# GUIDELINES FOR RESPONSIBLE CARE

MANAGEMENT SYSTEM IMPLEMENTATION FOR ENTERPRISES

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FOREWORD

I would like to congratulate the team in Chemical Productivity Nexus (CPN) and the Chemical Industries Council of Malaysia (CICM) for taking the initiative to produce the *Guidelines for Responsible Care® Management System Implementation in Enterprises*. This Guideline is introduced to assist enterprises, particularly chemical manufacturers in the implementation of health, safety, and environment (HSE) management system based on Responsible Care® (RC) in their organization to facilitate them to comply with HSE related legislations in Malaysia.

Increasingly complex work processes and changes in working conditions, together with new or changing types of hazards, require continual improvement and more systematic approach to manage HSE in enterprises workplaces. However, successful RC management at the workplace also needs full commitment and support from all levels of the organization, from top to bottom and vice-versa, in implementing the management system. This RC Guideline provides a foundation and step-by-step journey for a planned and systematic approach to HSE management system with continuous support from CICM as the sole steward or custodian of RC in Malaysia. By being a member of CICM and signatory of RC in Malaysia, the enterprises could also enjoy the benefit of benchmarking, peer guidance and sharing of best practices in RC (HSE) among the industrial players.

It seeks management's commitment to RC and outline the responsibility and accountability of top management, mid-management, supervisors, and shop-floor employees for workplace HSE. This Guideline explores the essential elements necessary to manage HSE at the workplace.

I hope this Guideline will help to equip enterprises with the necessary knowledge and skills to effectively implement RC at their respective workplace, in line with the international RC practices. On behalf of CPN, I would like to record my sincere appreciation to the individuals, especially those involved in the preparation of this important Guideline.

Dato' Dr. Mohamed Noor Sany
Chairman of Chemical Productivity Nexus
Malaysia Productivity Corporation

PREFACE

This document is cited as Guidelines for Responsible Care® Management System Implementation in Enterprises.

This Guideline is developed to guide and assist enterprises particularly within the chemical industries in implementing Responsible Care® standards and requirements as their Health, Safety and Environment (HSE) management system in their respective organizations. However, the Guideline may also be applicable to all industries, types, and sizes because the information provided is intended to assist organizations in establishing, implementing and improving a basic and generic HSE management system at their workplace namely the 2 (two) basic Responsible Care® Codes of Management Practices i.e., the Employee Health & Safety (EHS) and Environmental Protection (EP) Code which supports ISO 45001:2018 OHSMS and ISO 14001:2015 EMS certification, respectively. These can be integrated with other management systems of the organization and subsequently enhanced based on the other 5 (five) Responsible Care® Code of Management Practices i.e., Distribution, Process Safety, Product Stewardship, Community Awareness & Emergency Response, and the newly introduced Security Code.

The Guideline provides information on Responsible Care® (RC), Responsible Care® Management System (RCMS) and Responsible Care® Code of Management Practices (RCMP), and advice on practical guidance for enterprises to implement RCMS at their respective workplaces which meets worldwide and international RC standards while at the same time, fulfill regulatory requirements of Occupational Safety and Health Act 1994 (OSHA 1994) and Environmental Quality Act 1974 (EQA 1974) and their respective regulations or as amended thereafter. In general, the implementation of Responsible Care® Management System in industries, particularly enterprises will help to establish and boost the organization's capability to continuously improve and achieve a sound and sustainable HSE performance along with business growth.

ACKNOWLEDGEMENTS

* Note : The RC Environmental Protection (EP) Code was formerly known as Pollution Prevention (PP) Code prior to the major revision of the Responsible Care® Code of Management Practices by CICM RCP Technical Committee in 2021.

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ABBREVIATION

APRO	Asia Pacific Responsible Care Organization
CEO	Chief Executive Officer
CICM	Chemical Industries Council of Malaysia
CMP	Code of Management Practice
CPN	Chemical Productivity Nexus
CRCC	Company Responsible Care® Coordinator
DMAIC	Define-Measure-Analyze-Improve-Control
DOE	Department of Environment
DOSH	Department of Occupational Safety & Health
EHS	Employee, Health & Safety
EMS	Environmental Management System
EP	Environmental Protection
ERCC	External Responsible Care® Consultant
HSE	Health, Safety & Environment
HSES	Health, Safety, Environment & Security
ICCA	International Council of Chemical Associations
KPI	Key Performance Indicator
MP	Management Practice
MPC	Malaysia Productivity Corporation
OHSMS	Occupational Health & Safety Management System
PDCA	Plan-Do-Check-Action
PP	Pollution Prevention
RC	Responsible Care®
RCIP	Responsible Care® Improvement Plan
RCLG	Responsible Care® Leadership Group
RCMP	Responsible Care® Code of Management Practice
RCMS	Responsible Care® Management System
SME	Small & Medium Enterprise
SoHELP	Systematic occupational Health Enhancement Level Program

TERMINOLOGY

TERM	DEFINITION	BASED ON
5S	A set of systematic principle and practices to be implemented to ensure workplaces are always kept clean and well-organized. The purpose of 5S is to promote a safe, efficient, and productive work environment. 5S is an acronym for 5 (five) Japanese words with the letter S : 1) **S**eri – Sort 2) **S**eiton / Straighten 3) **S**eiso / Shine 4) **S**eiketsu / Standardize 5) **S**hitsuke / Sustain	MPC[1][2]
5-Why Method	Five Whys (5-Why) is a problem-solving tool that explores the underlying cause-and-effect of a particular problem. The primary goal is to determine the root cause of a defect or a problem by successively asking the question "Why?" The method is remarkably simple : when a problem occurs, you drill down to its root cause by asking "Why?" five times. Then, when a countermeasure becomes apparent, you follow it through to prevent the issue from recurring.	Sakichi Toyoda, Toyota Industries, 1930s
Assessment	Management method used to evaluate the Maturity Level of each Management Practice and every RC Code of Management Practice using the RCMS Assessment Checklist.	N/A
Audit	Systematic, independent, and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled. Audit evidence consists of records, statements of fact or other information which are relevant to the audit criteria and are verifiable. Audit criteria are the set of policies, procedures or requirements used as a reference against which audit evidence is compared. The audit should comprise First, Second- & Third-Party Audit.	ISO 45001[3] / ISO 14001[4]
Continual improvement	Recurring activity to enhance performance. Note 1 to entry: Enhancing performance relates to the use of the OHS & Environmental management system to enhance the respective system performance consistent with the organization's HSE or RC policy. Note 2 to entry: The activity need not take place	ISO 45001[3] / ISO 14001[4]

	in all areas simultaneously, or without interruption.	
Contractor	External organization providing services to the organization in accordance with agreed specifications, terms, and conditions	ISO 45001[3] / ISO 14001[4]
Corporate Social Responsibility (CSR)	Corporate social responsibility is a form of international private business self-regulation which aims to contribute to societal goals of a philanthropic, activist, or charitable nature by engaging in or supporting volunteering or ethically oriented practices.	N/A
Documented Information	Information required to be controlled and maintained by an organization and the medium on which it is contained. Note 1 to entry: Documented information can be in any format and media, and from any source. Note 2 to entry: Documented information can refer to: ▪ the management system, including related processes. ▪ information created for the organization to operate (can be referred to as documentation). ▪ evidence of results achieved (can be referred to as records).	ISO 45001[3] / ISO 14001[4]
Employee	Individual in a relationship recognized as an "employment relationship" in national law or practice	ISO 45001[3]
Environment	Natural surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelationships. Note 1 to entry: Surroundings can extend from within an organization to the local, regional, and global system. Note 2 to entry: Surroundings can be described in terms of biodiversity, ecosystems, climate, or other characteristics.	ISO 14001[4]
Environmental Aspect	Element of an organization's activities or products or services that interacts or can interact with the environment. Note 1 to entry: An environmental aspect can cause (an) environmental impact(s). A significant environmental aspect is one that has or can have one or more significant environmental impact(s).	ISO 14001[4]

	Note 2 to entry: Significant environmental aspects are determined by the organization applying one or more criteria.	
Environmental impact	Change to the environment, whether adverse or beneficial, wholly, or partially resulting from an organization's environmental aspects.	ISO 14001[4]
Environmental Management System (EMS)	Part of the management system used to manage environmental aspects, fulfil compliance obligations, and address risks and opportunities.	ISO 14001[4]
Environmental Protection	Use of processes, practices, techniques, materials, products, services, or energy to avoid, reduce or control (separately or in combination) the creation, emission, or discharge of any type of pollutant or waste, to reduce adverse environmental impacts. Note 1 to entry: Environmental Protection can include pollution prevention source reduction or elimination; process, product, or service changes; efficient use of resources; material and energy substitution; reuse; recovery; recycling, reclamation; or treatment.	RCMS[5]
Gap Analysis	A problem-solving tool used to compare where you are against and where you would like to be. This helps you identify the gaps between these two states and come up with an action plan to close them. For example, in this project, you need to conduct Gap Analysis for the Initial RC Maturity Level against the Targeted RC Maturity Level as specified by your organization or CICM expectation (Level 3).	Problem-solving Tools
Hazard	A source or actual/potential situation that poses harm or threat to human life or health, or damage to property, environment or the workplace, or a combination of these.	ISO 45001[3] / ISO 14001[4]
Incident	Occurrence arising out of, or during, work that could or does result in injury and ill health. Note 1 to entry: An incident where injury and ill health occurs is sometimes referred to as an "accident". Note 2 to entry: An incident where no injury and ill health occurs but has the potential to do so may be referred to as a "near-miss", "near-hit" or "close call". Note 3 to entry: Although there can be one or more non conformities related to an incident, an incident can also occur where there is no nonconformity.	ISO 45001[3]

Indicator	Measurable representation of the condition or status of operations, management, or conditions.	ISO 45001[3] / ISO 14001[4]
ISO14001:2015 Environmental Management Systems	ISO 14001:2015 specifies the requirements for an environmental management system that an organization can use to enhance its environmental performance. ISO 14001:2015 is intended for use by an organization seeking to manage its environmental responsibilities in a systematic manner that contributes to the environmental pillar of sustainability. ISO 14001:2015 helps an organization achieve the intended outcomes of its environmental management system, which provide value for the environment, the organization itself and interested parties. Consistent with the organization's environmental policy, the intended outcomes of an environmental management system include: • enhancement of environmental performance. • fulfilment of compliance obligations. • achievement of environmental objectives. ISO 14001:2015 is applicable to any organization, regardless of size, type, and nature, and applies to the environmental aspects of its activities, products, and services that the organization determines it can either control or influence considering a life cycle perspective.	European Chemical Industry Council (Cefic) [6]
ISO45001:2018: Health & Safety Management Systems	ISO 45001:2018 specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving their OH&S performance. ISO 45001:2018 is applicable to any organization that wishes to establish, implement, and maintain an OH&S management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities. ISO 45001:2018 helps an organization to achieve the intended outcomes of its OH&S management system.	European Chemical Industry Council (Cefic) [6]

	Consistent with the organization's OH&S policy, the intended outcomes of an OH&S management system include: ▪ continual improvement of OH&S performance. ▪ fulfilment of legal requirements and other requirements. ▪ achievement of OH&S objectives. This standard replaces the previous OHSAS 18001 (transition possible till 2021).	
Management of Change (MoC)	Procedure used when making a change to the process equipment or operating procedures to detail changes made and to document steps taken to inform and train operating personnel and relevant stakeholders on process changes.	ISO 45001[3]
Management Practice	Management practices (MP) are the working methods and innovations that company management use to make the organization more efficient. For the RCMS, MP are the standard building blocks for the respective RC Code of Management Practices.	Management Tools
Management System	Set of interrelated or interacting elements of an organization to establish policies and objectives and processes to achieve those objectives. Note 1 to entry: A management system can address a single discipline or several disciplines (e.g., environment, occupational health, and safety). Note 2 to entry: The system elements include the organization's structure, roles & responsibilities, planning and operation, performance evaluation and improvement. Note 3 to entry: The scope of a management system can include the whole of the organization, specific and identified functions of the organization, specific and identified sections of the organization, or one or more functions across a group of organizations.	ISO 45001 [3] / ISO 14001 [4]
Maturity Level	Key Performance Indicator (KPI) used during RCMS Assessment to measure and determine RCMS implementation Level at the workplace based on each RC Code of Management Practices.	European Chemical Industry Council (Cefic) [6]
Monitoring	Determining the status of a system, a process, or an activity.	ISO 45001[3] / ISO 14001[4]

	Note 1 to entry: To determine the status, there might be a need to check, supervise or critically observe.	
Occupational Health and Safety Management System (OHSMS)	Management system or part of a management system used to achieve the OHS policy. Note 1 to entry: The intended outcomes of the OHS management system are to prevent injury and ill health to workers and to provide safe and healthy workplaces.	ISO 45001[3]
Opportunity for Improvement (OFI)	An OFI is simply an opportunity to improve a system, process, or practice. Examples of improvement can also include correction, corrective action, continual improvement, breakthrough change, innovation, and reorganization.	ISO 9001:2015 [7]
Organization	Person or group of people that has its own functions with responsibilities, authorities, and relationships to achieve its objectives	ISO 45001[3] / ISO 14001[4]
Performance Indicator	Measure or unit of performance, as defined by the organization.	N/A
Policy	Intentions and direction of an organization related to (health, safety, or environment) performance, as formally expressed by its top management.	ISO 45001[3] / ISO 14001[4]
Process Safety	Process Safety is a disciplined framework for managing the integrity of operating systems and processes handling hazardous substances by applying good design principles, engineering, and operating practices. It deals with the prevention and control of incidents that have the potential to release hazardous materials or energy. Such incidents can cause toxic effects, fire, or explosion and could ultimately result in serious injuries, property damage, lost production, and environmental impact.	RCMS [5]
Product Stewardship	Product stewardship directs participants involved in the life cycle of a product to take shared responsibility for understanding, managing, and communicating the impacts on human health and the environment that result from the development, production, use, distribution, and end-of-life management of the product. This helps companies and their partners to promote safe and environmentally sustainable use of products.	RCMS [5]

Regulatory Requirements	Legal requirements (preferred term) that an organization must comply with or chooses to comply with. Note 1 to entry: Compliance obligations are related to a particular management system. Note 2 to entry: Compliance obligations can arise from mandatory requirements, such as applicable laws and regulations, or voluntary commitments, such as organizational and industry standards, contractual relationships, codes of practice and agreements with community groups or non-governmental organizations.	ISO 45001[3] / ISO 14001[4]
Responsible Care®	An international environment, health, and safety (in some cases also includes security) performance improvement initiative of the chemical industry. Responsible Care is based on the concepts of continual improvement and openness in responding to the concerns of stakeholders about the industry's operations and products.	European Chemical Industry Council (Cefic)[6]
Responsible Care® Code of Management Practices (RCMP)	The 7 (seven) Codes of the RCMP comprises of: 1) Distribution Code 2) Community Awareness and Emergency Response (CAER) Code 3) Environmental Protection (EP) Code 4) Employee Health & Safety Code (EHS) Code 5) Process Safety (PS) Code 6) Product Stewardship (PSS) Code 7) Security Code	CICM[5]
Responsible Care® Management System (RCMS)	The RCMS specifies the management processes and practices needed to effectively implement RC and is a tool for members on how to manage their RC activities. The RCMS is designed for individual company processes for maintaining regulatory compliance and in addition implementing other company programs and commitments such as sustainable development initiatives and corporate social responsibilities. Furthermore, keeping in mind that some companies may do more than just the Codes of Management Practices or other CICM requirements; the RCMS provides the framework for the integration of all the initiatives and programs these companies have undertaken as an industry or individually with room for further future initiatives. The RCMS	CICM[5]

	helps in effective implementation of each program or activity.	
Risk	A combination of the likelihood of an occurrence of a hazardous event with specified period or in specified circumstances and the severity or damage to the health of the people, property, environment, or any combination of these caused by the event. By computation : Risk = Hazard Severity x Likelihood of Occurrence or Exposure	NIOSH [8]
Risk Assessment	The process of analyzing and evaluating the risks to health and safety arising from hazards at work.	NIOSH[8]
Risk Management	Managing OSH risk through the HIRARC cycle or Hazard Identification (HI) - Risk Assessment (RA) - Rick Control (RC) and Continuously Review	NIOSH [8]
Root Cause Analysis (RCA)	Process of identifying all root causes that have or may have resulted in an undesirable condition, situation, non-conformity, or failure.	European Chemical Industry Council (Cefic) [6]
Stakeholders or Interested Parties	Person or group that can affect, be affected by, or perceive itself to be affected by a decision or activity of an organization. Stakeholders can be governments, customers, communities, suppliers, non-governmental organizations, investors, neighbors, employees, and anyone else with a personal stake in the organization's operations. Note 1 to entry: To "perceive itself to be affected" means the perception has been made known to the organization.	European Chemical Industry Council (Cefic) [6]
Systematic occupational Health Enhancement Level Program (SoHELP)	A systematic intervention program introduced by DOSH to help industries to: ▪ Enhance industrial hygiene standard in the workplaces ▪ Meet regulatory requirements on industrial hygiene related regulations with focus initially on basic occupational hazards i.e., chemical, noise, and ergonomic hazard at work.	DOSH
Top Management	Person or group of people who directs and controls an organization at the highest level	ISO 45001[3] / ISO 14001[4]
Workplace	Place under the control of the organization where a person needs to be or to go for work purposes.	ISO 45001[3]

CHAPTER 1 - INTRODUCTION

1.1 Scope

This Guideline provides generic advice on the application of Responsible Care Management System (RCMS) Enterprises particularly within the chemical industries operating in Malaysia. It explains the implementation of the system at enterprises worksites in stages which are governed by the Occupational Safety & Health Act 1994 (OSHA 1994) [9] and Environmental Quality Act 1974 (EQA 1974) [10] and their respective Regulations, related Industry Code of Practice (ICoP), Guidelines and Manuals or the documents as amended thereafter. The work activities may involve production, processing, handling, storage, transport, removal, disposal, or treatment of chemicals, chemical-based intermediate or chemical wastes at the workplace. This Guideline also contains some examples of checklist to assist the user.

