



RESPONSIBLE CARE ®

ENVIRONMENTAL PROTECTION

CODE OF MANAGEMENT PRACTICES

Developed by
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ENVIRONMENTAL PROTECTION CODE

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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, 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	<ul style="list-style-type: none"> • 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 (<i>stakeholder could be community, authorities, consumer, customer, supplier, etc.</i>)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Perform waste minimization in the following order: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Provision of opportunities for dialogue with employees and the public on pollution prevention, inventories potential risks and mitigation measures

Management Practices	Implementation Guidelines
	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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

Original Issue: November 25, 1997
Reissued Date: December 1, 2021
Revision No: 01

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Revision Date: December 1, 2021

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Original Issue: November 25, 1997

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