



Responsible Care[®]
Our commitment to sustainability

Responsible Care

program

20 years of the Responsible Care Program in Brazil

**Requirements of the
Management System**



BRAZILIAN CHEMICAL INDUSTRY ASSOCIATION

The “Programa Atuação Responsável®” [**The Responsible Care Program**], a trademark from **Abiquim - Associação Brasileira da Indústria Química** [Brazilian Chemical Industry Association] is an initiative of the Brazilian and worldwide chemical industry designed to show its voluntary commitment to continuous improvement of its performance in health, safety and environment.

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Introduction

This document is intended to assist the associated companies in the understanding, implementation, maintenance, evaluation and improvement of the Responsible Care Program®.

It reaffirms the commitment assumed by the Brazilian chemical industry, as of April 1992, upon the adoption of the Responsible Care Program in Brazil and meets the key elements of the Responsible Care Global Charter of The International Council of Chemical Associations (ICCA) of 2006.

The contents of this publication sets out the requirements of the Management System of the Responsible Care Program, as well as presents which were the basis considered for the definition of such requirements and how to manage them.

For the approval of the Management System of the Responsible Care Program, the involvement and commitment of a large number of professionals from the associated companies were necessary.

The Brazilian chemical industry recognizes and appreciates the dedication of all who participated in this effort, vital to the industry.

Abiquim will continue to promote events and provide other documents and supplementary materials, with the support of committees related to the Responsible Care Program.

City of São Paulo, December 12, 2011

**This document was translated into English in 2014.*

Elucidation

Abiquim began restructuring the Responsible Care Program in July 2011, after approval by the Board of Directors.

The details of actions to meet the new guidelines of the Program are founded on the reaffirmation and strengthening of ethics and responsibility of the associated companies in its implementation. The restructuring focused on issues related to health, safety and environment.

The performance indicators of the Responsible Care Program demonstrate the achievements and significant improvements on issues related to health, safety and environment, resulting from 20 years of implementation of the Program in Brazil.

The commitment and determination of the associated companies in implementing and maintaining the Responsible Care Program will define, within next 20 years, the success and effectiveness of the continuous improvement.

The Responsible Care Program is an essential part of Abiquim's Mission to contribute to the promotion of competitiveness and sustainable development of the chemical industry installed in the Country.

Management Committee of the Responsible Care Program.

Biennium 2011/2013

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1. Introduction

The implementation of the Management System of the Responsible Care Program will provide companies a tool that will allow them to develop, in a simple, objective and effective way, issues related to health, safety and environment considering the processes, products, facilities and services.

The Management System of the Responsible Care Program establishes requirements, classified as essential and complementary, which when incorporated into the company's management system - considering its structure and culture - will allow the fulfillment of the Program in an effective and verifiable manner.

The management process starts with the signature, by the chief executive, of a "Statement of Commitment" and a "Statement of Compliance" stating its support to the actions of the Responsible Care Program. The process ends with an audit of the implemented system. All the intermediate actions necessary to implement the Management System are detailed in this manual.

With the implementation of the Responsible Care Program, the company will expand the knowledge and optimize the actions related to health, safety and environment, will disseminate the principles of the Program in the value chain and meet the expectations of interested parties.

Adhesion to the Responsible Care Program is a condition of membership for the effective and collaborative associated companies, termed herein as companies.

Abiquim will stimulate the formation of Multiplication Centers, with regional operations, aiming the exchange of experiences and mutual assistance in the implementation of the Program.

2. Basis for the definition of the management system

2.1 The management system is structured according to the PDCA (Plan-Do-Check-Act) model.



Plan-Implement-Monitor-Analyze.

Plan: establish the objectives and actions required to achieve the desired results.

Implement: document actions and put them into practice.

Monitor: monitor, measure and audit the actions and compare the obtained results with the desired ones.

Analyze: analyze and monitor the actions to continually improve performance.

2.2 Promoting the continuous improvement culture of the company:

- In health, safety and environment.
- In conducting ethical and transparent businesses.
- In the protection of people and in the environment conservation.
- In the integrity of the property.
- In the communication channels with interested parties.
- In the value chain.
- In the image enhancement of the chemical industry and its products.

2.3 Manage the impacts and risks inherent to processes, products, facilities and related services:

Preserve health and protect the physical integrity of people	Health and safety
Ensure operational and facilities safety	Process safety
Ensure the correct and proper use of products	Product Safety
Conserve the environment	Environment

2.4 Communicate the impacts and risks to interested parties, recognize and respond to the demands, expectations and suggestions from them.