1.2 Purpose & Objectives

This purpose of this Guideline is to establish a standard method of implementing Responsible Care® Management System (RCMS) in enterprises with the objective to provide direction and assistance in implementing RCMS [5] that can contribute to the protection of employees from health and safety hazards and its associated risks, the elimination of work-related injuries, disabilities, ill health, diseases, near misses and fatalities as well as the minimization of containment loss and discharge of industrial effluents, wastes and pollutants into the environment. In line with the *Guiding Principles of Responsible Care®*, this guideline is intended to:

- Support the requirement of ISO 45001 OSHMS[9] and ISO 14001 EMS[10]
- Assist compliance to regulatory requirements
- Promote continual improvement in RC particularly in HSE performance
- Cultivate sustainable Responsible Care culture in organization

1.3 Responsible Care® and Responsible Care® in Malaysia

1.3.1 Background & History

Responsible Care® is a global and voluntary initiative of the chemical industry adopted by chemical companies to continuously improve health, safety, environmental and security (HSES) performance of their operations and products in manner responsible to the concerns of the public. Introduced in Canada in 1984, Responsible Care (RC) is developed autonomously by the chemical industry for the chemical industry. Today, it runs in 67 countries including Malaysia which combined chemical industries accounting for nearly 90% of global chemical production. 96 of the 100 largest chemical producers in the world have adopted RC as their license to operate.

RC stands for the chemical industry's desire to improve HSES performance. The signatory chemical companies agree to commit themselves to improve their performances in the fields of environmental protection, occupational health and safety protection, plant safety, product stewardship and logistics, as well as to continuously improve dialogue with their neighbors and the public, independent from legal requirements.

1.3.2 Responsible Care® in Malaysia

Responsible Care® or RC is managed on a national basis by the chemical industry association in the country it operates. In Malaysia, the Chemical Industries Council of Malaysia (CICM) is the country steward for RC initiative program. RC was launched by CICM on April 29, 1994. At the launch, 33 chemical companies' top management signed the Certificates of Responsible Care® Guiding Principles to mark their companies' commitment to RC. To date, there are 150 chemical companies which are signatories to RC in Malaysia.

CICM receives support from international chemical industry associations which generously shared their experiences and reports of their respective RC programs. CICM is also a member of the Responsible Care Leadership Group of the International Council of Chemical Association (RCLG, ICCA); the governing body for Responsible Care implementation worldwide, and the Asia Pacific Responsible Care Organization (APRO). Further information on CICM can be obtained through the CICM Secretariat at the following contact:

Chemical Industries Council of Malaysia (CICM)
Wisma FMM, No. 3, Persiaran Dagang, PJU 9, Bandar Sri Damansara, 52200 Kuala Lumpur, Malaysia.
T : +603 6286 7200 | F : +603 6277 6714 | E : secretariat@cicm.org.my
W **:** www.cicm.org.my

1.3.3   RC Global Charter - Sustainable Means of Doing Business

The Responsible Care® Global Charter defines the commitment of companies to the safe management of chemicals throughout their life cycle, while promoting their role in improving quality of life and contributing to sustainable development. The Global Charter composed of six (6) elements:

1. A Corporate Leadership Culture
2. Safeguarding People and the Environment
3. Strengthening Chemical Management System
4. Influencing Business Partners
5. Engaging Stakeholders
6. Contributing to Sustainability

CEOs of companies worldwide sign and pledge to implement the Responsible Care® program in their respective organization. A copy of the Charter is provided in **APPENDIX A**.

1.3.4   RC Guiding Principles - Leadership Commitment

The RC Guiding Principles refers to the responsibility of the industry to conduct its operations to minimize the negative impact on the workers, environment and all other persons who may be affected by the industry operations.

The Guiding Principles are the philosophical principles of the chemical industry under RC and form the framework for activities within the individual national association like CICM and corporate programs. They are the code of conduct of the chemical industry implementing the RC program.

The CEO must declare and sign an affirmation that the Guiding Principles will be adhered to in all company operations. Responsible Care signatories pledge to manage their businesses according to the following *10 Guiding Principles of Responsible Care*® :

1. To recognize and respond to community concerns about chemicals and operations

2. To develop and produce chemicals that can be manufactured, transported, used, and disposed of safely

3. To make HSE considerations a priority in planning for all products and process

4. To report promptly the information on chemical related health and environmental hazards and to recommend protective measures

5. To counsel customers on the safe use, transportation, and disposal of chemical products

6. To operate our plants and facilities in a manner that protects the environment and the health and safety of our employees and the public

7. To extend knowledge by conducting or supporting research on the HSE effects of our products, processes and waste materials

8. To work with others to resolve problems created by past handling and disposal of hazardous substances

9. To participate with Government and others in creating responsible laws, regulations, and standards to safeguard the community, workplace and environment

10. To promote the principles and practices of Responsible Care by sharing experiences and aiding others who produce, handle, use, transport or dispose of chemicals

1.3.5   Translating the Commitment into Action

Everyone in the industry consisted of companies, national associations like CICM and ICCA plays their role to translate the commitment into action through the introduction and implementation of Responsible Care® Management System (RCMS) in a RC participating organization. The RCMS is a tool for companies to continuously manage their RC activities. These activities are stated in the RC Codes of Management Practices which include additional commitment to sustainable development, Global Product Strategy (GPS) and corporate social responsibility.

CHAPTER 2 - RC MANAGEMENT TOOLS

The following RC management tools are required for companies to manage their RC-related activities or initiatives:

2.1 RC Management System via PDCA Cycle

A management system is defined as a set of systematically organized policies, procedures and practices that express a set of commitments around a set of core objectives and values. The RC Management System (RCMS)[5] specifies the management processes and practices needed to effectively implement and sustain RC within the organization.

The RCMS[5] incorporated the following elements like the standards of ISO 45001 OHSMS[3] and ISO 14001 EMS[4]:

- Policy & Leadership
- Planning to Achieve Objectives
- Description of the Organization & Responsibilities
- Performance Evaluation
- Communication & Employee Participation
- Procedures and Work instructions
- Audit Program
- Document Control & Records
- Management Review
- Continual Improvement

The RCMS[5] is intended for implementation by all signatories of RC. The key elements of RCMS[5] are derived based on modified Deming PDCA Cycle which can be summarized as in **Fig. 1** below.

FIG. 1. RCMS based on PDCA Cycle
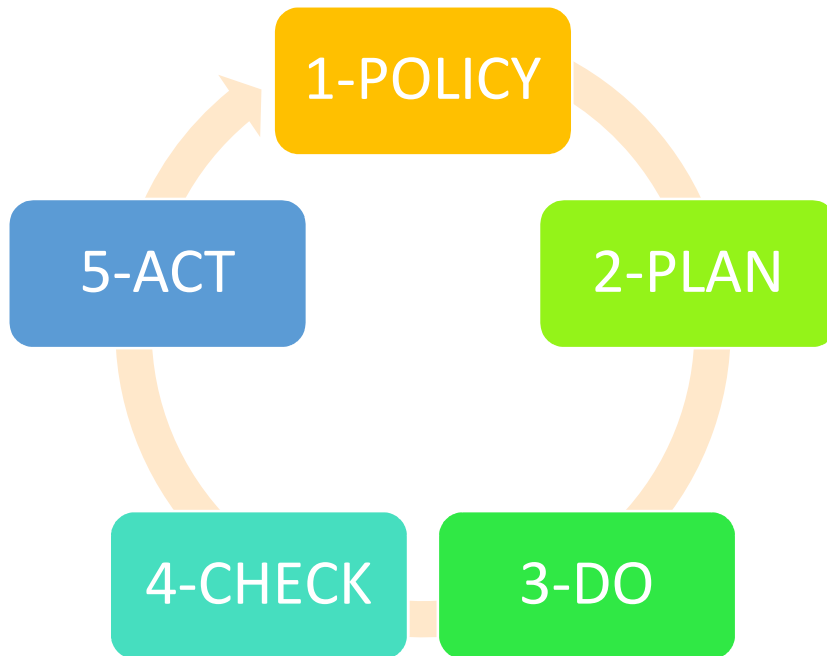
*P*OLICY - Policy and Leadership

Companies' most senior management must develop RC Policy or Occupational Health, Safety, Environmental & Security (HSES) policies which reflect its organizational commitment, philosophy, culture, and scope of operation.

*P*LAN - Planning

It identifies hazards and risks; knowing legal requirements, understanding stakeholders' views of the company and its activities; prioritizing risks; setting goals, targets, and objectives; and allocating appropriate resources to reduce such risks.

DO - Implementation, Operation and Accountability

These elements focus on how the company aligns its resources (people, programs, training, budget, etc.) to achieve the milestones or goals set in their planning process. This includes management of change and employee empowerment.

CHECK - Performance Measurement and Corrective Action

This stage of implementation provides the checks and balances the company must have in place to monitor and evaluate its performance.

Internal audits of the management system, regulatory compliance audits; incident investigations which determines the effectiveness of the RCMS[5] and its operations according to the goals and expectations.

ACT - Management Review

The company's senior management reviews the information on the RCMS[5] collected from the measurement, and corrective action process and any deviations from the goals, targets and objectives set in the initial planning process. If there are deviations or non-conformances, then the organization will need to revisit its original assumptions and take appropriate corrective actions.

GENERAL

Through this Policy-Plan-Do-Check-Act (PDCA) processes in the RCMS[5], the organization can continuously drive Responsible Care performance improvement.

The RCMS[5] is also designed for individual company to manage and handle processes in maintaining regulatory compliance and implementing other company

RC programs and commitments such as for sustainable development and corporate social responsibility (CSR) initiatives.

Furthermore, keeping in mind that some companies may implement more than just the Codes of Management Practices, RCMS[5] is flexible and indirectly compliment and provides framework for integration with all other standards the organization embarked on such as ISO 45001 OHSMS[3] and ISO 14001 EMS[4], initiatives and programs like DOSH's SoHELP and MPC's 5S[1][2] with opportunity or room for future extension as well.

2.2 RC Codes of Management Practices

To assist members in achieving the objectives of the RC Guiding Principles, CICM had developed the 7 (seven) Codes of Management Practices (CMP) which focus on Community Awareness & Emergency Response, Environmental Protection, Process Safety, Distribution, Employee Health & Safety, Product Stewardship and Security which is the recently introduced in all areas of manufacturing, handling, disposal, transportation, and research.

These codes provide general guidelines. They do not attempt to establish standards of conduct. They expressly recognize that each company must use and have its own judgment and discretion to implement the codes successfully. Each company is granted the flexibility to develop systems unique to that company's system that best fits its management structure, its products lines, its location, and other factors unique to the company. Each company designs and implements its own RCMS consistent with the guidance provided by the following RC CMP:

2.2.1 *Distribution Code*

This Code reduces employee and public risk during transportation and distribution of chemicals and chemicals products. The scope of this Code covers all modes of transportation. It protects the carrier, distributors, contractor, and the environment. It also covers activities such as storage, handling, transfer, and packaging. For further details, refer to the RC Distribution Code of MP document in : https://www.cicm.org.my/images/RC/Code_Dist.pdf

2.2.2 *Community Awareness & Emergency Response (CAER) Code*

Designed to help ensure emergency preparedness and foster community involvement. The Code builds on the voluntary self-regulation concept by emphasizing a broader dialogue and interaction between employees, the public, government officials as well as emergency responders. It also requires companies to establish facility outreach program that includes an ongoing assessment of employee and community concerns about their operations. For further details, refer to RC CAER Code of MP document in : https://www.cicm.org.my/images/RC/Code_CAER.pdf

2.2.3 *Environmental Protection (EP) Code*

The Code presents a broad framework that is useful to any company, regardless of its existing efforts. Its management practices are aimed at helping companies to reduce both emissions released into the various media, the amount of waste generated, and deals with waste management. For further details, refer to the newly revised RC EP Code of Management Practices in **APPENDIX B.1**.

2.2.4 *Employee Health & Safety (EHS) Code*

The goal of this Code is to protect and promote the health and safety of people working at; or visiting the company work sites. It provides a framework for identifying and assessing hazards, preventing unsafe acts and conditions, maintaining, and improving EHS, and fostering communications on health and safety issues. Some of this Code's requirements run parallel with the OSHA 1994[9], however it also goes beyond the Act and its regulations. For further details, refer to the recently revised RC EHS Code of MP document in **APPENDIX B.2**.

2.2.5 *Process Safety (PS) Code*

The approach of this Code is to eliminate risks from the outset, i.e., safety begins at the very early planning stages of the plant's production processes. Potential sources of danger which may emerge because of the plant itself or through chemical substances used in the production are analyzed and eliminated as far as possible. It also requires that employees must be trained in the safe operational and maintenance methods and be able to recognize potential sources of error and be capable of assessing the resulting risks. The reactions of the community to the issues in the chemical plant are communicated to those doing the designs and modifications of the plant. For further details, refer to RC PS Code of MP document in : https://www.cicm.org.my/images/RC/Code_PS.pdf

2.2.6 *Product Stewardship (PSS) Code*

The aim of this Code is to make HSE protection an integral part of the research, designing, manufacturing, marketing, distributing, using, recycling and ultimate disposal of chemical products. It emphasizes the need for everyone involved in the developing and handling of chemicals to do so responsibly to help maintain a safe and healthy environment. The key is to keep a flow of information coming

back to the company about how customers are using and disposing the products. For further details, refer to the RC PSS Code of MP document in : https://www.cicm.org.my/images/RC/Code_PSte.pdf

2.2.7   *Security Code*

The purpose of the Security Code of Management Practices is to provide protection to people, property, products, processes, information, and information systems by enhancing security, including security against potential terrorist attack, throughout the chemical value chain.

The code must be implemented with the understanding that security is a shared responsibility requiring actions by others such as customers, suppliers, service providers, and government officials and agencies. Thus, everyone in the chemical industry value chain has security responsibilities and must act accordingly to protect the public interest. Broadly, this code requires member companies to address issues covered under the performance standards such as securing site perimeters, controlling site access, monitoring the export and receipt of hazardous materials from a facility, and preventing internal sabotage.

The code uses the risk-based approach to identify, evaluate, and address vulnerabilities, prevent, or mitigate incidents, enhance training and response capabilities, and maintain and improve relationship with key stakeholders. For further details, refer to RC Security Code of Management Practices in https://www.cicm.org.my/images/RC/Security-Code.pdf

RC Code of Management Practices for Enterprise

For RCMS implementation in enterprise, only the Employee Health & Safety (EHS) and Environmental Protection (EP) Code, namely as the Basic RC Codes are utilized to measure and evaluate the RCMS Maturity Level or HSE

management system implementation stage of the organization. For assessment and implementation guidance of these 2 (two) RC Codes, refer to the respective checklists under **RCMS ASSESSMENT CHECKLISTS.**

2.3 System Maturity Assessment via DMAIC

The Six Sigma DMAIC [11] methodology is a 5 (five)-step problem-solving tool with statistically driven methodology that companies or organizations normally use and refer as a mental framework for business process improvement. However, to assess the RCMS Maturity Level in a company, a simplified DMAIC methodology is utilized to fit the purpose which can be described as follows:

DEFINE
Define the Task and Project Goals

This Definition stage outlines the task, scope, strategy, plan, and expectation of the project to improve Health, Safety & Environment (HSE) performance of the company. All the key information of the project shall be clearly defined and stated in a Project Charter approved by the top management.

MEASURE
Measure RC Performance and Maturity Level

The initial (baseline) HSE or RC performance of a company is evaluated using a set of self-assessment protocol for each respective RC Codes. The Maturity Level of each Code shall be determined based on the average Maturity Level of all the MP. For RCMS implementation in enterprise, only the 2 (two) basic RC Codes; Employee Health & Safety and Environmental Protection Code are assessed to measure and evaluate the RCMS Maturity Level or HSE Management System implementation stage of the company or organization. For assessment of these RC Codes, refer to the respective checklists under **RCMS ASSESSMENT CHECKLISTS.**

*A*NALYZE

Analyze the Gap, Determine Causes & Recommend Solution

Once assessed or evaluated, the company shall later conduct gap analysis for each respective MP and RC Code by comparing the assessment results with the expected company or industry standard set by CICM. Based on the benchmarking process, determine the cause(s) for not meeting the expected level of performance. Direct determination or problem-solving tools such as Root Cause Analysis (RCA) and 5-Why may be used to identify the main reason for the gap. By identifying the root cause of the problem, solution could be identified and recommended. Basically, the gap measures opportunity for improvement (OFI) which assist the leadership team to understand the benchmarking process and decide on the way forward.

