#### RESPONSIBLE CARE – A VOLUNTARY APPROACH TO THE INTEGRATED SUSTAINABILITY OF INDUSTRIAL UNITS

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### Abstract

The Responsible Care Initiative of the American Chemical Council, generated by the chemical industry sector in order to minimize the public damage produced by several catastrophic incidents (Bhopal, Seveso, EXXON Valdez, etc.) is a voluntary step taken by managers, going towards stakeholders, to prove them the commitment to make the chemical industry environmentally friendly, safer for human individuals and communities health. It also aims at observing, monitoring and assisting industrial products from cradle to grave, along all their life cycle. The Initiative was endorsed by the European Chemical Industry Council (CEFIC) as well as thousands of chemical industrial platforms on all continents. Up to now, the Responsible Care Initiative did not find its way in Romania. The present paper describes the experience of implementing the Responsible Care Initiative in a machinery manufacturing company. It is found to be similar to ISO 9001, ISO 14001 or OHSAS 18001 certification though many dissimilarities are mentioned. Finally, the Responsible Care Initiative is inserted in the sustainable enterprise strategy, using the Sustainability Balanced Scorecard developed by the authors.

**Keywords**: quality management system, health and safety management system, environmental management system, sustainability, responsible care

#### Introduction

An updated definition of the Responsible Care Initiative (RCI) (Responsible Care, 2011) mentions that RCI is the chemical industry's global voluntary initiative under which companies, through their national associations, work together to continuously improve their health, safety and environmental performance, and to communicate with their stakeholders about their product and processes. Practicing RCI leads to a new kind of industrial and business ethics that helps the chemical industry sector to improve its public image, to work safer, while still profitable and sustainably. (CEFIC, 2011).

The basic ideas of the RCI are included in the Responsible Care Global Charter and address the following subjects:

- Companies must voluntarily go far beyond the strictest norms
- Environmental, health and safety concerns must not stop at the Company's fence;
- Companies have nothing to hide.;

- The dialogue with all stakeholders must be substantial and permanent;
- Resources must be efficiently used and waste minimized
- Communication and co-operation represent a global matter and concern

Up to now, there are 53 National Responsible Care Associations. At the European level, though only 20% of the chemical companies are RCI members, they add up to some 80% of the chemical sector production.

# Components of the RCI

For a company to adhere to the RCI, the following steps are necessary::

- Endorse the RCI Global Chart and the associated Guiding Principles
- Implement all the elements in the RCI Programme.
- Decisively make progress toward sustainable development
- Transparently report performances to stakeholders and general public;.
- Product Stewardship an efficient product system management
- Promoting and facilitating the inclusion of more companies in the RCI
- Active support for the national and global Responsible Care Governance
- Caring and accepting stakeholders concerns and suggestions
- Allocating necessary resources to fully implement the RCI

After some 20 years of successful industrial practice, the RCI proved its potential to become a single, integrated management system at company level, to address environmental, health and safety problems while continuing to be a profitable company that applies sustainable technologies and makes use od resources in a responsible manner.

# Implementing the RCI in a Romanian Company

The paragraph describes the main elements of a nucleus - project, financed by the Romanian Ministry of Industry and Trade, aiming at the implementation of the RCI in a Romanian Company that is not part of the chemical industry (this was an extra challenge). The partners in the project were:

- INCD-ECOIND
- S.C. ROMPRIM S.A., a machinery manufacturing company.

The implementation of the RCI started by setting up a Responsible Care Implementing Unit (RCIU) that included specialists from ROMPRIM and INCD-ECOIND. A SWOT analysis was conducted at ROMPRIM in order to identify the internal and external reference system of the company, potential stakeholders. A thorough analysis of the ISO certifications of ROMPRIM was also carried out.

# Building up the RCI elements

As there is no Romanian National RCI Authority, the main objective of the Project was to devise the entire infrastructure needed for ROMPRIM RCI Certification:

- general policy documents (the Declaration of the CEO)
- translation and adaptation of the RCI Global Chart and of the Guiding Principles that the company has to adhere to
- specific policy documents (e.g., for communicating with stakeholders)
- a Guide to evaluate the ecological risk entrained by ROMPRIM activities
- a Guide to evaluate health and safety problems at ROMPRIM
- detailed Checklists to be used when carrying out the RCI implementation
- Modifications in the company general structure to accommodate a new office dedicated to the implementation of the RCI. It was decided that the Environmental Protection Management Office (carrying out the ISO 14001 implementation) takes over this responsibility..
- Targeted Job Description documents for RCI department employees
- Adaptation of the documents addressing all kinds of risks generated by the Company activity was carried out and needs for expanding them or developing new ones, identified.