2.5 Qualify company's staff and require qualification of service providers.

3. How to Manage the Responsible Care Program

We list below the guidelines for managing the Responsible Care Program:

- By the Top Management
- To manage the impacts and risks
- To communicate the impacts and risks
- To qualify people
- Other management actions

Top Management

- Sign the “Declaration of Commitment”, where the chief executive states support to the actions of the Responsible Care Program.
- Sign the “Statement of Compliance” to the Responsible Care Program Principles.
- Sign the appointment of the Responsible Care Program Coordinator.
- Demonstrate leadership and commitment to the Program and related issues.
- Encourage the commitment of everyone in the company around the Responsible Care Program.
- Include, in the company’s policy, the commitment to the Program and to issues related to health, safety and environment.
- Establish a specific document to guide the company’s ethics.
- Establish and monitor objectives, goals and performance indicators related to health, safety and environment.
- Promote, in the value chain, the spread of the Responsible Care Program and issues related to health, safety and environment.

Manage the impacts and risks

- Ensure compliance with legislation and other voluntary subscribed requirements.
- Identify the impacts and risks related to its activities, considering health, safety and environment issues and define those considered significant.
- Analyze the risks of its processes and facilities and identify which are the critical scenarios.
- Establish acceptance criteria for impacts and risks identified.
- Identify the properties and risks to health, safety and environment of its intermediate products, finished products and marketed products, documenting them through the Safety Data Sheet for Chemicals (SDS), as well as wastes through the Waste Safety Data Sheet (WSDS).
- Require the SDS from its suppliers and service providers.
- Manage the impacts and risks of transportation and distribution means.
- Manage the impacts and risks of the contracted services.
- Establish administrative and organizational measures and ensure they are fully understood and met in order to manage risks considered significant.
- Adopt protection equipment and systems in order to reduce impacts and risks.
- Define mitigation measures to the significant impacts and risks.
- Adopt safety criteria inherent to all phases of the processes.
- Establish and monitor operational procedures and maintenance programs.
- Manage changes in processes, products, facilities and services.
- Define emergency plans and conduct simulation exercises, considering the critical scenarios identified.
- Set the plan for managing crises and conduct simulation exercises.
- Monitor the impacts and risks to health, safety and environment.
- Manage liabilities related to health, safety and environment.

Communicate impacts and risks

- Identify and define interested parties.
- Establish and control tools and communication channels, according to the definition of the interested parties.
- Establish, based on the location and the scenarios identified, a formal relationship channel with the neighboring communities, aiming to address the risks beyond the boundaries of the premises.
- Establish the means to recognize and respond to demands, expectations and suggestions from the interested parties.
- Monitor the effectiveness of tools and communication channels.

Qualification of people

- Define the organizational structure and describe the roles, duties and responsibilities related to health, safety and environment.
- Set the knowledge and skills, train people and monitor their performance.
- Manage the movement of people.
- Develop a behavioral culture, so that people have a safe and proper attitude inside and outside the company.

Other management actions

- Develop a continuous improvement culture.
- Establish and monitor procedures for handling incidents, losses, non-conformances and other deviations.
- Systematically audit and monitor the resulting actions.
- Critically and systematically analyze the management system and monitor the resulting actions

Requirements of the Management System of the Responsible Care Program

Generality

The company shall develop, document, implement, maintain and continually improve the Management System of the Responsible Care Program.

The Management System is composed of elements and its requirements.

Considering the structure and culture of the company, the elements and its requirements should be aligned to the existing management system in the company, not being necessary to develop a new parallel system.

Elements

The Management System has 10 elements:

- 4.1 Leadership and commitment.
- 4.2 Identification of aspects and hazards, and assessment of impacts and risks.
- 4.3 Legal and other requirements.
- 4.4 Objectives, goals and performance indicators.
- 4.5 Standards, procedures, instructions, operational controls and processes control.
- 4.6 Communication, participation and consultation.
- 4.7 Qualification and behavior of people.
- 4.8 Audits.
- 4.9 Incidents, non-conformances, corrective and preventive actions.
- 4.10 Analysis of the management system.

Requirements

The management system defines requirements which, when implemented, add value in the health, safety and environment areas as well as in the Responsible Care Program.

Every requirement is classified as:

Essential - that is absolutely necessary.

or

Complementary - which adds, complements.

The Management System is composed of 28 requirements, of which 23 are classified as essential and 5 as complementary.

Details of elements and its requirements:

4.1 Leadership and commitment

4.1.1 Document the commitment and adhesion to the Responsible Care Program. - (Essential)

The chief executive must sign the following documents:

- a) Statement of Commitment with supporting actions to the Responsible Care Program.
- b) Statement of Compliance to ethical principles of the Responsible Care Program.
- c) Appointment of the Responsible Care Program Coordinator.