*I*MPROVE

Implement RC Improvement Plan

Based on the recommended improvement actions at the ANALYZE phase, the company shall then produce a RC Improvement Plan (RCIP) for each MP. A complete, comprehensive, and SMART improvement shall be produced which includes project deliverables and expected deadline. Additional resource such as people and financial budget allocation may also be explored and planned at this stage.

Once decided and agreed, implement the improvement plan accordingly until completion within the given time frame. Closing of each action will help to reduce the maturity gap hence improve the maturity level (score) of the respective Management Practice and RC Code. However, if the Maturity Level for the RC Code is less than the industry standard, it is strongly recommended for the organization to completely implement full RCMS on site.

*C*ONTROL

Control the Process to Sustain the System

Effective controls to the process cycle should be in place after implementation to ensure the system is effectively maintained and performance does not regress, or the maturity gap enlarged and become ineffective once again. Means of control may include performance monitoring, regular RCIP review meeting, certification, re-assessment, and control of records.

GENERAL

The implementation of RC and RCMS using the DMAIC approach, however, is applicable to all sizes of organization and types of industry, not limited to SME alone. However, the availability of resource and infra-structure may vary by organization and hence, influence the rate and means of implementation.

CHAPTER 3 - PREPARE

Prior to the RCMS implementation project, take the following step and prepare the following resource and infrastructure required for the project accordingly:

3.1 Get Project Information

To start with, the enterprise should get information about the initiative, namely RC@SME from the CICM Secretariat. Refer to Section 1.3.2 for CICM Secretariat contact. The organization will later be invited to attend a project introductory session conducted by CICM. During the program, CICM shall introduce RC and RCMS to the participants, and sharing risk management opportunity through RC@SME Program. Top management of the enterprise is strongly recommended to participate. This Guideline may also be distributed during the briefing session.

3.2 Request to Participate

Upon completion of the Introductory session, interested organization shall submit a Letter of Intent to CICM through its Secretariat (refer to Section 1.3.2) to participate in the program. Although the program is a voluntary initiative, CICM needs to compile data information about the organization and industry they represent, monitor the progress, determine the success rate of implementation, and review the process accordingly for continuous improvement purposes.

3.3 Appoint A Management Representative

Every participating company shall be required to appoint a Company RC Coordinator (CRCC) as the management representative prior enrolling in the RC@SME program. The CRCC role is pivotal to the successful implementation of RC and RCMS in the organization. With full support from the enterprise top

management, the CRCC is the organization resource and liaison person on all RC-related matters.

3.3.1 Function & Background of A CRCC

1) <u>Duty</u>

The main duties of the CRCC are as follows:

a. Advise the enterprise top management and propose strategy on the implementation of RC@SME Program at the workplace.

b. Plan and implement RC and RCMS throughout the organization, in a way that makes the most business sense and beneficial to the organization.

c. Coordinate, monitor, assess, review, and report the status of the project at regular intervals to check effectiveness against target set.

2) Qualification, Experience & Knowledge

Personnel in senior executive level post is a minimum requirement. He / She should possess effective managing skills such as planning, coordinating, communicating, and interacting with employees to discuss RC-related issues or programs and implementing preventive measures or solutions. Personnel with knowledge and experience as Management Representative, HSE Manager, Safety & Health Officer (SHO), Safety Coordinator, OSH Competent Person, SoHELP Coordinator or DOSH / DOE Competent Person with auditing experience should have added advantage and appropriate for the task.

3.3.2 Train & Certify the CRCC

CICM shall arrange to conduct a two-day RC@SME certified training session for all the CRCCs before the CRCC could perform his/her duty. Upon completion of the training, the certified CRCC should be able to manage the program companywide. The CRCC shall also be able to train RCMS Internal Assessors to maintain, improve and sustain the RCMS in the future.

3.4 Appoint RCMS Internal Assessors

The self-assessment shall be conducted by RCMS Internal Assessors trained by the CRCC prior to the assessment. Where appropriate, RCMS Internal Assessors can be personnel from the following group of employees but not limited to:

1) Functional Manager or Head of Department / Section
2) Executive or Officer Level Personnel
3) Senior Member of the HSE Committee

3.4.1 Duties of RCMS Internal Assessor

Besides supporting and assisting the CRCC, the RCMS Internal Assessor is expected to:

1) Carry out self-assessment of the RC Code of Management Practices for the company based on his/her knowledge, experience and observation of the system and process supported with adequate evidence to perform the duty

2) Furnish the self-assessment report and present his/her findings accurately to all stakeholders concerned within a specified time

3) Recommendation any opportunity for improvement if any to the employer

3.4.2   Competency of RCMS Internal Assessor

The trained RCMS Internal Assessor should be able to conduct the assessment and should have the ability to:

1) Understand the requirement of the RCMS including related documents & records supporting the system

2) Knowledge of HSE-related hazards and risks at the workplace

3) Observe the conditions of work and anticipate potential risk to HSE

4) Communicate effectively via interview with all the stakeholders including managers, supervisors and shop-floor employees including contractors

5) Draw all the information together in a systematic way to form valid conclusions about the Maturity Level of the management practices and RC Code

3.4.3   RCMS Assessment Team cum Project Team

The RCMS Internal Assessors are members of the RCMS Assessment Team headed by the CRCC. The team may also function as the Project Team to support and assist the CRCC in performing his/her duties. However, the number of members may vary by organization depending on the area of coverage, resource availability and duration of task involved.

3.5 Appoint External RC Consultant (Optional)

The company, at the organization own cost, may also opt to appoint an External RC Consultant (ERCC) to advise and assist the company in implementing the program and getting the RCMS Certification. If an ERCC is hired, the ERCC shall guide and advise the CRCC and the Project Team on all matters related to the project. Although the ERCC is available, the company should still maintain the RCMS Assessment Team cum Project Team. The scope of the ERCC is to

conduct assessment at Phase 2 & 3 as shown in Table 3 while at the same time, train the RCMS Assessment Team in managing and sustaining the RCMS. To ensure consistency, the ERCC shall have adequate knowledge of RC and experience in managing RCMS with at least 3-year experience as RC Assessor with CICM. The enterprise may refer to the CICM Secretariat if the ERCC service is required.

3.6 Manage the Project via DMAIC

Once the resource and infrastructure are prepared and available, the project shall be ready to be launched companywide using simplified Six Sigma DMAIC methodology from start until completion as described in **Fig. 2** .

Fig 2. RC@SME Project Implementation via DMAIC CYCLE
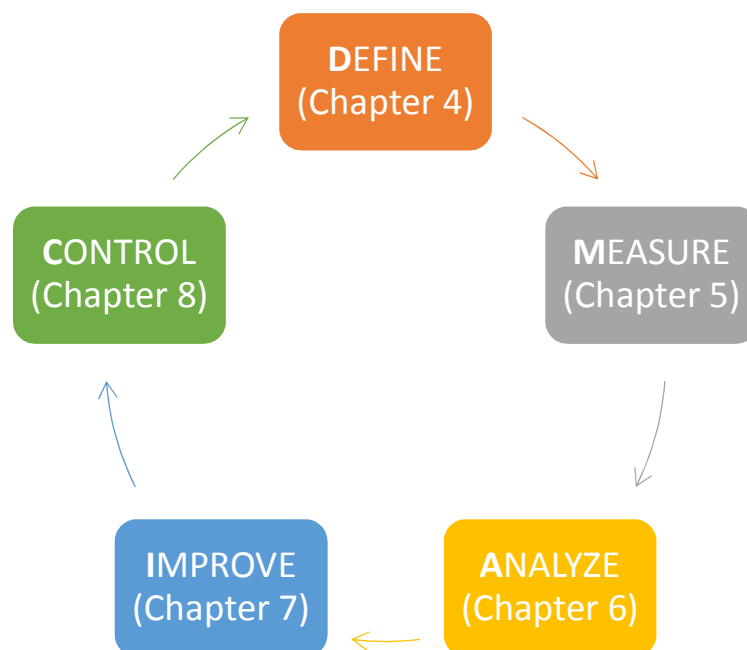
Under normal circumstances, it is anticipated that the duration of the RCMS implementation in enterprise program will not be more than 12 (twelve) months.

CHAPTER 4 - DEFINE

Define the Task and Project Goals

The first step in establishing RCMS in any organization involved understanding the current or initial (baseline) status of the company Health, Safety & Environment (HSE) management system and defining the means of addressing and resolving the issues through the DMAIC process. In this case, the Project Team shall define the issue, purpose, scope, objectives, strategy, required resource, timeline, and expectation of the project by establishing a Project Charter.

A Project Charter is a high-level document that provide purpose and motivation for the initiative, serves as a working document for the Project Team and as a reference for the rest of the company. Project Charter is the most important document in the Define phase and shall be updated progressively throughout the DMAIC process. The project may only be implemented upon approval of the Project Charter by the company top management.

A Project Charter provide the overview of the program and should contain at least the following elements:

- Problem Statement
- Business Case
- Project Scope
- Goal Statement
- Deliverables
- Milestones
- Resources

A sample of the Project Charter is provided in **APPENDIX C**.

Based on the information in the Project Charter, a detailed Project Plan shall also be developed by the CRCC to plan and track all the relevant activities for each phase of the project. An example of the Project Plan is provided in **APPENDIX D** as reference. Throughout the project, the plan should be consistently updated by the Project Team to communicate and share the birds-eye view of the project to all the relevant and interested parties. The company particularly the Project Team shall use the document to plan the action, monitor the progress and review the action or timeline accordingly to ensure the project schedule is adhered.

Chapter 5 - MEASURE

Measure RC Performance & Maturity Level

At this stage, the company is expected to evaluate the current or initial (baseline) Stage of RCMS Implementation or Maturity Level of each Management Practice of the respective RC Code using the RC Assessment Checklist as shown in Table 1 below.

Table 1. No. of Management Practices by RC Code

No.	RC Code of Management Practice	Code	No. of Management Practices
1	Distribution	D	7
2	Community Awareness & Emergency Response	CAER	19
3	Environmental Protection*	EP	15
4	Employee Health & Safety*	EHS	18
5	Process Safety	PS	23
6	Product Stewardship	PSS	8
7	Security (New)	S	12
	TOTAL	**RC**	**102**

*Note : Basic RC Code of Management Practices

Refer to the respective checklist in **RCMS ASSESSMENT CHECKLISTS** for each RC Code of Management Practice.

5.1 Determine Assessment Strategy

Select the assessment strategy to be used. The selection shall be based on system availability in the organization and the following options as stated in Table 2 :

Table 2 . Types of Assessment Strategy

Option	Type of Assessment	RC CMP	SME	Large & Multinational
A	Basic	EHS & EP Code only	Compulsory*	Compulsory*
B	Partial	Basic & 1-4 Other Codes	Optional	Compulsory
C	Full	All 7 RC Codes	Optional	Compulsory

*Self-assessment is required for annual submission to CICM Secretariat

As stated in Table 2, only Basic Assessment comprises of the 2 (two) basic RC Codes: Employee Health & Safety (EHS) and Environmental Protection (EP) Code are required to be conducted for enterprise to measure and evaluate the RCMS Stage of Implementation or Maturity Level within the organization.

5.2 Conduct Assessment

This 3-Phase assessment of each RC Code of Management Practice shall be conducted by the company or organization in the following manner :

5.2.1 *Phase 1 - Self-Assessment*

1) Self-Assessment shall be conducted by RCMS Internal Assessors using the RCMS Assessment Checklist of the respective RC Code attached in the **RCMS ASSESSMENT CHECKLISTS** section of this Guideline.

2) For each Management Practice (MP), record observations and findings based on the Implementation Guidelines and availability of evidence gathered. Later provide assessment rating based on degree of RC Maturity Level or Stage of Implementation of 1 to 5 for each management practice evaluated. Refer to Section 5.3 below for the rating score and definition.

3) Each MP shall be supported by strong evidence of implementation like documents, records, visual proof etc. to get high rating. No or lack of evidence provided will lead to low assessment rating.

4) The RCMS Assessment Checklist is also available in a pre-programmed softcopy Excel sheet which will compute the Maturity Level rating for each Management Practice and Code of Management Practice. The softcopy of the pre-programmed checklist will be provided to the CRCC during the certified training for use in their respective organization.

5) The initial assessment rating is considered as the baseline rating for the Management Practice and Code of Management Practice under evaluation.

5.2.2 *Phase 2 - Documentation Assessment*

Upon completion of the Self-Assessment, Documentation Assessment shall be conducted by either the CRCC or ERCC (if applicable) using the same RCMS Assessment Checklist produced in Phase 1. At this stage, the rating may be reviewed and revised by either the CRCC or ERCC (if applicable) accordingly depending on the findings and adequacy of evidence provided. The rating given by either the CRCC or ERCC (if applicable) will be accepted as the final assessment rating before Phase 3. Refer to a sample copy of the respective RC Code checklist provided under **RCMS ASSESSMENT CHECKLISTS** of this Guideline.

5.2.3 *Phase 3 - Site Verification*

Site Verification / Assessment is conducted by either the CRCC or ERCC (optional) using the same RCMS Assessment Checklist produced in Phase 2 (Documentation Assessment). Normally, the assessment involves a walk-through survey (fieldwork) of the site to observe and verify the actual practice at the workplace as claimed in the self-assessment. Besides the documented evidence and visual observation, the assessors may interview either the employer, employees (including contractors) and person-in-charge of the workplace. At the end, the rating given by the assessor after this exercise will be accepted as the final assessment score for the respective management practice.

General

The overall method of assessment can be summarized into the following manner as shown in Table 3.

Table 3. Overall Method of RCMS Assessment

Stage	Type of Assessment	Assessor	Type of Checklist**	Type of Activity
1	Self-Assessment	RCMS Internal Assessor	Self-Assessment	Deskwork
2	Documentation Assessment	CRCC or ERCC*	Self-Assessment	Deskwork
3	Site Verification	CRCC or ERCC*	Self-Assessment	Deskwork & Fieldwork***

Note :

*Only if applicable
Refer to the respective document in **RCMS ASSESSMENT CHECKLISTS of this Guideline
*** Walk-through inspection including interviewing of employee & management

5.3 Evaluate Maturity Levels (1 to 5)

The rating is based on the RC Maturity Level or Stage of Implementation of the management practice evaluated. The rating standard comprised of 5 (five) different RC Maturity Level or Stage of Implementation measures the company achievement on their path towards continuous improvement in all the 7 (seven) Responsible Care® Codes of Management Practices which can be described as follows:

LEVEL 1 : Insignificant or Minimum Practice of Responsible Care®

No or minimal action taken. Insignificant or minimum practice of RC or HSE in place.

LEVEL 2 : Committed to Responsible Care® - Initiate & Plan

System in process of being developed. The company commits to RC and starts acknowledging the implementation steps. System is progressively developed but more effort is required.

LEVEL 3 : Implement Responsible Care® - Plan & Do (PD)

The organization has started implementing RC throughout its organization and business with plans to improve. Requirements are mostly met but some improvements are needed.

LEVEL 4 : Continuously Improving - PDCA Established

Planning, Doing, Checking and Acting (PDCA) in place. The organization has reached a level of RC implementation where the plans and actions are not only done, but also assessed to drive continuous improvement; full management system (PDCA) approach.

LEVEL 5: Promote and Sustain Excellence - PDCA Enhanced

The organization has achieved an improved performance. It is going further by either reviewing the effectiveness of its processes or sharing best practices with peers, partners etc. to foster resource building in the business and accelerate change.

6   CHAPTER 6 - ANALYZE

Analyze the Gap, Determine Causes & Recommend Solution

6.1 Set SMART Target for RCMS Maturity Level

The company shall set SMART target for RCMS Maturity Level for each respective Management Practice and RC Code. The target or goal may be based on internal management decision, CICM RC standard or business / industry standard (if any). The CICM RC standard shall be determined, reviewed, and revised if required by the CICM RC Technical Committee on periodical basis in line with industry expectation.

SMART targets or goals can be defined as follows:

- **S**pecific: Well-defined, clear, and unambiguous
- **M**easurable: With specific criteria that measure progress towards the accomplishment of the goal
- **A**chievable: Attainable and not impossible to achieve
- **R**ealistic: Within reach, realistic, and relevant to purpose of project
- **T**imely: With a clearly defined timeline, including a starting date and a target date. The purpose is to create urgency.

It is anticipated for enterprise to achieve Min. RC Maturity Level of 3.0 for each Management Practice (MP) and RC Code during the initial (baseline) assessment.

6.2 Conduct Gap Analysis on the Maturity Level

Conduct benchmarking. Compare initial (baseline) assessment results with the set target and identify the maturity gap. The target or goal may be based on internal management decision, CICM RC standard or business / industry standard (if any).

6.3 Determine the Root-Cause(s) of Each Gap

Determine root-cause(s) of the maturity gap. Direct determination or problem-solving tools like Root-Cause Analysis (RCA) or 5-Why could be used to determine the root-cause(s) of the gap. Root-cause(s) may be identified based on the findings and availability of evidence during assessment. The root-cause(s) are the Opportunity for Improvement (OFI) to be acted upon to improve the Maturity Level.

6.4 Recommend Improvement Action(s)

Based on each root cause or OFI, identify all the improvement actions accordingly.