The insertion of the RCI in the Company took 15 months but the process is still ongoing. The basic idea was to consolidate existing ISO 9001, 14001 18001 documents and management components so that the implementation of the RCI does not become an extra burdenbut should simplify the managing tasks in the target company.

During this process, the help and support of managers at all levels was swift and robust. Policy documents were distributed to all departments of the target company in the very early Project stages, so that every employee can learn about the new initiative, can understand and be a part of it.

# Barriers and risks

The ROMPRIM experts had gathered an invaluable experience during the implementation of certifications (ISO 14001, ISO 9001, OHSAS 18001). So, all problems connected to coding of documents, archiving, circulation, distribution, updating went straightforwardly due to similarities with the same issues of ISO / OHSAS certifications.

On the contrary, including the stakeholders in the process, setting up a reliable communication system with the same stakeholders, the adjacent communities and the general public did not go as swiftly as expected.

As a general observation, inviting stakeholders as equal partners is a problem in itself since, historically, all previous conflicts involved exactly the same stakeholders now sought after. Problems arising in the backyard of the target company had immediate negative effects upon the neighbourhood (a large hospital, a factory, a military unit and several blocks of flats). Also, accidents happening in the backyard of the company's neighbours had bad effects upon the situation in the target company.

At this stage, the role of ECOIND experts was essential, they facilitating the meetings and conveying, from one partner to another, messages of good will and benevolence. Building up confidence with all stakeholders cannot be accomplished in a fortnight and the process is still ongoing.

The main problem, during the RCI implementation was to expand the risk analysis beyond the fences of the company and to address potential problems that could arise during the entire life cycle of company's products.

Risks have to be addressed in the earliest possible stage of product design and company planning. In order to ensure that all important risk causes have been taken into account, the following matrix was devised. Tagged cells indicate that the respective risk analysis has already been completed.

In fulfilling the risk analysis, the contribution of contractors, distributors, transporters, etc., will always be of help since they themselves must comply to environmental, safety and health regulations.

Data for evaluate environmental, health and safety risks were found on the INTERNET (e.g., the portal of the World Health Organization, see WHO, 2011).

INCD-ECOIND contributed, in this respect with all its previous expertise in identifying and characterizing risks associated to industrial processes

Phase in the Company's activity	Environmental Risk	Safety Risk	Health Risk
Policy Documents	$\checkmark$	$\checkmark$	$\checkmark$
Conception, Design, Planning	√	$\checkmark$	Ongoing
Implementing, commissioning	√	$\checkmark$	Ongoing
Operational phase (internal processes)	4	V	$\checkmark$
Stakeholders:			
Contractors, material and utility providers	$\checkmark$	Ongoing	Ongoing
Transporters	√	Ongoing	Ongoing
Distributors	√	Ongoing	Ongoing
Beneficiaries (users of company's products)	4	$\checkmark$	$\checkmark$
Service and maintenance of company's products	4	$\checkmark$	$\checkmark$
Recyclers	√	$\checkmark$	Ongoing
Waste management companies	٧	V	Ongoing
Control and Monitoring of risk assessment	1	$\checkmark$	Ongoing

#### Table 1. Risk follow-up Matrix

### Inserting the RCI in the Company's Strategy

In order to structure an integrated approach which would address all a company's problems a version of a Balanced Scorecard was developed by INCD-ECOIND consultants and implemented in the present project.

Placing the RCI elements at their right place, in the Company Strategy at the level of internal processes clearly shows the integrating potential of the Responsible Care approach. Wherever the RCI met another ISO certification, a special attention was paid that there are no redundancies. In this way, important simplifications can be achieved and ISO 9001, 14001, 18001 certifications have been fully harmonized with the RCI Components (Product Stewardship approach, environmental issues, health and safety issues)

Once the Strategic objectives have been clearly set up, each such objective must be detailed, attaching to every one of it, Action Plans, key performance indicators, targets for them, responsibilities, resources.

This is an ongoing matter at the target company.

The duration of implementing the Sustainable Strategy of the Company was found to be 6-12 months, depending on the complexity of the strategic objectives and on the company expertise in devising long term plans.

### Conclusions

The Responsible Care proves a valuable tool for integrating existing environmental, health and safety concerns of the Company, expanding them to include stakeholders, developing them to address product quality, servicing, maintenance, recyclability, along all its life cycle.

The described project fully demonstrated the potential of the Responsible Care to be implemented not only in chemical companies but in any unit that faces risks and problems in the field of environmental protection, and health and safety.

Though the full implementation of the RCI take many months, the outcome is a single, comprehensive, integrated management system for environmental and health and safety problems at the company level. The next steps for Romanian enterprises will be to join a Responsible Care National Association, once this organization will be set up, and the global Responsible Care community.

#### References

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