your partner for management solution

## Step 7 System Implementation

- Define System effective date and announce it to all staff
- Develop management plans to monitor the achievement of Objectives.
- Organise awareness trainings to management and frontline staff
- Implement the process requirements
- Ensure all products comply with the REACH Regulation and other requirements
- Maintain required records

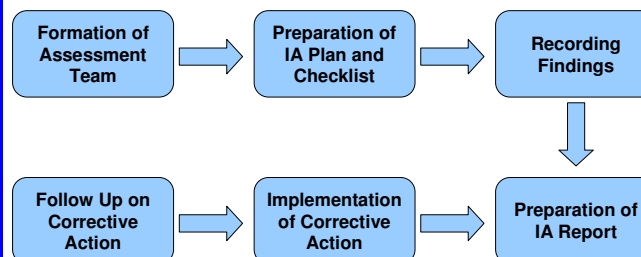
Your partner for management solution

## Step 8 Internal Assessment

- Assess strengths and weaknesses of Chemical Management System
- Demonstrate that requirements are met
- Identify opportunities for improvement
- Initiate corrective action for nonconforming findings
- Improve system effectiveness.

Your partner for management solution

## Typical Internal Assessment Flow



Your partner for management solution

## Step 9 CPAR Mechanism

- **Corrective Action**
  - Review and investigate the causes of non-conformities
  - Implement corrective actions needed to prevent recurrence
  - Record the non-conformities and actions taken
  - Review the effectiveness of corrective actions taken
- **Preventive Action**
  - Determine the causes of potential non-conformities
  - Implement preventive actions to prevent the occurrence
  - Record the potential non-conformities and actions taken
  - Review the effectiveness of preventive actions taken

*Your partner for management solution*

## Step 10 Management Review

- Review the CMS at planned intervals
- **Agenda include**
  - Results of internal assessment
  - Communication and feedback from external interested parties
  - Achievement of objectives
  - Status of CPAR
  - Suppliers and contractors performance
  - Updated information and requirements
  - Need for changes to CMS
  - Results of evaluation of compliance
  - Recommendations for improvement
  - Staff competence and training effectiveness
  - Overall effectiveness of CMS

*Your partner for management solution*



*Your partner for management solution*