7   CHAPTER 7 - IMPROVE

Implement RC Improvement Plan

7.1 Establish Basic RCMS for Key Management Practices

Considering the resource and system limitation among enterprise to fulfill the entire RCMS requirement, exemption had been given for enterprise to implement and be assessed only on specific Management Practices (MP) in each RC Code only after the initial (baseline) assessment. This criterion, however, is applicable for enterprise which scored below the Min. RC Maturity Level of 3.0 for the respective RC Code.

Table 4 below listed down the specified MP which shall be focused by enterprise under this condition which comprises of 9 (nine) MP under EHS Code and 6 (six) MP under EP Code. These MP are selected because they are considered as basic MP for the respective RC Code. However, the enterprise may continue to implement and assess on other MP under the respective Code in addition to the specified MP if they wish to do so.

Table 4. Key RCMS Management Practices for Implementation in enterprise

A. Employee Health & Safety (EHS) Code

No.	EHS Code No.	Management Practices
1	1	Management Leadership and Commitment
2	2	Stakeholder Engagement
3	4	H&S Documentation and Program
4	5	H&S Audit and Assessment
5	6	H&S Record and Performance Review
6	7	H&S Risk Management System (HIRARC)
7	12	H&S Equipment
8	14	H&S Incident Investigation and Effectiveness of Action
9	17	H&S Communication

Refer to **APPENDIX E.1** for the detailed RC Management Practices for EHS Code in enterprise.

B. Environmental Protection (EP) Code

No.	EP Code No.	Management Practices
1	1	Management Commitment
2	2	Objectives & Strategy
3	3	Environmental Sustainability
4	4	Waste Control
5	5	Communication with Stakeholders
6	11	Waste Generation, Release & Performance Monitoring

Refer to **APPENDIX E.2** for the detailed RC Management Practices for EP Code in enterprise.

7.2 Implement Recommended Improvement Action(s)

7.2.1   Based on improvement actions identified in Section 6.4 above, the CRCC shall produce an RC Improvement Plan (RCIP) with SMART target. Propose the RCIP to the top management for approval because some actions may involve cost and hence, requires proper planning and budget allocation. However, at the starting of the project, normally most of the improvement actions are related to establishing the RCMS which involved merely documentation work and conducting basic HSE training to relevant employees which can be performed by internal resource hence, considered as low-cost activities or initiatives.

7.2.2   Assign responsible person for each improvement action and agree on specific deadline according to the status of Maturity Level as stated in Table 5 below.

7.2.3   Prioritize Improvement Action based on Maturity Level and Status of Action as stated in Table 5 below. In this case, priority shall be given to actions with the lowest Maturity Level i.e., Red (Level 1) & Orange (Level 2).

Table 5 . Proposed Plan based on Maturity Level & Status of Action

Maturity Level	Color Code	Score (%)	Status of Improvement Action	Proposed Time of Completion
1	Red	0-20	Unsatisfactory	Within 1 Month
2	Orange	21-40	More Expected	Within 2 Months
3	Yellow	41-60	Satisfactory	Within 3 Months
4	Blue	61-80	Good	Within 6 Months
5	Green	80-100	Excellent	None

For example: If the improvement action for a Management Practice was determined to have Maturity Level = 1 (Red), then the Proposed Time of Completion should be within 1 Month.

7.2.4   Implement the RCIP to remove / reduce the gap in accordance with the mutually agreed target. This activity is a team initiative led by the CRCC. Every team member needs to play his / her own role to complete the task assigned on time as agreed.

7.3 Plan & Conduct RC-Related Training

7.3.1   As part of the RCIP, plan to train the employer and employees on related RC and HSE subject matters identified as the outcome of the assessment.

7.3.2   Prepare RC and HSE Training Plan including refresher for every Group of employees. For this purpose, Training Matrix is appropriate to be produced by the Human Resource Department. Periodical mandatory training related to regulatory requirements shall be included in the plan. Some of the basic RC & HSE-Related Training for enterprise is recommended in **APPENDIX F**.

7.3.3   Train the management and respective employees on related RC and HSE subject matters based on the agreed training plan.

CHAPTER 8 - CONTROL

Control the Process to Sustain the System

Effective process controls should be in place after implementation to ensure the system is effectively maintained and performance does not regress and become ineffective once again. The company shall add controls to the RCMS process cycle to ensure the maturity gap is further minimized for the system to reach the expected Maturity Level, hence, improve the organization RC performance. Several means of controlling the process such as follows can be introduced and incorporated by the company to sustain the system in the future :

8.1 RC Performance Monitoring

Means of Control for this project may include continuous monitoring of the following RC Key Performance Indicators (KPI):

8.1.1   RC Improvement Plan

1) Report and monitor RC Improvement Plan (RCIP) through review and revision (if required) on each improvement action on monthly during RCIP Meeting until the end of the project.

2) Responsible Person for the improvement action shall resolve any outstanding or pending actions so that the system maturity target could be achieved as planned.

8.1.2   RCMS Maturity Level

1) Monitor RCMS Maturity Level of the Management Practice for each RC Code on monthly basis and report performance status during RCIP Meeting. This is

required to ensure the RC performance does not regress or the gap enlarge and become ineffective once again.

2) The Maturity Level for each Management Practices and RC Code should at least meet the company target or industrial standard proposed by CICM RC Technical Committee for enterprises, whichever higher.

3) Monitoring and reporting can be done using Maturity Level Score Card which is shown in **APPENDIX G**. The Maturity Level Score Card monitor the Maturity Level of each Management Practices and RC Code for each company at start, during implementation, after implementation and thereafter. Scoring for the Maturity Level Score Card shall be identified in a manner shown in Table 5.

8.2 RC Management Review Meeting

8.2.1 For the start, conduct monthly RCIP Meeting to review performance based on the KPIs set and agreed.

8.2.2 The meeting shall be chaired by the Company Head i.e., Chief Executive Officer, Managing Director or General Manager. In his/her absence, the Head shall appoint a senior director / manager among the company leadership team to chair the meeting. The CRCC shall be assigned as the Secretary for the meeting.

8.2.3 The frequency of meeting can be reviewed 1 (one) year after successful RCMS certification.

8.3 RCMS Certification

8.3.1 Only enterprise which had completed the entire RCMS assessment and achieved Minimum Maturity Level of 3 for each RC Code has fulfilled the RCMS requirement and shall be awarded Basic Certificate of RCMS.

8.3.2 Basic RCMS Certification only covers the Employee Health & Safety (EHS) Code and Environmental Protection (EP) Code.

8.3.3 The RCMS Certification shall be issued by CICM as the Responsible Care® steward in Malaysia.

8.4 Re-Assessment

8.4.1 Re-assessment of the RCMS is required to maintain and sustain the system health and review the RC Maturity Level after a certain period since implementation. Therefore, re-assessment shall be carried out 12 months after certification and annually thereafter for re-certification.

8.4.2 The re-certification process involved a complete re-assessment process using the same method as stated in Section 5.2, that is Self-Assessment, Documentation Assessment and Site Verification.

8.4.3 The re-assessment shall be carried out by the company RCMS Assessment Team and endorsed by the CICM RC Committee.

8.5 Control of Records

Records are important documents that show conformance to requirements. They can either be in hard copies or soft copies.

In maintaining records, the employers must ensure that all records remain legible, identifiable, and traceable. All records shall be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration, or loss. The retention period and disposition of records should be in accordance with the governing Acts or Regulations.

For this program, the following records shall be maintained by the participating companies:

No.	Records	Retention Period
1	Responsible Care® Policy	2 years
2	Appointment Letter of Company RC Coordinator	Current
3	Appointment Letter of RCMS Internal Assessor	Current
4	Assessment Forms for each RC Code	3 years
5	Minutes of RCIP Review Meeting	3 years
6	Responsible Care® Management System Certificate	5 years
7	RC and HSE Training Record	5 years

DISCLAIMER

This document was prepared by a group of Responsible Care® consultants from the Chemical Industries Council of Malaysia (CICM) for the Chemical Productivity Nexus (CPN) of Malaysia Productivity Corporation (MPC). It has been produced according to the defined scope of work and is only suitable for use in connection therewith. The information, views or opinions provided in this Guideline reflects the consultants' best professional knowledge, experience, and judgement in the light of the given information available at the time of preparation. However, as the consultants cannot control the conditions under which this report may be used, the consultants accept no liability or responsibility whatsoever in respect of any use of or reliance upon this document by any third party.

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RCMS ASSESSMENT CHECKLISTS

1. Employee Health & Safety (EHS) Code
2. Environmental Protection (EP) Code
3. Distribution Code**
4. Community Awareness & Emergency Response (CAER) Code**
5. Process Safety (PS) Code**
6. Product Stewardship (PSS) Code**
7. Security Code**

*This checklist also contains Implementation Guidelines & Sample of Evidence

** This checklist is available in the following location. Please click on the link below:

https://drive.google.com/drive/folders/1oaS2VNW24I1otDhkUJHzXnHzAF23hqYR?usp=sharing?

APPENDICES

A. Responsible Care® Global Charter

B. RC Code of Management Practices

    1. Environmental Protection (EP) Code

    2. Employee Health & Safety (EHS) Code

C. Project Charter

D. Project Plan

E. RC Code of Management Practices for enterprise

    1. OFI - EP Code

    2. OFI - EHS Code

F. Recommended Basic Trainings

G. Maturity Level Score Card

RCMS ASSESSMENT CHECKLISTS

Chemical Industries Council of Malaysia (CICM)

ENVIRONMENTAL PROTECTION CODE

RCMS Assessment Checklist

(   ) Self-Assessment Form / (   ) Documentation Assessment Form / (   ) Site Verification Form *[Please tick (√)]*

Name of Company:

NO.	MANAGEMENT PRACTICES	IMPLEMENTATION GUIDELINES	EVIDENCE(S)	STAGES OF IMPLEMENTATION								FINDINGS	RECOMMENDATIONS
				1	2	3	4	5	N/A	Score	Avg.		
1	MANAGEMENT COMMITMENT	Management commitment through:											
	Management commitment to ongoing pollutants reductions in releases to air, water, land and in generation of wastes.	Written environmental policy statement and action plan by management showing commitment to continuous reduction in releases and waste generation.	H&S Policy published in languages understood by employees, signed by CEO/Top Management, periodically reviewed/updated and displayed at										
			Policy awareness training / briefing conducted with evidence e.g. attendance list, validation record & training material.										
		Established corporate objective that emphasize environmental targets	Top Management approved corporate objective which emphasize on environmental issues.										
		Ensure sufficient resources (budget, manpower, facilities etc) for proceeding all related activities.	Financial budget allocated for environmental-related activities & improvement programs / projects										
			Availability of environmental competent, qualified or appointed personnel, related committee and functional facilities.										
			Organization chart will show environmental issue is taken care by dept/section .										
		Establish and maintain appropriate organization and accountability at all levels to support management commitment.	Environmental plan and KPI performance objectives, goals or target set with periodical performance										
			Environmental-related events, campaigns & initiatives involving employees										
			Environmental accountability at all levels of the organization e.g. Job Description & Personal Annual										
			Minute of meeting for Environment Committee or/and Environmental Management Review meeting										
		Ensure compliance to EMS and any national environmental legislations / regulations that are currently in	Document avidence.										
2	OBJECTIVES & STRATEGY										0.0		
	Establish priorities, goals and plans for waste / release reduction, taking into account all stakeholders concern / environment impact (stakeholder could be community, authorities, consumer, customer, supplier etc)	Prioritise and plan targets for waste / release reduction taking into account all stakeholders input and its impact on environment.	Management plan that show priority of waste reduction programs. Community and others stakeholder concern are in considering.										
			Activities that enhance the facility's ability to cope with change, to advance, and to reduce health and environment impacts on to the										
		Identify sufficient resource needs consistent with	List goals with the clear budget,										
3	ENVIRONMENTAL SUSTAINABILITY												

#																
	Quantitative inventory of wastes generated and releases to	*Analyst the statistical data and propose in waste*	Identify sources of wastes and													
4	**WASTE CONTROL**											**0.0**				
	Ongoing waste release reduction giving priority to source reduction, reuse, recycle, recovery and treatment. Proper treatment before disposal	*Perform waste minimization in the following order:- Source reduction, Reuse/recycle/sale of special materials, recovery and treatment.*	Procedure for waste minimization based on hierarchy of control is available and communicated to all														
			Waste Minimization system is implemented based on hierarchy of control														
		Appoint an appropriate accountable person for the	Appoint person in charge to conduct														
5	**COMMUNICATION WITH STAKEHOLDERS**																
	Provide appropriate education and dialogue with employees / public about the inventories, impact evaluation, risks to community and waste handling knowledge..	*Provision of opportunities for dialogue with employees and the public on pollution prevention, inventories potential risks and mitigation measures.*	Internal system of communication with the employee on the business aspect & impact on environment is in place														
			External system of communication with the public on the business aspect & impact on environment is in place														
			Internal communication session on the company environmental aspect & impact via briefing, town hall or dialogue session with employees is conducted on periodical basis														
			External communication session on the company environmental aspect & impact via briefing, town hall or dialogue session with the public is conducted on periodical basis														
		Provision of environmental awareness and refresher training for concern employee and others stakeholders	On going dialogue with workers and stakeholders regarding discharges and release information, progress in														
			Adequate environmental training provided to employees based on training plan and record														
			Competency training identified &														
6	**CONTINUOUS COMMUNICATION**																
	Ongoing, dialogue with related stakeholders regarding waste and release information and progress.	*Regular dialogue and participation with employees / community giving information on waste / release and stating the progress in the minimization programme.*	Workers technical empowerment programs should involve interactive hands-on process, classroom training, higher education programs, workshops, meetings etc.														
			Environment awareness sessions tailored specifically to the community														
7	**CONTRACTOR WASTE MANAGEMENT**																
	Management of contractor and outsource manufacturers on their waste management and HSE practices.	*Implement a system for selection and evaluation contractors and outsource manufacturers, taking into account sound waste management practices that protect the environment and the health and safety of employees and the public.*	System procedures must establish for selecting and evaluation contractors and outsource manufacturers,														
			Contract service documents by contractor or outsource manufacturer must included the proper waste management commitment.														
		Established process to educate and review contractors	A process should be established to														

#	Element	Requirement	Criteria											
8	**ENVIRONMENTAL IMPACT ASSESSMENT**													
	Evaluation of potential impact and emergency of releases on environment and health / safety of employees / public.	*Establish of proper assessment system to identify the potential impact and aspect of waste and releases on the environment and health and safety of employees and the public.*	Assessment system procedure are in place.											
			Based on the evaluation, the reduction priorities are established in an action plan. The inventory of the action plan is communicated to the											
		Established emergency Response Plan (ERP) for handling during emergency and minimize impact to environmnent.	Emergency Response Plan(ERP) procedure/masterplan must establish for handling environmental incident/accident.											
			Each facility needs to develop and											
9	**PREVENTION THROUGH ENGINEERING CONTROL**													
	Appropriate controls (engineering and operation) to improve	*Established system and facilities for early detection of*	1. List out the potential leakage points											
10	**ENVIRONMENTAL INCIDENTS/ACCIDENTS INVESTIGATION**													
	The incidents/accidents related to environmental releases are properly investigated and put in place countermeasure for control and prevention purposes to eliminate the re-occurrence.	*Procedure established to address the investigation and monitoring the progress of countermeasure.*	There is a systematic reporting and assessment of all health, safety, security & environmental accidents/ incidents (including e.g.: near misses,											
			Procedures should be in place for environmental accidents/incidents reporting, including their causes and correction actions.											
		Periodical reporting to management the status of the	The conclusions of the investigations											
11	**WASTE GENERATION, RELEASE AND PERFORMANCE MONITORING**													
	Quantitative inventory of waste generated and releases to environment and monitoring progress in reduction of waste generated and releases at least annually.	*Develop up-to-date inventory for on-site and off-site releases, waste discharges and recycling.*	Waste management procedure in place to record & report all waste generation, recycling, recovery, treatment, disposal & discharge /release particularly those											
			Availability of records & reports of all wastes transaction particularly through on-line DOE reporting system.											
		Update and maintain sufficient data to provide quantitative measurement of progress in waste minimization and release / reductions at least annually.	Procedure in place to report on waste reduction / minimization program for the company on annual basis											
			Report waste minimization											
12	**PERFORMANCE EVALUATION**													
	Periodic evaluation of environmental management practices, considering community / stakeholder concerns, HSE impacts and compliance obligation.	*Conduct periodic, at least annually, evaluations of*	Conducted internal and external audit											
		Evaluation by internal or 3rd party audit	Audits.											
		Ensure operation activities are fulfil compliance obligation by periodic evaluation	Regularly review and evaluate the											

13	MANGEMENT REVIEW												
	Address past operating and waste management practices and work with others to resolve identified problems.	Review past operating and environmental management system / practices and develop corrective action plans by adopting relevant and available technologies in both process and waste management.	Analyse past years waste release /generated data, as well as incidents, accidents. Identify gaps and develop a corrective action that can eliminate or minimize the pollution.										
			Management shall review										
14	CONTINUOUS IMPROVEMENT & INNOVATION												
	Continuous improvement programmes eg. waste / release prevention/reduction integrated in R&D / design of new or modified facilities, processes and products.	Inclusion of waste minimization and release prevention objectives in R&D and in design of new or modified facilities, processes and products.	The criteria's of new design or modified facilities, processes and products must show waste minimization elements.										
		All projects, business expansion, joint ventures,	3rd party or appropriate										
15	SHARING OF BEST PRACTICES												
	Promotion and support environmental sustainability programmes by related stakeholders.	Support waste reduction / recovery efforts across supply chain (vendors, customers) neighbouring plants, subsidiaries and members by technology transfer and explore the possibility of waste exchange.	Regular meeting with associate company or any industrial committee on sharing the case study and exchange ideas for improvement .										