The chief executive must also:

- d) Demonstrate leadership and commitment to the Program and related issues.
- e) Acknowledge the value of the Program and encourage the involvement of people.
- f) Promote, in the value chain, the spread of the Responsible Care Program and issues related to health, safety and environment.

4.1.2 Set the policy for the organization. (complementary)

The policy shall include:

- a) How to deal with issues related to health, safety and environment.
- b) Recognition of commitment to the Responsible Care Program.

It should be documented, implemented, maintained, reviewed, communicated and easily understood by all.

This requirement is complementary to the Program, but is mandatory for the certification processes related to health, safety and environment.

4.1.3 Establish document to guide the company's ethics. (complementary)

It shall include:

- a) Appreciation of the Responsible Care Program.
- b) Issues related to health, safety and environment.

It should be implemented, maintained and reviewed, communicated and easily understood by all.

4.2 Identification of aspects and hazards and assessment of impacts and risks.

4.2.1 Establish, implement, maintain and monitor procedures for identifying aspects and hazards, for assessment of impacts and risks inherent to the activities of the company and for definition of the respective controls. (essential)

The aspects, impacts, hazards and risks to be considered are those inherent to the activities, processes, products, facilities and services related to health, safety and environment:

- a) Identify hazards and assess risks to health and safety of people.
- b) Identify the aspects and assess the environmental impacts.
- c) Use risk analysis techniques to identify the technological risks inherent to processes and facilities.
- d) Use consequences and vulnerabilities analysis techniques to define and establish a criticality range of scenarios.
- e) Identify the properties and risks of raw materials, wastes, intermediate, finished and marketed products.
- f) Identify the risks of transportation and distribution means.
- g) Establish a matrix of acceptability for the impacts and risks identified.

4.3 Legal and other requirements

4.3.1 Establish, implement and maintain procedures to meet the applicable legal requirements and other voluntary subscribed requirements. (essential)

The company must ensure compliance with the legislation applicable to people, products and company's activities related to health, safety and environment:

- a) Identify, interpret and define the applicable legislation.
- b) Implement the applicable legislation and assess the consequences upon non-compliance.
- c) Monitor the compliance.

The items above are valid for the other voluntary subscribed requirements.

The Responsible Care Program is a voluntary requirement subscribed by the company that should be considered in the certification processes related to health, safety and environment.

4.4 Objectives, goals and performance indicators.

4.4.1 Establish, implement, maintain and monitor objectives and goals. (essential)

The objectives and goals should be related to impacts and risks identified in 4.2, in a prioritized manner, and should encourage the continuous improvement.

The company must establish documented programs to meet the objectives and goals settled.

4.4.2 Establish, implement, maintain and monitor the performance indicators. (essential)

Performance indicators should maintain relationship with the objectives and goals defined in 4.4.1 and also stimulate the continuous improvement. Proactive indicators, preferably, should be established.

When defining indicators, consider minimally the indicators required by Abiquim.

If, in the company's policy, according to item 4.1.2, it is mentioned that the management strives for excellence in health, safety and environment, the company must show comparative results using benchmarking, where applicable.

4.5 Standards, procedures, instructions, operational controls and processes control.

4.5.1 Establish, implement, maintain and monitor policies, procedures, instructions, operational controls and processes controls resulting from impacts and risks identified. (essential)

The company shall establish preventive measures, aiming controlling the impacts and risks identified in 4.2, and adopt standards to mitigate their consequences:

- a) Establish a priority scale considering the potential of impacts and risks identified.
- b) Determine measures to control impacts and risks.
- c) Set protection levels sufficient to prevent that a failure, including the possibility of human error, evolves into a critical scenario (fire, explosion and accidental release of products).
- d) Prioritize critical scenarios.
- e) Install protection equipment and systems to reduce impacts and risks, as well as mitigate their consequences.
- f) Set safety criteria inherent to all phases of the processes.
- g) Establish safe and suitable procedures and practices for regular start and stop, operation, maintenance and emergency stops activities.
- h) Establish procedures for critical works (confined space, hot services, works at height and on energized equipment).

The adoption of control measures will allow the company to use its human, material and financial resources safely and efficiently.

4.5.2 Establish, implement, maintain and monitor the maintenance and calibration programs. (essential)

The maintenance and calibration programs must consider the impacts and risks identified in 4.2:

- a) Define the criticality of equipment and controls involved in the management of impacts and risks.
- b) Document and monitor the procedures of its maintenance and calibration programs.

