INTRODUCTION TO CHEMICAL MANAGEMENT FRAMEWORK

November 2017
LEARNING OUTCOMES & RESOURCES

Learning Outcomes

• Introduction to the Chemical Management Framework.

Resources

• REMC Company Handbook.

Workbook

Refer to complimentary exercises in your workbook.
Introduction To Chemical Management Framework
CHEMICAL MANAGEMENT SYSTEM

Taking full control of all operations and activities where chemicals are involved in the facility.

1. Procurement
2. Inspection
3. Inventory
4. Chemical Store (Main Store & Sub Store)
5. Delivery (Transportation)
6. Production (Use)
7. Discharge
8. Collection & Disposal

Version 1.4
OBJECTIVES FOR A CHEMICAL MANAGEMENT SYSTEM

Primary Objectives

- Regulatory Awareness & Compliance
- Process & Product Chemicals Knowledge
- Chemical Hazard Assessment (low, med, high)
- Insufficient data?
- Regular re-evaluation
- Safer Alternatives Assessment & Preferred Substances
- Restricted Substances / Substances of Concern
- Manage
- Keep
- Substitute

Outputs

- Substances of Concern List
- Preferred Substances List
- Restricted Substances List
- Innovate
- Manage
- Keep
- Substitute

Source: OIA

Version 1.4
What are the benefits of a Chemical Management System?
BENEFITS OF A CHEMICAL MANAGEMENT SYSTEM AND RESOURCE EFFICIENCY

- Maintain a license to operate
- Access to global market
- Maintain a competitive advantage
- Minimise excessive or replicative chemical purchases/consolidate chemical purchasing
- Reduction in costs by reducing waste/overages
- Enforce chemical managing knowledge by expert or certified trainer

- Reduce down time by creating a safer work environment
- Stop potential hazards before they become an issue
- Helps facilities ensure that RSL compliant materials are being produced; becomes invaluable in tracking down issues if they do arise
- Traceability of chemicals in the supply chain
- Reduction of chemicals can result in loading reduction in ETP
**EFFECTIVE IMPLEMENTATION OF MANAGEMENT ACTION PLAN (MAP)**

**Steps for the effective implementation of a Management Action Plan:**

1. **Document the improvement area**
   - Identification of improvement areas for your facility at the point of assessment in order to control input of chemicals and substitute hazardous chemicals in production processes.

2. **Analyse the improvement area**
   - Analyse the root cause of an improvement area to develop the most appropriate Management Actions.

3. **Define the Management Actions (MA)**
   - Formulate the most appropriate MA to an improvement area.

4. **Create ownership to MA**
   - Assign the responsible persons and deadlines to each MA.

5. **Implement the MAP**
   - Implement the MAP with the help of your Chemical Management System Team.

6. **Monitor and review MAP**
   - Systematically monitor the progress on implementing the MAs, monitor effectiveness of implemented actions and review the MAP in case any modification is required.
UTILISING YOUR MAP DURING OUR TRAINING

Steps addressed during the training and visits:

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PLAN, DO, CHECK, ACT

1. Commitment to CMS
2. Assessment, Planning and Prioritisation
3. Chemicals Management
4. Monitoring
5. Management Review

Version 1.4
AREAS OF ATTENTION

ACT
• Communication and reporting.

CHECK
• Performance assessment.

Chemical management issues and elements

PLAN
• Legal register.
• Brand requirement.
• Material flow accounting.
• Chemical inventory.
• Chemical risk analysis.
• Specification of input chemicals.
• Production planning.
• Hazard risk and mapping.

DO
• Emergency preparedness and response planning.
• Chemical risk management action.
• Providing training and creating training awareness.
KEEP IT SIMPLE AND PRACTICAL

Where are chemicals wasted?

What are the risks to the environment?

What are the inefficient ways of handling chemicals?

What are the health risks to workers?
In which processes get chemicals potentially wasted in facilities?
STARTING POINTS (1/2)

Chemicals in effluent

Chemicals lost during processing
STARTING POINTS (2/2)

Chemicals wasted during preparation and handling

Chemicals spoilt and damaged
ACTIVITY

REFLECTION

Conduct the assessment. Workbook, exercise (1-1).

Team-up with colleagues of Your facility.

Assess the maturity of the Chemical Management System in Your facility.
Open To Questions
Every participant to feedback one key learning from this session.

Take notes in your workbook, exercise (1-2).