Submitted by:
For Self-Assessment:
Name:
Email Address:
Contact No:
Date:

For Documentation / Site Assessment:
Name of Assessor(s):
Email Address:
Contact No:
Date:

Revision Date : 01/12/2021
Revision No: 01
References : GPCA and CEFIC

Name of Company: _____

NO.	MANAGEMENT PRACTISES	IMPLEMENTATION GUIDELINES	EVIDENCE & EXAMPLE	1	2	3	4	5	N/A	Score	Avg.	FINDINGS	RECOMMENDATIONS
								STAGES OF IMPLEMENTATION					
1	**MANAGEMENT LEADERSHIP & COMMITMENT** Commitment by all levels of management to protect and promote the Health & Safety (H&S) of people working at or visiting company facilities through published policies, accountability for implementation and provision of sufficient resources including qualified H&S personnel	Demonstrating management leadership and commitment in H&S through :									0.0		
		1. Policy A written H&S policy endorsed by top management is available. The policy shall be periodically reviewed, communicated to all employees (including contractors) and publicly displayed	H&S Policy published in languages understood by employees, approved by top management, periodically reviewed/updated and displayed at strategic locations on site							0	0.0		
			H&S Policy awareness & refresher training / briefing record are available for all employees							0			
		2. H&S Management System (H&S MS) A standard H&S MS is established and fully implemented on site	The site is certified with the latest version of H&S MS e.g. ISO 45001:2018							0	0.0		
		3. Accountability H&S accountability for every management personnel by establishing goals and responsibilities for implementing H&S throughout the organization	Documented H&S strategy, plan and goals established, communicated and implemented by top management and monitored and reported on periodical basis							0	0.0		
			H&S accountability at all levels of the organization as stated in the Job Description (JD) & annual H&S objectives in order to meet the set goals							0			
		4. Participation Active management participation & involvement in H&S via H&S-related meetings, events, campaigns & activities where employees at all levels are involved	H&S-related meetings e.g. H&S Committee, Management Review & HIRARC Meeting							0	0.0		
			Involvement & Participation through Employee Engagement Program e.g. Survey, Dialogue, Town Hall / Coffee Talk session, Suggestion Scheme, H&S Campaign and company media of communication e.g. notice board, e-mail, website, newsletters & magazines							0			
		5. Resources Provision of sufficient resources to implement the policy	Availability of a qualified and competent H&S personnel, H&S-related committee or function group and H&S-related facilities.							0	0.0		
			Competency training requirement established based on Training Matrix for critical H&S position							0			
			Adequate H&S training provided to employees including contractors e.g. training plan, refresher training & completion record provided							0			
			Consistent financial budget allocated for H&S-related initiatives & improvement programs/projects							0			
2	**STAKEHOLDER ENGAGEMENT** Opportunities for employees (including contractors) to participate in developing, implementing and reviewing of H&S programs	Provide opportunities for employee									0.0		
		1. Development Stage	A. Employee Feedback / Survey							0	0.0		
			B. Employee Suggestion Scheme							0			
			C. Safe Operating Procedure Establishment, Implementation & Review							0			
		2. Implementation Stage	A. Hazard Identification & Communication e.g. Workplace H&S inspection, risk-based observation activity or Behavioral-based Safety (BBS)							0	0.0		
			B. H&S Program & Activities e.g. Committee Meetings, Improvement Projects, Competitions, Campaigns, Promotions & Community Engagement							0			
			C. H&S Audit & Assessment Involvement as auditee / auditor and assessee / assessor							0			
			D. H&S Training Participation of employee as trainee / trainer or organizer							0			
			E. PPE Selection e.g. PPE Fit Test							0			
		3. Recognition & Reward	A. Internal Announcement Recognize employee participation & contributions in H&S programs through company communications							0	0.0		
			B. Reward Offer reward or incentives for participation or achievement in H&S program / activities							0			
			C. Employee Performance Recognize the participation or achievement as part of employee performance appraisal							0			
3	**CONTRACTOR MANAGEMENT** Ensure contractors (inluding sub-contractors) management includes selection criteria, contractor H&S program, performance and contract review, consistent with applicable Management Practices of the EHS Code	Contractor is selected based on their H&S program and performance such as follows:									0.0		
		1. Policy Demonstrating H&S management leadership and commitment through written H&S policy which is communicated to all employees via training / briefing	Contractor H&S Policy published in languages understood by employees, approved by top management, periodically reviewed/updated and displayed at strategic locations							0	0.0		
			Contractor H&S Policy awareness training / briefing record are available for all their employees							0			
		2. Contractor & Visitor Management A management system on contractor and visitor control is established and fully implemented on site	Procedure of managing contractors with regards to statutorial requirement, contractor selection, approved							0	0.0		
			Procedure of managing and handling visitor on site including during abnormal circumstances							0			
		3. Accountability Accountability for implementation by establishing H&S goals and responsibilities	Contractor H&S plan / program and KPI performance objectives, goals or target set with periodical monitoring report							0	0.0		

#	Element	Requirement	Evidence / Detail							Score	Rating		
		for implementing H&S throughout the contractor organization	H&S accountability at all levels of the contractor organization through via Job Description, Letter of Appointment or Organization Chart							0	0.0		
		4. Participation Active participation & involvement in H&S via H&S-related meetings, events, campaigns & activities when employees are involved	MOM for H&S or/and Management Review Meeting							0	0.0		
			H&S events, campaigns & activities involving employees (including contractors)							0			
		5. Resources Provision of sufficient resources to implement the contractor's H&S policy & ensure compliance with client's H&S policy, rules, procedures and practices related to	Availability of a competent / qualified personnel for H&S personnel and/or high risk or critical H&S tasks							0	0.0		
			Availability of safe & effective equipment / facility provided and used on site by the contractor e.g. PPE and high risk / H&S critical task equipment							0			
		6. Training Competency training requirement for critical H&S position & H&S awareness training for all contractors (incl. site supervisor) and safety induction for visitors	Competency training records for high risk or critical H&S tasks e.g. confined space entry (CSE), working at height (WAH), electrical work & hot work							0	0.0		
			H&S awareness training records i.e. attendance & validation test for contractor employees							0			
			H&S induction briefing records for visitors							0			
		7. Contractor H&S Audit Periodical H&S audit of contractor	Record of contractor periodical H&S audit							0	0.0		
		8. Contract Review Periodical contract evaluation & review	Record of annual contractor performance review							0	0.0		
4	DOCUMENTATION & PROGRAM Each site should have written and current H&S documents e.g. procedures, work instructions, manuals & guidelines, and programs which are appropriate to the H&S matters on site and re-evaluated for any changes and current good practice, and updated as necessary.	Maintain simple to be understood site specific H&S documentation and program such as follows:									0.0		
		1. System The site should have an updated H&S documentation system to manage the generation, review, update, distribution & communication of all related matters including programs to all stakeholders	A written and up-to-date H&S documentation system is in place comprises of procedures, work instructions, manuals and programs							0	0.0		
		2. Key H&S Issues Documentation & program based on the following key H&S issues should be in place:	a. H&S Hazards & Risks Procedures & programs documented, reviewed and updated based on the site H&S hazards identified and risk assessed. Example : HIRARC/HAZOP & JSHA							0			
			b. H&S Regulatory Requirements Procedures & programs documented, reviewed and updated based on the most current H&S-related act and regulatory provisions applicable including Industrial Code of Prctices (ICoPs) issued by the respective governing authorities.							0			
			c. H&S Critical Operations / Tasks Procedures & programs documented, reviewed and updated based on H&S Critical Activities & Tasks. Example : Permit to Work (PTW), Confined Space Entry (CSE), Work at Height, Hot Work, Electrical Inspection and Management of Change (MoC)							0	0.0		
			d. Abnormal Circumstances Procedures & programs documented, reviewed and updated based on abnormal circumstances e.g. emergency & unplanned events, shutdown & crisis							0			
		3. Review & Update Documents & programs reviewed & updated	Documents & programs are periodically reviewed and updated whenever necessary for any changes and implementation of better practices							0	0.0		
		4. Responsibility Qualified and responsible personnel with necessary experience to produce the documentation & program	Qualified and responsible personnel with necessary experience and expertise selected to develop specific documents & programs updated. A Register or List of Document Issuer & Reviewer is appropriate.							0	0.0		
		5. Distribution Distribute written document and program to accountable or affected personnel	A list of Document Receiver is appropriate with receiving evidence							0	0.0		
		6. Communication Communicate newly developed or revised document and program to affected stakeholders	A communication or validation record is available							0	0.0		
5	AUDIT & ASSESSMENT Means to verify that the H&S documents & programs are effective and that actual practices are consistent with them	The site / facility should establish a system to verify the effectiveness & consistency of the H&S documents & programs through:									0.0		
		Regular H&S audits / assessments	Audit / assessment procedure is in place							0	0.0		
			Only conducted by trained or competent Auditor/Assessor							0			
			Periodical plan is in place							0			
		Identify non-compliance and take corrective / preventive actions	Non-compliance results reported, analyzed & improvement action plan generated							0	0.0		
		Implement improvement action plan completion	H&S improvement action plan monitored on periodical basis by Management until completion							0	0.0		
6	RECORD & PERFORMANCE REVIEW Establish system for maintaining H&S records and analyzing data to evaluate H&S performance, determine trends and identify areas for improvement.	The site / facility should establish a system to record, analyze & review H&S performance									0.0		
		Establishing a recording, data analysis & review system	Procedure for recording, monitoring & reviewing of H&S performance is in place							0	0.0		
			H&S KPI established and database for recording the performance is available							0			
		Analyze H&S KPI trend to ensure it meets or exceeds regulatory requirements	Database for reporting and monitoring of H&S KPI is available							0	0.0		
			Periodical reporting, monitoring and analysis of H&S KPI via formal communication platform e.g. H&S Committee							0			
		Take corrective / preventive actions	H&S performance improvement plan established & implemented							0	0.0		

#	Category	Description	Sub-item	Criteria							Score	Weighted	
7	**H&S HAZARDS IDENTIFICATION** Establish methods to identify and evaluate potential health and safety hazards in plants / facilities & processes including new and to be modified plants / facilities & processes.	Establish means to identify and evaluate potential H&S hazards and for existing and new / modified facilities & processes at the following stages :										**0.0**	
			H&S Hazards Analysis	System in place & implemented to identify potential H&S hazards before construction, purchase or modification via systematic and effective procedures e.g. product research, plant & process design, HAZOP procurement screening policy and MOC.							0	0.0	
			Observation & Inspection	System in place & implemented to observe, inspect and report potential H&S hazards on regular basis at the workplace through systematic and effective programs with input from all stakeholders e.g. Workplace Inspection, UA/UC Identification, PMOS and BBS							0	0.0	
			Hazard Exposure Monitoring	System in place & implemented to monitor H&S hazards on regular basis at the workplace through systematic and effective exposure monitoring, surveillance & tracking programs & system e.g. Industrial Hygiene Monitoring and Health Surveillance							0	0.0	
			Document Review	System in place & implemented to review H&S documents on periodical basis e.g. hazard review, Regulations & Codes of Practice, Incident / Near Miss Report,							0	0.0	
8	**RISK EVALUATION** Conduct periodic assessment on employee exposure to H&S hazards to evaluate management performance for each respective risk	Establish means to conduct periodic employee exposure assessment to evaluate H&S risks with respect to :										**0.0**	
			Plants & Processes	HIRARC and Health Risk Assessment (HRA) conducted as part of the Site Risk Assessment (SRA) on all potential hazard exposure to employees and visitors on site with findings reported, opportunity for improvement implemented, effectiveness assessed & re-assessed, and communicated to relevant stakeholders.							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Biological Hazards (Example : bacteria, viruses or parasites, as well as venomous wildlife, pests and insects carrying disease-causing agents and	A simple Rapid Risk Assessment (RRA) procedure is used for biological hazards exposure to determine the level of							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Chemical Hazards (as classified under the respective law and regulations)	HRA, Chemical Health Risk Assessment (CHRA), Chemical Exposure Monitoring (CEM), LEV Examination &							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Energy Hazards Example : Electric Current, Electric Static, Pressurized/Compressed Fluid, Explosion, Radiation, Kinetic Energy (e.g. Moving Vehicle/Object) and Potential Energy	Risk assessment on such hazard exposure or risk-based observation activity conducted as part of HIRARC and workplace inspection with findings reported, opportunity for improvement implemented, effectiveness assessed & re-assessed, and communicated to relevant stakeholders.							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Environmental Hazards Example : Excessive Noise, Extreme Temperatures, Confined Space, Height, Poor Indoor Air Quality, Dark/Poor Lighting, Poor Ventilation, Contaminated Air & Crowded Room	Risk assessment e.g. Noise Risk Assessment (NRA), Heat Stress Assessment (HSA), Indoor Air Quality (IAQ) and Medical Surveillance on such hazard exposureor risk-based observation activity conducted as part of HIRARC and workplace inspection with findings reported, opportunity for improvement implemented, effectiveness assessed & re-assessed, and communicated to relevant stakeholders.							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Ergonomical Hazards (Physical conditions that may pose risk of injury to the human musculoskeletal system)	Ergonomical Risk Assessment (ERA) such as for Manual-handling & Video Display Unit (VDU) / Display Screen Equipment (DSE) or risk-based observation activity conducted as part of HIRARC and workplace inspection with findings reported, opportunity for improvement implemented, effectiveness assessed & re-assessed, and communicated to relevant stakeholders.							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Mechanical Hazards (Example : Cutting, Shearing, Stabbing & Puncturing, Impacting & Compacting, Entanglement, Friction & Abrasion, Crushing, Drawing-in and Ejection)	Risk assessment on such hazard exposure or risk-based observation activity conducted as part of HIRARC and workplace inspection with findings reported, opportunity for improvement implemented, effectiveness assessed & re-assessed, and communicated to relevant stakeholders.							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Physical Hazards (Example : Sharp, Slippery, Uneven Surface, Hot, Heat, Vibration, Heavy/Overload, Obstacle & Falling/Flying Object)	Risk assessment on such hazard exposure or risk-based observation activity conducted as part of HIRARC and workplace inspection with findings reported, opportunity for improvement implemented, effectiveness assessed & re-assessed, and communicated to relevant stakeholders.							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		
			Psycho-social Hazards (Example : Stress, Improper Occupational Behavior (IOB)*, Alcohol & Substance Abuse, Illness Absenteeism and Smoking) *Example : Horseplay, Workplace Violence, Intimidation, Bullying and Harassment	Mental Wellness assessment, hazard related behavioral survey or risk-based observation activity conducted as part of HIRARC and workplace inspection with findings reported, opportunity for improvement implemented, effectiveness assessed & re-assessed, and communicated to relevant stakeholders.							0	0.0	
				Records and reports on the assessment are available, maintained, reviewed & updated							0		