4.5.3 Establish, implement, maintain and monitor procedures for the management of changes to processes, products, services and premises. (essential).

Any change that amends or adds impacts and risks identified in 4.2 and managed in 4.5 should be:

- a) Assessed before its execution.
- b) Authorized by designated responsible.
- c) Executed as approved.
- d) Communicated to interested parties.

4.5.4 Establish, implement, maintain and monitor programs related to health, safety and environment issues. (essential)

Based on the impacts and risks identified in 4.2, develop programs aiming:

- a) The preservation of people's health.
- b) The monitoring of the work environment.
- c) The protection of the physical integrity of individuals.
- d) The inspection of the workplace.
- e) The analysis and evaluation of the task before its execution.
- f) The conservation of the environment.
- g) The constant reduction in the generation of waste, effluents and emissions.
- h) The optimum use of natural resources.
- i) The risk reduction in transportation and distribution means.
- j) The correct and safe use and handling of products sold.
- k) The correct and safe disposal and recycling of wastes and packaging of products sold.
- l) The identification and resolution of liabilities related to health, safety and environment.

4.5.5 Establish, implement, maintain and monitor procedures that take into account health, safety and environment issues when contracting services. (essential)

Based on the impacts and risks identified in 4.2, define the criteria for contracting services, to qualify service providers:

- a) That are internal.
- b) Of the transportation means.
- c) Of distribution.
- d) Of treatment and disposal of waste.
- e) Of emergency response.
- f) Of industrialization.

Require, when contracting services, that the health, safety and environment standards adopted by the company are adopted and proven.

Consider the SASSMAQ (Safety, Health, Environment and Quality Management System) models, specific and valid, for the respective service providers.

4.5.6 Establish, implement, maintain and monitor procedures that take into account health, safety and environment issues in the commercialization. (complementary)

Based on the impacts and risks identified in 4.2, define the criteria for evaluating the technical and organizational capacity of the client to handle the marketed products.

This requirement applies to products with high impact and risks to health, safety and environment, considering the related properties:

- a) Toxicity - carcinogenicity, mutagenicity and endocrine disruptor.
- b) Flammability.
- c) Stability.
- d) Ecotoxicity.

4.5.7 Establish, implement and exercise plans for emergency response. (essential)

Based on the prioritization of critical scenarios, identified in 4.2, develop plans for emergency responses, considering:

- a) Scenarios with internal consequences.
- b) Scenarios with consequences that go beyond the limits of the company.
- c) Scenarios generated by the neighborhood that could affect the company.
- d) External emergencies.
- e) Plans for mutual assistance.

The company must document and maintain updated plans, on which all actions and responsibilities must be defined, from the time of the alert to the post-emergence actions.

The plans must be communicated and understood by all individuals involved, internally and externally.

Considering a priorities scale of the scenarios identified in 4.2, develop a plan for the accomplishment of the simulated exercises.

After definition of plans and scenarios, perform the simulated exercises in order to test the operability of the written plan, the operation of the equipment used and the qualification of people involved.

The simulated exercises must take into account all actions established internally and must involve all external entities (Civil Defense, Fire Department, the environmental agency, medical and hospital care).

The simulated exercises must be documented, evaluated and used as a learning process. Plans should be reviewed and revised after the simulated exercises, particularly after a real or potential emergency event.

4.5.8. Establish, implement and exercise plans for managing crises. (complementary)

Based on the scenarios identified in 4.2, the company must establish plans for managing crises, in the best interests of:

- a) The company's image.
- b) The image of its products.
- c) The relationship with the value chain.
- d) The relationship with the media.
- e) The relationship with governmental and non-governmental agencies.
- f) The relationship with employers and workers' representatives.
- g) The relationship with the community in which the company operates or where the crisis occurred.

4.5.9 Establish, implement, maintain and monitor procedures for monitoring impacts and risks. (essential)

In order to measure the effectiveness of control measures and mitigating measures adopted, the company must monitor:

- a) The health of people.
- b) The liquid effluents, air emissions and waste.
- c) Soil, groundwater and other receptors.

4.6 Communication, participation and consultation.

4.6.1 Identify the interested parties. (essential)

Based on impacts and risks, defined in 4.2, the company must identify and define the interested parties, such as:

- a) Internal community - people who work for the company, people from internal services providers and visitors.
- b) External community.
- c) Clients.
- d) Suppliers.
- e) Media.
- f) Governmental and non-governmental agencies.
- g) Public agencies working in emergency situations.
- h) Shareholders.
- i) Employers and workers' representatives.