#	Element	Requirement	Detail						Score	Rating	
9	**HEALTH FITNESS ASSESSMENT** For specific jobs, conduct employee health assessment to determine employee medical fitness	Conducted health fitness assessment through:								**0.0**	
		Establish medical fitness standards for specific H&S critical jobs / tasks such as confined space entry (CSE), work at height (WAH) and use of self-contained breathing apparatus (SCBA) during emergency response	Procedure for conducting health fitness assessment on employees for H&S critical jobs / tasks is in place						0	0.0	
		Conduct health fitness assessment for H&S critical jobs / tasks	Health fitness assessment record & report available, kept and maintained						0	0.0	
10	**HEALTH SURVEILLANCE** Tailor employee health surveillance programmes to work site hazards	Conducted health surveillance program through:								**0.0**	
		Establish health surveillance program for employees exposed to hazard such as	Procedure for conducting health surveillance on employees exposed to workplace hazards e.g. CHH, noise, heat etc. is						0	0.0	
		Conduct health surveillance for CHH	Health surveillance record & report available, kept and maintained as per regulatory requirement						0	0.0	
11	**DESIGN REVIEW & MANAGEMENT OF CHANGE** Establish mechanisms for reviewing the design and modification of facilities, processes and job tasks based on the following Hierarchy of Risk Control : Inherently Safe Design, Engineering Controls, Administrative Controls and Personal Protective Equipment (PPE)	Establish risk control mechanisms based on Hierarchy of Risk Control when reviewing the design and modification of facilities, processes and job tasks :								**0.0**	
		1. Inherently Safe Design (ISD)	ISD via Substitute, Minimize, Moderate & Simplify approach						0	0.0	
		2. Engineering Controls	Engineering controls that address H&S issues installed						0	0.0	
			Design review & MOC procedure available & enforced						0		
		3. Administrative Controls	Safe work procedures for H&S-critical job developed & implemented						0	0.0	
			Training provided to minimize potential exposure to H&S hazards						0		
			Other administrative measures e.g. personal hygiene and						0		
		4. PPE	Appropriate PPE provided to control H&S hazards						0	0.0	
12	**HEALTH AND SAFETY EQUIPMENT** Establish system for selection, issuance, use (including limitation) and maintenance of H&S equipment* including training of employee in proper use of the equipment. *Example : PPE, first aid equipment & facilities, fire-fighting equipment & system, emergency shower, eye wash, alarm system & devices, ladder, crane, lifting hoists, equipment fence, machine guardings, pressure vessels, elevators & electrical tools	Availability of the following procedure on site to ensure H&S equipment (e.g. PPE, fire extinguishing system, emergency shower, eye wash, alarm system, ladder, crane, man lift & electrical tools) is effective in protecting employees from exposure to workplace hazards:								**0.0**	
		Selection of H&S Equipment	Written procedure for the selection including fit test / evaluation and 3rd party certification of equipment is in place						0	0.0	
		Issuance of Equipment	Written procedure for issuance including recording of equipment is in place						0	0.0	
		Use of Equipment	Written procedure for use including limitation of equipment is in place						0		
			PPE Matrix in place & communicated to all employees						0		
			Verify equipment usage during site visit						0	0.0	
			Consequence management on equipment non-compliance						0		
		Maintenance of Equipment	Procedure for cleaning, storing, testing, disposal and replacement of equipment is in place. For some equipment, 3rd party re-certification shall be required.						0	0.0	
		Training for Employee (User)	Training record e.g. training material, attendance & validation are kept and maintained						0		
			Personnel trained on the selection, issuance, use and maintenance of equipment						0	0.0	
			Verify effectiveness of training via interview with personnel during site visit						0		
13	**HOUSEKEEPING & PREVENTIVE MAINTENANCE** Establish housekeeping and preventive maintenance programs to maintain the safety of facilities, equipment and tools	Availability of the following program on site to ensure the safety of facilities, equipment and tools:								**0.0**	
		Effective housekeeping program	Written housekeeping / 5S policy & procedure in place						0		
			Housekeeping / 5S program implemented & effectiveness measured						0		
			Verify through site inspection & observation on labeling, signage, storage orderliness etc.						0	0.0	
			Housekeeping / 5S audit and corrective / preventive actions taken to improve housekeeping						0		
		Preventive Maintenance (PM) program	Written PM procedure in place						0		
			PM program for equipments & tools implemented, plan						0	0.0	
			Approved vendor list for tools and equipment established						0		
14	**INCIDENT INVESTIGATION & EFFECTIVENESS OF ACTION** Establish documented illness, injury and incident investigation process, set corrective actions to prevent recurrence and evaluate the effectiveness of the corrective and preventive action taken	Establish the following provision for all H&S-related illness, injury and incident affecting employees on site :								**0.0**	
		Illness, Injury & Incident timely reported and investigated by giving full attention to details and objectivity	H&S-related Incident, injury & Illnesses reporting & incident investigation procedure is in place						0		
			Effective investigation technique such as Root Cause Analysis (RCA) and 5 Why's used during investigation						0	0.0	
			Relevant personnel are adequately trained to report and investigate H&S incidents						0		
		Improvement action identified based on investigation outcome	Corrective / Preventive action identified and implemented based on the investigation outcome. Actions should be based on effective controls e.g. engineering controls & above while treating administrative control and PPE as mandatory or secondary measures.						0	0.0	

#	Element	Sub-element	Requirement							Score	Rating		
		Effectiveness of the improvement action	Review of improvement action effectiveness after certain period and report to management							0	0.0		
		Incident learning	Lesson learnt and improvement actions from H&S incidents shared across the organization							0	0.0		
15	ORGANIZATIONAL, ENVIRONMENTAL & INDIVIDUAL HEALTH Establish system on Organizational, Environmental & Individual Health for all stakeholders working on site to produce and maintain a healthy, productive and harmony workplace	Establish provision for the following type of health management on site :										0.0		
		1. Organizational Health	The site has implemented the following organizational health-related policies & program : Organizational Stress, Alcohol & Substance Abuse, Smoke Free Workplace, Improper Occupational Behavior e.g. Workplace Violence, Intimidation & Harassment, Vulnerable Groups e.g. Ageing Worker, Young Adolescents, Pregnant & Breast-feeding Women, and Disabled Workers, Illness Absenteeism and Control of Disease							0	0.0		
			Employees can get support for organizational health-related issues through program e.g. Employee Assistance Program (EAP)							0			
		2. Environmental Health	The site has implemented the following environmental health-related policies, procedures & program on Infectious Diseases (Pandemic & Epidemic), Food Poisoning, Pests							0	0.0		
			Employees can get support for environmental health-related issues through appropriate disease & illness control & prevention program							0			
		3. Individual Health	The site has implemented the following individual health-related policies & program : Healthy Lifestyle Promotion, Periodical Health Screening for All Employees, Heart Health & Diabetes Management, Balanced Diet, Physical Exercise, Mental Health and Disease Prevention							0	0.0		
			Employees can get support for individual health-related issues through intervention program at various level							0			
16	EMERGENCY MEDICAL CARE & OCCUPATIONAL HEALTHCARE Establish emergency medical assistance and occupational healthcare at work site	Establish provision for the following resources & facilities on site :										0.0		
		Emergency Medical Care	Emergency response procedure is available & reviewed on periodical basis							0			
			Availability of trained & certified internal emergency medical resources or responders e.g. first-aiders, fire-fighters, paramedics and nurses							0			
			Availability of well-maintaned first aid facilities, equipment & supplies provided at identified strategic location on site							0	0.0		
			External medical assistance identified & communicated during emergencies							0			
			Availability of site emergency plan and drill conducted on periodical basis based on requirement							0			
		Occupational Healthcare	Occupational healthcare resource & facility procedure is available & reviewed on periodical basis							0			
			Availability of qualified occupational healthcare resources e.g. occupational health doctors (OHD) and/or nurses (OHN)							0	0.0		
			Occupational healthcare program is available and conducted as planned							0			
			Availability of occupational healthcare facilities e.g. clinic & examination room and P&C record room							0			
17	COMMUNICATION Communicate H&S information to all stakeholders relevant to specific job function / task and the work site in general	Evidence of effective two-way H&S communication to the following stakeholders:										0.0		
		Employees	Communicate H&S hazard & risk, management expectation and regulations through H&S training/drill, H&S-related meetings, Employee Engagement Program e.g. Survey, Dialogue, Town Hall / Coffee Talk session, Suggestion Scheme, Project & Campaign and company media of communication e.g. notice board, e-mail, website, newsletters & magazines							0	0.0		
			Recognize & reward the employee (incl. family) for their participation, involvement, contribution and achievement in H&S							0			
		Contractors	Site rules and H&S hazard & risk aspects are communicated to contractors during site registration and H&S induction through video, oral briefing / presentation, contractor booklet & validation. For high risk job / task, special permit or H&S authorization e.g. Permit-to-Work (PTW) shall be mandatory prior to start work which may involve risk assessment, inspection, training, emergency drill & validation.							0	0.0		
			Recognize & reward the contractor for their participation, involvement, contribution and achievement in H&S							0			
		Visitors	Site rules and H&S hazard & risk aspects are communicated to visitors during site registration and H&S induction through video, oral briefing / presentation & visitor pamphlet							0	0.0		
		Customers	Product Safety Data Sheet (SDS), company media of communication including e-communication e.g. e-mails & website, newsletters or magazines and Emergency Response Drill. Communication also applicable if the customers visit the company work site.							0	0.0		

		Community including Neighboring Factories, Housing Areas, Business Community, Authorities, Emergency Responders & Regulatory Bodies	Emergency Response Drill / Briefing, Neighborhood Emergency Support Group, Community Engagement / Outlook Program e.g. Survey, Dialogue & Town Hall session, Suggestion Scheme, H&S Campaign, Open House / Family Day, and company media of communication e.g. notice board, e-mail, website, newsletters & magazines						0	0.0	
18	**TRAINING** H&S training programs provided to employees with appropriate documentation and methods to evaluate the effectiveness of both training & re-training activities	H&S training should be provided to employees and implemented in the following manner:									0.0	
		Employees provided with H&S training appropriate to their job function	H&S Training Need Analysis (TNA) and Training Matrix for each position & function is available						0	0.0	
		Provision for refresher training as and when necessary	Refresher training is available at appropriate frequency						0	0.0	
		All trainings should be documented	Training record e.g. training material, attendance &						0	0.0	
		Regularly evaluated to determine effectiveness	Evaluation of training effectiveness are recorded & kept						0	0.0	
			Periodical review of training module						0		

Maturity Level

Rating	Assessment	Description	% Implementation	Stages of Maturity				
				Initiate 1	Plan & Policy 2	Do & Implement 3	Check & Assess 4	Review & Improve 5
1	Insignificant or Minimum Practice of Responsible Care®	No or minimal action taken. Insignificant or minimum practice of RC or HSE in place.	0-20	Yes				
2	Committed to Responsible Care® - Initiate & Plan	System in process of being developed. The company commits to RC and starts acknowledging the implementation steps. System is progressively developed but more effort is required.	21- 40	Yes	Yes			
3	Implement Responsible Care® - Plan & Do (PD)	The organization has started implementing RC throughout its organization and business with plans to improve. Requirements are mostly met but some improvements are needed.	41-60	Yes	Yes	Yes		
4	Continuously Improving - PDCA Established	Planning, Doing, Checking and Acting (PDCA) in place. The organization has reached a level of RC implementation where the plans and actions are not only done, but also assessed to drive continuous improvement; full management system (PDCA) approach.	61-80	Yes	Yes	Yes	Yes	
5	Promote and Sustain Excellence - PDCA Enhanced	The organization has achieved an improved performance. It is going further by either reviewing the effectiveness of its processes or sharing best practices with peers, partners etc. to foster resource building in the business and accelerate change.	80-90	Yes	Yes	Yes	Yes	Yes

Submitted by:
For Self-Assessment:
Name:
Email Address:
Contact No:
Date:

For Documentation / Site Assessment:
Name of Assessor(s):
Email Address:
Contact No:
Date:

Revision Date : 01/12/2021
Revision No: 01

APPENDICES

Responsible Care®
Global Charter

Responsible Care is the global chemical industry's unifying commitment to the safe management of chemicals throughout their life cycle, while promoting their role in improving quality of life and contributing to sustainable development.

As a signatory to the Responsible Care Global Charter my company will actively strengthen the Responsible Care initiative worldwide and is committed to:

1 **A Corporate Leadership Culture** that proactively supports safe chemicals management through the global Responsible Care initiative

2 **Safeguarding People and the Environment** by continuously improving our environmental, health and safety performance; the security of our facilities, processes and technologies; and by driving continuous improvement in chemical product safety and stewardship throughout the supply chain

3 **Strengthening Chemicals Management Systems** by participating in the development and implementation of lifecycle-oriented, sound-science and risk-based chemical safety legislation and best practices

4 **Influencing Business Partners** to promote the safe management of chemicals within their own operations

5 **Engaging Stakeholders,** understanding and responding to their concerns and expectations for safer operations and products and communicating openly on our performance and products

6 **Contributing to Sustainability** through improved performance, expanded economic opportunities and the development of innovative technologies and other solutions to societal challenges

_____

Company

_____   _____

CEO Signature   Date

Responsible Care®
OUR COMMITMENT TO SUSTAINABILITY

Approved by the ICCA Board of Directors, May 29, 2014

ICCA
INTERNATIONAL COUNCIL OF CHEMICAL ASSOCIATIONS

RESPONSIBLE CARE ®

ENVIRONMENTAL PROTECTION

CODE OF MANAGEMENT PRACTICES

ENVIRONMENTAL PROTECTION CODE

CONTENTS

ENVIRONMENTAL PROTECTION CODE

Introduction

Initially this Code was called the Pollution Prevention Code. There are 15 management practices which are aimed at helping firms to reduce both emissions released into various media and the amount of waste which they generate.

This Code attempts to present a broad framework that is useful to any firm, regardless of its existing efforts in pollution prevention. Companies are to measure or estimate amounts of waste generated and emissions, then form reduction plans based primarily on community concerns. Each plant then must measure its progress and update its inventory annually, going back to the community with its efforts.

At the heart of this Code is the need to develop a "quantitative inventory" of both releases and waste generated. This is meant to give a measure of the industry's performance and to ensure that individual facilities can chart progress which goes beyond current regulatory requirements.

With 15 management practices, ~~the~~ firms will have to set up and quantify waste reduction efforts as well as how to deal with waste still generated.

Scope

The Code calls for companies to promote pollution prevention methods with customers, suppliers, other companies and the communities. The Code requires waste generators to take responsibility for waste generated by their contractors - including waste hauliers, tank cleaners and maintenance workers and thus covers both on-site and off-site releases and disposals.

Objectives

The Environmental Protection Code is designed to improve the industry's performance by seeking:-
1. Ongoing, long-term reductions in all pollutants released to the environment
2. Steady reduction in the amount of wastes generated by chemical industry, and
3. Proper management of remaining wastes.

There is a high priority given to employee and community input in these processes, using the mechanisms established in the CAER Code. Progress shall be measured at least annually.

References

1. Gulf Petrochemicals & Chemicals Associations Responsible Care Codes dated January 1, 2018
2. ISO 14001: 2015
3. CEFIC's Responsible Care self-assessment tool (Version 12/04/2019)

COMPLIANCE WITH RESPONSIBLE CARE GUIDING PRINCIPLES

1. Recognise and respond to community concerns about chemicals and the operations.

2. Develop and produce chemicals that can be manufactured, transported, used and disposed of safely.

3. Make health, safety and environmental considerations a priority in planning for existing and new products and processes.

4. Operate plants and facilities in a manner that protects the environment and health and safety of employees and the public.

5. Extend knowledge by conducting or supporting research on the health, safety and environmental effects of products, processes and waste materials.

6. Work with others to resolve problems caused by past handling and disposal of hazardous substances.

7. Participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.

MANAGEMENT PRACTICES AND IMPLEMENTATION GUIDELINES

The 15 Management Practices that help protect the environment by reducing waste generation and pollution:-

Management Practices	Implementation Guidelines
Management Commitment	
1. Management commitment to ongoing pollutants reductions in releases to air, water, land and in generation of waste	• Written environmental policy statement and action plan by management showing commitment to continuous reduction in releases and waste generation • Established Corporate Objective that emphasize environmental targets • Ensure sufficient resources (budget, manpower, facilities, etc,) for proceeding all related activities • Establish and maintain appropriate organization and accountability at all levels to support management commitment • Ensure compliance to Environmental Management System (EMS) and any national environmental legislations / regulations that are currently in force
Objectives and Strategy	
2. Establish priorities, goals and plans for waste / release reduction, taking into account all stakeholders concern / environment impact *(stakeholder could be community, authorities, consumer, customer, supplier, etc.)*	• Prioritize and plan targets for waste / release reduction taking into account all stakeholders input and its impact on environment • Identify sufficient resource needs consistent with established goals
Environmental Sustainability	
3. Establish environmental sustainability plan to conserve natural resources and protect global ecosystems to support health and wellbeing for present and in future	• Set short and long term KPI (production quantity base) for environmental sustainability elements. • Reduction in waste release (GHG, waste generated, waste go to land filled etc), natural resources usage (water, energy etc). • Increase in renewable energy usage, green area, green procurement ratio etc. • Established Management programs or roadmap to achieve each KPI set.
Waste Control	

4. Ongoing waste release reduction giving priority to source reduction, reuse, recycle, recovery and treatment. Proper treatment before disposal	• Perform waste minimization in the following order:
	  • Source reduction
	  • Reuse/recycle/sale of special materials
	  • Recovery
	  • Treatment
	• Appoint an appropriate accountable person for the environmental reduction plan

Communication with Stakeholders	
5. Provide appropriate education and dialogue with employees / public about inventories, impact evaluation, risks to community and waste handling knowledge	• Provision of opportunities for dialogue with employees and the public on pollution prevention, inventories potential risks and mitigation measures

Management Practices	Implementation Guidelines
	• Provision of environmental awareness and refresher training for concern employee and other stakeholders
Continuous Communication	
6. Ongoing, dialogue with related stakeholders regarding waste and release information and progress	• Regular dialogue and consultation with employees / community giving information on waste / release and stating the progress in the minimisation programme.
Contractor Waste Management	
7. Management of contractor and outsource manufacturers on their waste management and HSE practices	• Implement a system for selection and evaluation contractors and outsource manufacturers, taking into account sound waste management practices that protect the environment and the health and safety of employees and the public. • Established process to educate and review contractors past performance on the waste management and monitoring continuous improvement practices.
Environmental Impact Assessment	
8. Evaluation of potential impact and emergency of releases on environment and health / safety of employees / public	• Establish of proper assessment system to identify the potential impact and aspect of waste and releases on the environment and health and safety of employees and the public • Established Emergency Response Plan (ERP) for handling during emergency and minimize impact to environment
Prevention Through Engineering Control	
9. Appropriate controls (engineering and operation) to improve prevention and early detection of releases that may contaminate soil, ground water, surface water and the atmosphere.	• Established system and facilities for early detection of releases and discharges and their proper management and disposal. Records of all solid, liquid and gaseous waste generated shall be maintained and conduct analysis and countermeasure to minimise the risk of contamination to of the environment
Environmental Incidents / Accidents Investigation	
10. The incidents / accidents related to environmental releases are properly investigated and put in place countermeasures for control and prevention purposes to eliminate the re-occurrence	• Procedure established to address the investigation and monitoring the progress of countermeasure. • Periodical reporting to management the status of the accidents/incidents (internal and external) and its countermeasures.
Waste Generation, Release and Performance Monitoring	
11. Quantitative inventory of waste generated and releases to environment and monitoring progress in reduction of waste generated and releases at least annually	• Develop up-to-date inventory for on-site and off-site releases, waste discharges and recycling • Update and maintain sufficient data to provide quantitative measurement of progress in waste minimisation and release/ reductions at least annually.

Management Practices	Implementation Guidelines
Performance Evaluation	
12. Periodic evaluation of environmental management practices, considering community / stakeholder concerns, HSE impacts and compliance obligation	• Conduct periodic, at least annually, evaluations of processes and facilities to identify sources of pollutant and to develop the most effective ways to reduce impact. • Evaluation by internal or 3rd party audit • Ensure operation activities fulfils compliance obligation by periodic evaluation
Management Review	
13. Address past operating and waste management practices and work with others to resolve identified problems	• Review past operating and environmental management system/practices and develop corrective action plans by adopting relevant and available technologies in both process and waste management.
Continuous Improvement & Innovation	
14. Continuous improvement programmes e.g. waste / release prevention/reduction integrated in R&D / design of new or modified facilities, processes and products.	• Inclusion of waste minimisation and release prevention objectives in R&D and in design of new or modified facilities, processes and products. • All projects, business expansion, joint ventures, acquisitions and divestments will be reviewed for their environmental impact by appropriate environmental personnel.
Sharing of Best Practices	
15. Promotion and support environmental sustainability programmes by related stakeholders	• Support waste reduction / recovery efforts by across supply chain (vendors, customers), neighbouring plants, subsidiaries and members by technology transfer and explore the possibility of waste exchange.

ACKNOWLEDGEMENT

RESPONSIBLE CARE ®

EMPLOYEE HEALTH AND SAFETY

CODE OF MANAGEMENT PRACTICES

EMPLOYEE HEALTH AND SAFETY CODE

CONTENTS

EMPLOYEE HEALTH AND SAFETY CODE

Introduction

This Code is aimed at protecting workers (including contractors) in the workplace and deals with the human factor rather than the equipment side of health and safety.

This Code calls for a commitment by management (including those required by law) of member companies to provide resources and mechanisms to identify and evaluate health and safety (H&S) hazards, control the risk or prevent them from causing harm to people at work and their workplace.

The Code also specifies training appropriate for workers which also requires their participation in developing and implementing health and safety programmes. As with the other Responsible Care Codes, self-audits to evaluate the effectiveness of health and safety programmes are also included.

One key issue of this Code is the requirement for companies to train contractors and sub-contractors who carry out work on their facilities.

The Code also includes safety of visitors to the facilities and procedures are to be drawn-up for their protection.

Generally, the Employee Health and Safety Code deals with people operating equipment and focuses on establishing, maintaining and improving H&S systems to provide safe and healthy working environment at all times.

Scope

The scope of this Code covers the entire management of H&S of people at work with the site or organization which includes H&S Program Management, H&S Risk Identification & Evaluation, Prevention & Control of the H&S Risk and H&S Communication & Training to the stakeholders i.e. management, employees, contractors & visitors conducting business on / with the site.

Objectives

The Code in general provides a framework for identifying and assessing occupational or work-related hazards, preventing unsafe acts and conditions, maintaining and improving H&S and fostering communications on H&S issues within the facility and community they operate.

References

1. Gulf Petrochemicals & Chemicals Associations Responsible Care Codes dated January 1, 2018
2. ISO 45001: 2018

COMPLIANCE WITH RESPONSIBLE CARE GUIDING PRINCIPLES

1. To develop and produce chemicals that can be manufactured, transported, used and disposed off safely.

2. To make H&S and environmental considerations a priority in planning for existing and new products and processes.

3. To operate plants and facilities in a manner that protects the environment, and H&S of employees and the public.

MANAGEMENT PRACTICES AND IMPLEMENTATION GUIDELINES

The 18 Management Practices that protect and promote health and safety of people working at, or visiting company facilities:-

No.	Management Practices	Implementation Guidelines
MANAGEMENT LEADERSHIP & COMMITMENT		
1	Commitment by all levels of management to protect and promote the health and safety of people who work at or visit company facilities, through : • published policies; • accountability for implementation; and • provision of sufficient resources, including qualified health and safety personnel	Management leadership and commitment in health & safety of people by: • Demonstrating management leadership through written policy, management system, active participation and communication • Establishing goals and accountabilities / responsibilities for implementing employee health and safety program throughout the organization and continue to measure performance against these goals • Committing resources necessary to implement and maintain employee health and safety practices
STAKEHOLDER ENGAGEMENT		
2	Opportunities for employees to continuously participate in the development, implementation and review of health and safety program where involvement, contribution and achievement will be recognized and rewarded accordingly	Provide opportunities for employees including contractors at all levels to continuously participate in the development, implementation and review stage of health and safety program such as: • Employee Feedback, Survey & Suggestion Scheme • Health & Safety Procedures establishment, implementation & review • Hazard Identification, Risk Assessment & Risk Control (HIRARC) Activities • Health & Safety Organizations, Programs & Activities • Health & Safety Trainings & Communication • Personal Protective Equipment (PPE) Selection and Assessment At the end, involvement, contribution and achievement will be recognized and rewarded accordingly.
CONTRACTOR MANAGEMENT		
3	Ensure contractors (including sub-contractors) management includes selection criteria, contractor H&S program, performance and contract review, consistent with applicable Management Practices of Employee Health and Safety Code	• System in managing contractors shall be available, implemented and reviewed • Availability of a health & safety policy, programs and performance measures are included as main criteria for the contractors during selection process • Safe, healthy & effective equipment / facility provided and used on site by the contractor e.g. PPE and high risk / H&S critical task equipment

No.	Management Practices	Implementation Guidelines
		• Appropriate health & safety training of the assigned workers provided to ensure compliance with company's (as client) safety rules, procedures and practices related to the services provided • Contractors should also perform periodical check / audit on their H&S system accordingly • Periodic review of contractor's safety performance
DOCUMENTATION & PROGRAM		
4	Written and current H&S documents e.g. procedures, work instructions, manuals & guidelines and programs which are appropriate to the H&S matters on site and re-evaluated for any changes and current good practice. It should be updated as and when necessary	The site should have a system in place to manage the generation, implementation, review, update, distribution & communication of all health & safety related documents and programs to all stakeholders. A written and updated H&S documentation system is in place comprises of procedures, work instructions, manuals and programs
AUDIT & ASSESSMENT		
5	Means to verify that the H&S documents and programs are effective and that actual practices are consistent with them	The site / facility should establish a system to verify the effectiveness & consistency of the H&S documents and programs vs actual practices by performing regular assessments or audits to identify and measure compliance level and if required, take corrective or improvement action accordingly
RECORD & PERFORMANCE REVIEW		
6	Systems for maintaining records and analyzing data to evaluate health and safety (H&S) programs, determine trends and identify areas for improvement	The site / facility should establish a system to record, analyze & review H&S performance by: • Maintaining health and safety data for analysis to determine trends, performance and improvement actions. • Establishing periodical reporting, monitoring and analysis of H&S KPI via formal communication platform e.g. H&S Committee or/and Management Review Meeting to ensure compliance and meet regulatory requirements
H&S HAZARDS IDENTIFICATION		
7	Methods to identify and review potential H&S hazards to employees (including contractors) and visitors in existing, new and to be modified site or facilities are in place and continuously improved	A system is in place to identify and review potential H&S hazards to employees (including contractors) and visitors for existing, new or to be modified plants, facilities & processes based on the following source of information: • H&S Hazards Analysis • Observation & Inspection • Hazard Exposure Monitoring • Document Review

No.	Management Practices	Implementation Guidelines
RISK EVALUATION		
8	Establish system to continuously evaluate and review level of H&S risk exposure on employee (including contractor) and visitor for existing, new or to be modified plants, facilities & processes	Establish means to continuously conduct periodic employee and visitor exposure assessment to evaluate H&S risks with respect to : • Plants & Processes • Biological Hazards • Chemical Hazards • Energy Hazards • Environmental Hazards • Ergonomical Hazards • Mechanical Hazards • Physical Hazards • Psycho-social Hazards Records of exposure assessment should be maintained and regularly updated
HEALTH FITNESS ASSESSMENT		
9	Health assessment to determine employee medical fitness for specific high risk job tasks	• Establish medical fitness standards for specific job tasks (e.g. working in confined space, working at heights, wearing breathing apparatus, etc.) • Conduct employee health assessment to these standards and • Maintain documented records
HEALTH SURVEILLANCE		
10	Employee occupational health surveillance programs tailored to work- site hazards. For CHH, health surveillance comprises of Biological Monitoring, Biological Effect Monitoring & Medical Surveillance	Establish health surveillance program for employees exposed to particular hazard e.g. noise, heat, lead and asbestos and other chemical hazardous to health
DESIGN REVIEW & MANAGEMENT OF CHANGE		
11	Mechanisms for reviewing the design and modification of facilities and job tasks, taking into account the following hierarchy of controls; inherently safer design, material substitution, engineering controls, administrative controls and personal protective equipment	Establish mechanism for reviewing the design and modification of facilities by having documented Process Hazard Analysis and Process Safety Review. Relevant approval gates should also be in place to steward the change. The hierarchy of design options employed to control or mitigate potential hazards associated with production processes shall be as follows : • inherently safer design techniques • material substitution • active hardware controls • specific procedural or administrative controls • general safe work practices and procedures • personal protective equipment (PPE)
HEALTH & SAFETY EQUIPMENT		
12	Systems to verify that personal protective health and safety equipment is properly selected, maintained and used. Establish Systems for selection, issuance, use (including limitation) and maintenance of	Availability of the following system at each facility to ensure H&S equipment is safe and effective in protecting employees from exposure to workplace hazards:

No.	Management Practices	Implementation Guidelines
	H&S equipment* including training of employee in proper use of the equipment. *Example : PPE, first aid equipment & facilities, fire-fighting equipment & system, emergency shower, eye wash, alarm system & devices, ladder, crane, lifting hoists, equipment fence, machine guarding, pressure vessels, elevators & electrical tools	• Selection, Issuance, Use & Maintenance of equipment • Training of Users • Consequence Management - Disciplinary measures to ensure proper use of equipment

HOUSEKEEPING & PREVENTIVE MAINTENANCE

No.	Management Practices	Implementation Guidelines
13	Establish an effective housekeeping and preventive maintenance systems for facilities, equipment, tools and vehicle / lifting truck to maintain and ensure the health and safety of users / employees at work	At each facility establish an effective housekeeping and preventive maintenance system for facilities, equipment, tools and vehicle / lifting truck such as policy, program, inspection, audit and review to ensure safety of facility, equipment and tools

INCIDENT REPORTING, INVESTIGATION & EFFECTIVENESS OF ACTION

No.	Management Practices	Implementation Guidelines
14	Timely investigation of work-site illnesses, injuries and incidents, implement corrective actions to prevent recurrence and evaluate the effectiveness of corrective actions plan.	Establish the following provision for all H&S-related illnesses, injuries and incidents affecting employees (including contractors) and visitors at work: • All illnesses, injuries and incidents timely reported & investigated • Every facility should have documented illness, injury and incident investigation system in place • Analyze historical incidences to determine trends and root causes, and corrective action to prevent recurrence. • Review action effectiveness • Share incident learnings with others to prevent recurrence

ORGANIZATIONAL, ENVIRONMENTAL & INDIVIDUAL HEALTH

No.	Management Practices	Implementation Guidelines
15	System on managing Organizational, Environmental & Individual Health for all stakeholders working on site to produce and maintain a healthy, productive and harmony workplace is in place	The site should establish policies & procedures including planning, promotion, implementation, monitoring and intervention on Organizational, Environmental & Individual Health for all stakeholders working on site

EMERGENCY MEDICAL CARE & OCCUPATIONAL HEALTHCARE

No.	Management Practices	Implementation Guidelines
16	Provisions for emergency medical assistance and occupational healthcare for people at company site.	Establish the following resources & facilities on site : • Emergency Medical Care • Occupational Healthcare

COMMUNICATION

No.	Management Practices	Implementation Guidelines
17	Communicate relevant H&S information to all stakeholders specific to the job function, task assigned and work site in general before, during and after work	• At each facility, establish and implement effective a two-way communication system for conveying H&S information regarding public announcement, work site, job function, task assigned to relevant stakeholders i.e. employees, contractors, visitors,

No.	Management Practices	Implementation Guidelines
		customers and surrounding community • Maintain regular communication and updates with stakeholders of such information based on the latest development / public announcements or amendments to regulations and standards

TRAINING

No.	Management Practices	Implementation Guidelines
18	H&S training programs provided to employees including contractors with appropriate documentation and methods to evaluate the effectiveness of both training & re-training activities	• All employees shall receive health and safety training appropriate to their job function or task assigned • Provide additional refresher training as and when necessary • All trainings shall be documented and regularly evaluated to ensure effectiveness

ACKNOWLEDGEMENT

Project Charter

Sponsor		Project Leader / CRCC	
Start Date		Target Completion Date	

DESCRIPTION, PURPOSE & SCOPE

Project Name	Responsible Care @ SME
Project Purpose	To implement Responsible Management System (RCMS) in the company HSE management system

Project Scope	Included: 1. Employee Health & Safety (EHS) Code
	         2. Environmental Protection (EP) Code
	Excluded: 1. Distribution (D) Code
	         2. Process Safety (PS) Code
	         3. Community Awareness & Emergency Response (CAER)
	         4. Product Stewardship (PSS)
	         5. Security Code (S) Code

OBJECTIVES

Objective	Baseline Value	Target Value	Units
1.			
2.			
3.			

OBJECTIVES

Business Benefits	a. b. c. d.
Stakeholder Benefits	a. b. c. d.
Estimated Cost (RM)	
Project Team	Sponsor : CRCC : ERCC (if any) : Team Members :

TIME PLAN

Schedule	Phase No.	Phase	Start Date	End Date	Recommend
Project Start	-	Preparation			

	1	DEFINE			2-Weeks
	2	MEASURE			1-month
	3	ANALYZE			1-month
	4	IMPROVE			6-months
	5	CONTROL			6-months
Project End	-	End			

APPROVAL

Role	Name	Signature	Date
Team Member			
CRCC / Team Leader			
ERCC (if any)			
Project Sponsor			

Chemical Productivity Nexus IWG-1

Responsible Care (RC) Implementation Programme for SMEs

ABC Technology Sdn. Bhd.
Nilai, Negeri Sembilan

PROJECT PLAN
(EXAMPLE)

Phase No.	Phase / Stage	Activity	Sub-Phase	Description*	Type	Responsibility	Venue	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	Prepare	Prepare Infrastructure & Resource	1	Get Project Information from MPC	Field & Desk Work	Managing Director	Off Site	Completed											
			2	Request to Participate	Desk Work	Managing Director	On Site	Completed											
			3	Appoint A Company RC Coordinator (CRCC)	Desk Work	Managing Director	On Site		Completed										
			4	Send the CRCC to be Trained on Implementation	Training	HR Manager	Off Site		Completed										
			5	Appoint RCMS Internal Assessors & Train the Assessors	Training	CRCC	On Site		Completed										
			6	Form the Project Team cum RCMS Assessment Team	Desk Work	CRCC	On Site		Completed										
			7	Appoint External Consultant (Optional)	Desk Work	CRCC	On Site		Completed										
1	Define	Define the Task & Project Goal	1	Establish Project Charter & Get Approval from Management	Desk Work	CRCC	On Site			Completed									
			2	Launch Project & Share Project Plan with Stakeholders	Desk Work	CRCC	On Site			Completed									
2	Measure	Measure RC Performance & Maturity Level	1	Step 1. Conduct Self-Assessment	Desk Work	Internal Assessor	On Site				Completed								
			2	Step 2. Conduct Document Assessment	Desk Work	CRCC / Consultant	On Site				Completed								
			3	Step 3. Conduct Site Verification	Field Work	CRCC / Consultant	On Site				Completed								
3	Analyze	Analyze Maturity Gap & Recommend Solution	1	Conduct Gap Analysis	Desk Work	Internal Assessor & HOD	On Site					In Progress							
			2	Determine the Root Cause	Desk Work	Internal Assessor & HOD	On Site					In Progress							
			3	Recommend Improvement Actions	Desk Work	Internal Assessor & HOD	On Site					In Progress							
4	Improve	Improve the System & Process	1	Establish RCMS for Specified Management Practices (if applicable)	Desk Work	Project Team	On Site					In Progress	Planned						
			2	Implement RC Improvement Plan (RCIP)	Desk Work	Project Team	On Site						Planned	Planned	Planned				
			3	Plan & Provide Appropriate RC-related Training	Desk Work	CRCC / Consultant	On Site						Planned	Planned	Planned				
5	Control	Control the System & Process	1	Conduct Monthly RC IP Review Meeting	Desk Work	CRCC / Consultant	On Site						Planned	Planned	Planned	Planned	Planned	Planned	
			2	Conduct final site assessment after 6 month & end project	Desk Work	CRCC / Consultant	On Site						Planned	Planned	Planned	Planned	Planned	Planned	
			3	Get RCMS Certification	Desk Work	CRCC / Consultant	On Site												Planned
			4	Plan for Next Year Program	Desk Work	CRCC	On Site												Planned