4.6.2 Establish, implement and maintain tools, communication and dialogue channels with interested parties. (essential)

Considering the interested parties identified in 4.6.1, the company must document what are the respective tools and channels, such as:

- a) Internal Community - billboard, internal newsletter, intranet.
- b) External Community - flyers, 0800 telephone line, Community Advisory Council.
- c) Clients - Safety Data Sheet for Chemicals (SDS), **Waste Safety Data Sheet (WSDS)**, information and guidelines on the use and disposal of products and packaging, meetings, conventions and Internet.
- d) Suppliers - SDS, meetings, awards and Internet.

Supply the value chain with all the necessary information related to health, safety and environment, based on impacts and risks inherent to products and services.

4.6.3 Establish, implement and maintain procedures and means to recognize and respond to the demands, expectations and suggestions from interested parties. (essential)

Considering the interested parties identified in 4.6.1, the company must document how it recognizes, evaluates and responds to the demands, expectations and suggestions from interested parties and monitor the resulting actions, such as:

- a) Internal Community - suggestions plan.
- b) External Community – 0800 telephone line, contact us.
- c) Client - website, SAC.
- d) Media - website, information/publications addressed.

4.6.4 Establish, implement and maintain procedures to evaluate the effectiveness of communication actions and the company's image. (essential)

Considering the procedures established in 4.6.2 and 4.6.3, set criteria to evaluate and monitor the effectiveness of them.

Evaluate the internal and external reactions of actions related to the Responsible Care Program.

4.7 Qualification and behavior of people

4.7.1 Establish the organizational structure and define roles, duties, responsibilities and competencies. (essential)

Define, document and communicate the roles, duties and responsibilities for implementation, dissemination and maintenance of the Responsible Care Program.

4.7.2 Define the knowledge and skills so that people can perform tasks in an appropriate and safe manner, establishing the necessary trainings and evaluating the effectiveness of them. (essential)

Identify the needs, establishing training and continuous education programs, incorporating the Responsible Care Program in them.

Manage changes of roles and tasks, previously assessing the risks inherent to the new role and tasks, adopting the necessary measures to perform the change properly and safely.

Keep track of trainings and evaluate the effectiveness of them.

4.7.3 Establish, implement and maintain a procedure for behavioral assessment. (complementary)

Considering the impacts and risks identified in 4.2, establish tools to stimulate and evaluate appropriate and safe behavior of people inside and outside the company.

Promote, at all levels, the sense of individual responsibility and prevention in relation to health, safety and environment.

4.7.4 Establish, implement and maintain procedures to assess the performance of people. (essential)

Assess and monitor the performance of people, considering issues related to health, safety and environment.

Identify deviations, evaluate and promote corrections, improvements in qualification, behavior and/or motivation.

4.8 Audits

4.8.1 Establish, implement and maintain procedures for planning, conducting, reporting and monitoring of audits. (essential)

Audit the Management System of the Responsible Care Program:

- a) Identify the 1st, 2nd and 3rd Party Audits.
- b) Plan audits at certain intervals.
- c) Define the scope of the audit.
- d) Appoint and qualify auditors.
- e) Implement and maintain records of audits.
- f) Propose actions resulting from audits.
- g) Prioritize actions, monitor its implementations and evaluate the effectiveness of them.

4.9 Incidents, non-conformances, corrective and preventive actions.

4.9.1 Establish, implement and maintain procedures to record, investigate and analyze incidents, accidents, losses and monitor the resulting actions. (essential)

Considering the impacts and risks identified in 4.2 and controlled in 4.5, investigate and analyze the real or potential event:

- a) Injury, illness or fatality.
- b) Environmental impacts.
- c) Technological accidents (fire, explosion and accidental release of products).
- d) Accidents in transportation and distribution.
- e) Accidents with marketed products.

Identify the need for corrective actions, opportunities for preventive actions and control the effectiveness of them.

4.9.2 Establish, implement and maintain procedures to record, investigate and analyze non-conformances, other deviations and monitor the resulting actions. (essential)

Consider the non-conformances with respect to the requirements of the Management System of the Responsible Care Program.

Identify the need for corrective actions and opportunities for preventive actions for continuous improvement, controlling the effectiveness of them.

4.10 Analysis of the Management System

4.10.1 Establish, implement and maintain procedures to critically analyze the management system. (essential)

Analyze the Management System of the Responsible Care Program:

- a) Define the participants of the analyses.
- b) Determine the interval between the analyses.
- c) Define what will be analyzed.
- d) Determine the results and, if necessary, propose actions seeking continuous improvement.
- e) Prioritize actions, monitor the implementation and evaluate the effectiveness of them.

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