LEGEND :

Planned	(blue)
In Progress	(yellow)
Completed	(green)
No Progress	(red)

OPPORTUNITY FOR IMPROVEMENT (OFI)
FOR EP CODE

No.	EP No.	Management Practices	Implementation Guidelines	Opportunity for Improvement (OFI)
1	1	**MANAGEMENT COMMITMENT** Management commitment to ongoing pollutants reductions in releases to air, water, land and in generation of waste	• Written environmental policy statement and action plan by management showing commitment to continuous reduction in releases and waste generation • Established Corporate Objective that emphasize environmental targets • Ensure sufficient resources (budget, manpower, facilities, etc.,) for proceeding all related activities • Establish and maintain appropriate organization and accountability at all levels to support management commitment • Ensure compliance to Environmental Management System (EMS) and any national environmental legislations / regulations that are currently in force	
2	2	**OBJECTIVES & STRATEGY** Establish priorities, goals, and plans for waste / release reduction, considering all stakeholders concern / environment impact *(stakeholder could be community, authorities, consumer, customer, supplier,*	• Prioritize and plan targets for waste / release reduction considering all stakeholders input and its impact on environment • Identify sufficient resource needs consistent with established goals	

		etc.)		
3	3	**ENVIRONMENTAL SUSTAINABILITY** Establish environmental sustainability plan to conserve natural resources and protect global ecosystems to support health and wellbeing for present and in future	• Set short and long term KPI (production quantity base) for environmental sustainability elements. • Reduction in waste release (GHG, waste generated, waste go to land filled etc), natural resources usage (water, energy etc). • Increase in renewable energy usage, green area, green procurement ratio etc. • Established Management programs or roadmap to achieve each KPI set.	
4	4	**WASTE CONTROL** Ongoing waste release reduction giving priority to source reduction, reuse, recycle, recovery and treatment. Proper treatment before disposal	• Perform waste minimization in the following order: ➢ Source reduction ➢ Reuse/recycle/sale of special materials ➢ Recovery ➢ Treatment • Appoint an appropriate accountable person for the environmental reduction plan	
5	5	**COMMUNICATION WITH STAKEHOLDERS** Provide appropriate education and dialogue with employees / public about inventories, impact evaluation, risks to community and waste handling knowledge	• Provision of opportunities for dialogue with employees and the public on pollution prevention, inventories potential risks and mitigation measures • Provision of environmental awareness and refresher training for concern employee and other stakeholders	
6	11	**WASTE GENERATION, RELEASE & PERFORMANCE**	• Develop up-to-date inventory for on-site and off-site releases, waste discharges and	

		MONITORING Quantitative inventory of waste generated and releases to environment and monitoring progress in reduction of waste generated and releases at least annually	recycling • Update and maintain sufficient data to provide quantitative measurement of progress in waste minimization and release/ reductions at least annually.	

RCMS Implementation Guidelines for SME

OPPORTUNITY FOR IMPROVEMENT (OFI)
FOR EHS CODE

No.	EHS No.	Management Practices	Implementation Guidelines	Opportunity for Improvement (OFI)
1	1	**MANAGEMENT LEADERSHIP & COMMITMENT** Commitment by all levels of management to protect and promote the health and safety of people who work at or visit company facilities, through : • published policies; • accountability for implementation; and • provision of sufficient resources, including qualified health and safety personnel.	Management leadership and commitment in health & safety of people by : • Demonstrating management leadership through written policy, management system, active participation and communication. • Establishing goals and accountabilities / responsibilities for implementing employee health and safety program throughout the organization and continue to measure performance against these goals. • Committing resources necessary to implement and maintain employee health and safety practices.	
2	2	**STAKEHOLDER ENGAGEMENT** Opportunities for employees to continuously participate in the development, implementation and review of health and safety program where involvement, contribution and achievement will be recognized and rewarded accordingly.	• Provide opportunities for employees including contractors at all levels to continuously participate in the development, implementation and review stage of health and safety program such as : • Employee Feedback, Survey & Suggestion Scheme • Health & Safety Procedures establishment,	

				implementation & review • Hazard Identification, Risk Assessment & Risk Control (HIRARC) Activities • Health & Safety Organizations, Programs & Activities • Health & Safety Trainings & Communication • Personal Protective Equipment (PPE) Selection and Assessment • At the end, involvement, contribution and achievement will be recognized and rewarded accordingly.	
3	4	**H&S DOCUMENTATION & PROGRAM** Written and current H&S documents e.g. procedures, work instructions, manuals & guidelines and programs which are appropriate to the H&S matters on site and re-evaluated for any changes and current good practice. It should be updated as and when necessary.		The site should have a system in place to manage the generation, implementation, review, update, distribution & communication of all health & safety related documents and programs to all stakeholders. A written and updated H&S documentation system is in place comprises of procedures, work instructions, manuals and programs.	
4	5	**H&S AUDIT AND ASSESSMENT** Means to verify that the H&S documents and programs are effective and that actual practices are consistent with them.		The site / facility should establish a system to verify the effectiveness & consistency of the H&S documents and programs vs actual practices by performing regular assessments or audits to identify and measure compliance level and if required,	

			take corrective or improvement action accordingly.	
5	6	**H&S RECORD & PERFORMANCE REVIEW** Systems for maintaining records and analyzing data to evaluate health and safety (H&S) programs, determine trends and identify areas for improvement.	The site / facility should establish a system to record, analyze & review H&S performance by : • Maintaining health and safety data for analysis to determine trends, performance and improvement actions. • Establishing periodical reporting, monitoring and analysis of H&S KPI via formal communication platform e.g. H&S Committee or/and Management Review Meeting to ensure compliance and meet regulatory requirements	
6	7	**H&S RISK MANAGEMENT SYSTEM (HIRARC)** Methods to identify and review potential H&S hazards to employees (including contractors) and visitors are in place and continuously improved.	A system is in place to identify and review potential H&S hazards to employees (including contractors) and visitors including people-related security threats for existing, new or to be modified plants, facilities & processes based on the following source of information : • H&S Hazards Analysis • Observation & Inspection • Hazard Exposure Monitoring • Document Review	
7	12	**HEALTH & SAFETY EQUIPMENT** Systems to verify that personal protective health and safety equipment is properly	Availability of the following system at each facility to ensure H&S equipment is safe and effective in protecting employees from	

		selected, maintained and used. Establish Systems for selection, issuance, use (including limitation) and maintenance of H&S equipment* including training of employee in proper use of the equipment. *Example : PPE, first aid equipment & facilities, fire-fighting equipment & system, emergency shower, eye wash, alarm system & devices, ladder, crane, lifting hoists, equipment fence, machine guarding, pressure vessels, elevators & electrical tools	exposure to workplace hazards: • Selection, Issuance, Use & Maintenance of equipment • Training of Users • Consequence Management - Disciplinary measures to ensure proper use of equipment	
8	14	**H&S INCIDENT INVESTIGATION & EFFECTIVENESS OF ACTION** Timely investigation of work-site illnesses, injuries and incidents, implement corrective actions to prevent recurrence and evaluate the effectiveness of corrective actions plan.	Establish the following provision for all H&S-related illnesses, injuries and incidents affecting employees (including contractors) and visitors at work : • All illnesses, injuries and incidents timely reported & investigated • Every facility should have documented illness, injury and incident investigation system in place • Analyze historical incidences to determine trends and root causes, and corrective action to prevent recurrence. • Review action effectiveness • Share incident learnings with others to prevent recurrence	

9	17	**H&S COMMUNICATION** Communicate relevant H&S information to all stakeholders specific to the job function, task assigned and work site in general before, during and after work	At each facility, establish and implement effective a two-way communication system for conveying H&S information regarding public announcement, work site, job function, task assigned to relevant stakeholders i.e. employees, contractors, visitors, customers and surrounding community Maintain regular communication and updates with stakeholders of such information based on the latest development / public announcements or amendments to regulations and standards.	

Chemical Productivity Nexus IWG-1

Responsible Care® Management System (RCMS) Implementation Program for SME

Basic Responsible Care® Training Required

No.	Category	No.	Topic	Hours	RC Code	Type	Recommended Participant
1	**Responsible Care**	1	Responsible Care (RC)	0.5		In-house	Management & HSE Committee
		2	RC Codes of MP & RCMS	1		In-house	Management & HSE Committee
			Sub-total : 1	**1.5**			
2	**Statutorial**	1	**OSH**				
		a	OSHA 1994 & Its Regulations	0.5		In-house	All Employees
		b	Responsibilities of Employer & Employee	0.5		In-house	All Employees
		c	Safety & Health Policy	0.5		In-house	All Employees
		d	Safety & Health Committee	1		In-house	All Employees
			Sub-total : 2.1	2.5			
		2	**Environment**				
		a	EQA 1974 & Its Regulations	1		In-house	Management & HSE Committee
		b	SW Reg. 2007 & Scheduled Waste Mgmt.	1		In-house	Management & HSE Committee
			Sub-total : 2.2	2			
			Sub-total : 2	**4.5**			
3	**Site / General**	1	Work-related Accident & Illness/Disease Prevention	1		In-house	All Employees
		2	Risk Management & Observation Tools	3		In-house	All Employees
		3	OSH MS, Policy, Procedures & Program	1		In-house	Management & HSE Committee
		4	Accident Reporting & Investigation	2		In-house	Management & HSE Committee
		5	Chemical Management	2		In-house	Exposed Employees & Respective Supervisor
		6	Noise & Hearing Conservation	2		In-house	Exposed Employees & Respective Supervisor
		7	Fire Safety & Emergency Response	2		In-house	All Employees
		8	Ergonomic - Manual-handling, DSE etc.	2		In-house	Exposed Employees & Respective Supervisor
		9	5S & Housekeeping	2		In-house	All Employees
		10	H&S Equipment including PPE	2		In-house	Exposed Employees & Respective Supervisor
		11	Spill Control & Loss of Containment	1		In-house	Exposed Employees & Respective Supervisor
			Sub-total : 3	**20**			
			Total # Training Hours Required	**26**			
			# Daily Training Hours Required	**6**			
			# Training Days Required	**4.3**			

No.	Category	No.	Topic	Hours		Type	Participant
4	**Specialized / Certified***	1	HIRARC*	12		External	Plant / Factory Management & Engineering
		2	First Aid & CPR*	12		In-house	First-Aiders & ERT
		3	Permit to Work*	6		In-house	Exposed Employees & Respective Supervisor and M&E
		4	Management of Change (MoC)	6		In-house	Plant / Factory Management & Engineering
		5	Lift Truck Driving*	12		External	LT Truck Drivers
		6	OSH Induction - Employees incl. Contractors	3		In-house	All Employees
		7	OSH Induction - Visitors	1		In-house	All Visitors
		8	Work Stress Management	2		In-house	All Employees
		9	Contractor Management	1		In-house	Procurement & Contract Managers
		10	Guarding	2		In-house	Exposed Employees & Respective Supervisor

Chemical Industries Council of Malaysia

Responsible Care for SMEs
EMPLOYEE HEALTH AND SAFETY CODE

(✔) Documentation Assessment Form / (✔) Site Verification Form *[Please tick (√)]*

RESPONSIBLE CARE® ASSESSMENT SCORECARD

Name of Company: Averex Technology Sdn. Bhd.

No.	Management Practices	Stages of Implementation - Initial (Baseline)									Remark(s)	After Improvement - Mid-Term			Remark(s)	After Improvement - Final			Remark(s)
		1	2	3	4	5	N/A	Score	Target	%		Score	%	% Improvement		Score	%	% Improvement	
1	**EHS 1. MANAGEMENT LEADERSHIP & COMMITMENT** Commitment by all levels of management to protect and promote the Health & Safety (H&S) of people working at or visiting company facilities through published policies, accountability for implementation and provision of sufficient resources including qualified H&S personnel				4			2.8	5.0	55.0	Refer details in No. 1, Checklist - EHS	3.3	65.5	10.5	Not meeting % improvement target of 30% (10.5%) but already exceeded standard requirement of 50% RC implementation (65.5%) - P2				
2	**EHS 2. EMPLOYEE ENGAGEMENT** Opportunities for employees (including contractors) to participate in developing, implementing and reviewing of H&S programs				4			1.9	5.0	37.5	Refer details in No. 2, Checklist - EHS	3.6	72.5	35.0	Meeting % improvement target of 30% (35.0%) and already exceeded standard requirement of 50% RC implementation (72.5%) - P3				
3	**EHS 4. H&S DOCUMENTATION AND PROGRAM** Each site should have written and current H&S documents e.g. procedures, work instructions, manuals & guidelines, and programs which are appropriate to the H&S matters on site and re-evaluated for any changes and current good practice, and updated as necessary.				4			1.2	5.0	23.3	Refer details in No. 4, Checklist - EHS	2.3	46.7	23.3	Not meeting % improvement target of 30% (23.3%) and failed to meet standard requirement of 50% RC implementation (46.7%) - P1				
4	**EHS 5. H&S AUDIT AND ASSESSMENT** Means to verify that the H&S documents & programs are effective and that actual practices are consistent with them			3				1.0	5.0	20.0	Refer details in No. 5, Checklist - EHS	1.8	36.0	16.0	Not meeting % improvement target of 30% (16.0%) and failed to meet standard requirement of 50% RC implementation (36.0%) - P1				
5	**EHS 6. H&S RECORD AND PERFORMANCE REVIEW** Establish system for maintaining H&S records and analyzing data to evaluate H&S performance, determine trends and identify areas for improvement.				4			3.2	5.0	63.3	Refer details in No. 6, Checklist - EHS	4.4	88.0	24.7	Not meeting % improvement target of 30% (24.7%) but already exceeded standard requirement of 50% RC implementation (88.0%) - P2				
6	**EHS 7. H&S RISK MANAGEMENT SYSTEM (HIRARC)** Establish methods to identify H&S hazards, evaluate potential risks in products, facilities (including plants & equipments) & processes to control the risk accordingly and review the risk on periodical basis or whenever required. The scope of HIRARC shall also include all new and to be modified products, facilities & processes.		2					1.8	5.0	35.0	Refer details in No. 7, Checklist - EHS	4.0	80.0	45.0	Meeting % improvement target of 30% (45.0%) and already exceeded standard requirement of 50% RC implementation (80.0%) - P3				
7	**EHS 12. H&S EQUIPMENT** Establish system for selection, issuance, use (including limitation) and maintenance of H&S equipment* including training of employee in proper use of the equipment.			3				2.5	5.0	50.7	Refer details in No. 12, Checklist - EHS	4.2	84.0	33.3	Meeting % improvement target of 30% (33.0%) and already exceeded standard requirement of 50% RC implementation (84.0%) - P3				
8	**EHS 14. H&S INCIDENT INVESTIGATION AND EFFECTIVENESS OF ACTION** Establish documented illness, injury and incident investigation process and evaluate the effectiveness of the corrective and preventive action taken				4			1.1	5.0	21.7	Refer details in No. 14, Checklist - EHS	4.0	80.0	58.3	Meeting % improvement target of 30% (58.3%) and already exceeded standard requirement of 50% RC implementation (80.0%) - P3				
9	**EHS 17. H&S COMMUNICATION** Communicate relevant H&S information to all stakeholders relevant to specific job function / task and the work site in general				4			1.7	5.0	33.0	Refer details in No. 17, Checklist - EHS	3.1	62.9	29.9	Not meeting % improvement target of 30% (29.9%) but already exceeded standard requirement of 50% RC implementation (62.9%) - P2				
	TOTAL							17.0	45.0	37.7	Baseline. No improvement action in place yet. Not meeting standard requirement of 50% RC implementation (45.0%) - P1	30.8	68.4	30.7	Meeting % improvement target of 30% (30.7%) and already exceeded standard requirement of 50% RC implementation (68.4%) - P3				
	AVERAGE							1.9			System in process of being developed. More effort is required.	3.4			Requirements are mostly met but some improvements are needed				

Submitted by:
Name of Assessor(s): **Radzi Hj. Abdul Rashid**
Company Audited: **Averex Technology Sdn. Bhd.**
Signature: *Radzi AR*
Date: **29/10/21**

Legend

Black   Self-evaluation Baseline Score given by the Client under Initial

Overall Score : 37.7% (Orange)

Stage of Implementation	Color Code	Overall Score (%)	MP No.	Proposed Action Completion
1	Red	0-20 (Unsatisfactory)	EHS 2, 4, 5, 7, 14 & 17	Within 3 months
2	Orange	21-40 (More Expected)	EHS 1 & 12	Within 6 months
3	Yellow	41-60 (Satisfactory)	EHS 6	Within 9 months
4	Blue	61-80 (Good)	None	Within 12 months
5	Green	80-100 (Excellent)	None	None

P1   Priority 1 - High Level Priority
P2   Priority 2 - Medium Level Priority
P3   Priority 3 - Low Level Priority

MPC
Malaysia Productivity Corporation
Driving Productivity of the Nation

CICM